### DMG MORI

COMPANY LIMITED

# Integrated Report 2022

Fiscal Year 2022 (January - December)

DMG MORI established carbon neutrality for its global production system covering Scope 1, 2 and 3 (upstream) By partially using internationally certified carbon credits. DMG MORI has received a limited guarantee by PricewaterhouseCoopers GmbH.

DMG MORI received SBT certification for its CO<sub>2</sub> emission reduction targets in 2021





### Mission Statement (revised in January 2021)

As a global corporation continually striving to be the world's largest and most respected international manufacturer of turning centers, machining centers, mill-turn centers, grinders, and process automation, we will:

Enable our customers to maximize their potential and excel in their respective markets by continually striving to provide innovative, accurate, and trouble-free machines, automation systems, and digital technology at competitive prices; Increase our customers' productivity and efficiency through our latest developments in technology as manifested by our increasingly accurate and progressive manufacturing capabilities; Support our customers with our knowledgeable and responsive sales, applications, and service personnel.

#### As befits a worldwide corporation, we will:

Foster a fair and open corporate culture, utilizing appropriate management initiatives; Play hard and be dynamic to enrich our private lives, study continuously and be open to advance our professional career, and work together and be innovative to bring innovation to the workplace; Respect each other's opinions and continually develop through fair competition.

As profitability is a goal of all healthy business organizations and in keeping with the true nature of the machine tool industry, we will: Work to increase the value of our company, the investment of all shareholders knowledgeable of the true nature of the machine tool industry, and the prosperity of our partners;

Always remember that the pricing of our products and services is an integral factor of the prosperity and longevity of the corporation; Generate suitable profits to ensure the cash flow necessary to provide for the healthy operation of our corporation,

research and development, stable customer services, employee training and development,

and the maintenance of safe and efficient manufacturing facilities.

#### As an industry leader and responsible corporate citizen, we will:

Contribute our fair share to our local community and society; Conserve environmental resources at all times to preserve the global environment; Incorporate the highest standard of ethics while still encouraging an aggressive approach to our business activities.



This Integrated Report was created by referring to the "The Guidance for Collaborative Value Creation" by Ministry of Economy, Trade, and Industry of Japan and "The International <IR> Framework" by the International Integrated Reporting Council.

### Integrated Report 2022 Contents

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(ESG / CSR)

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### Changes in Societal Needs and Development of DMG MORI

DMG MORI has continuously evolved its business model and improved its products and services in response to major societal changes, which occur each decade. We will continue to aim for further growth by providing value that reflects the demands of society.



Societal needs

Sales revenue

1970

1980

2000 01 02 03 04 05 06 07 08 09





WH-AMR



Technology Cycles "Chip-Braking"

DMC 125 FD duoBLOCK

### 2010s

5-axis machines

Sustainability

Automation

### Machining Transformation ("MX"):

LASERTEC 3000

DED hybrid

Process integration, Automation, Digital Transformation ("DX"), and Green Transformation ("GX") Additive Manufacturing ("AM")

•High-mix low volume •Industry 4.0 (connectivity)

Providing machine tools' software products that enable efficiency to streamline production processes •Automation system •Additive manufacturing ("AM") •CELOS

Launch factories in the USA and China

Strengthen brand recognition by promoting direct sales with DMG

Providing digital services in accordance with customer needs •Digital Twin Showroom Digital Twin Test Cut •Portal Site / E-Commerce Providing environmentallyfriendly products

2020~

Evolution of process integration, automation, digital transformation, and green transformation

Growing need for integration of hardware and software

Growing need to restructure global supply networks

Growing need for high precision and

environmentally-friendly technology

Aiming to stabilize business performance with abundant order backlog

### Our vision

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A solution provider committed to maximize customers' efficiency with its machine tools, automation, digital transformation, and service

Data-driven sales activities by global sales channels Increase customer contacts by enhancing functions of *my* DMG MORI



### Machining Transformation (MX)

-DMG MORI aims for ultimate Green Transformation (GX) through process integration and automation. We will contribute to global environmental protection by making the entire machining process leaner through Digital Transformation (DX).-







Number of

employees

Employees Consolidated

Zero Sludge Coolant Tank

zeroFOG

Approx. 12,000



machining with the assistance of various applications

**Diversified Organization** 



Non-contact onmachine measuring system

59

Nationalities

Sales and

services

locations

113

Foundation of services

### **Digital Transformation (DX)**

### Service / Training



ideas

**Meticulous services** 

locations:

### Key Points of the Medium-term Business Plan 2025 🗩



### **Process Integration** → **Automation** → **Green Transformation**

### **Digital Transformation**



## Sustainability (ESG / CSR)





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### What we aim for in the Medium-term Business Plan 2025

Machining Transformation (MX): Evolution of Process Integration, Automation, Digital Transformation, and Green Transformation

### Why did DMG MORI formulate the Medium-term Business Plan?

In 2022, consolidated order intake hit a peak of JPY 542.4 billion, and consolidated operating profit and profit margin also reached record highs. After reaching extremely high levels of orders of about JPY 150 billion in the first and second guarters, respectively, consolidated order intake has entered a gradual adjustment phase from the third guarter. However, our strategic focus topics of process integration, automation, digital transformation, and green transformation strategies have been on track, and the improvements in profitability became noticeable as the discount rate declined in line with strengthening the value proposition to customers. In addition, our expansion into new business fields such as medical, space, and energy focusing on CO<sub>2</sub> emissionreduction, coupled with our abundant order backlog, increased our resistance to downward trends in demand and has given us confidence in our ability to pursue a sustainable profit increase. Therefore, to share our management policies with our stakeholders, on December 14, 2022, DMG MORI announced a three-year medium-term business plan starting in 2023 and ending at the end of 2025.

DMG MORI has promoted process integration through 5-axis machines, mill-turn centers and AM (Additive Manufacturing), and automation together with robots and other peripheral equipment. These are our answers to societal needs such as global operator shortages, rising wages, and aging populations. The technology frictions between the United States and China since the middle of 2018, demands for economic security, and COVID-19-induced movement restrictions in 2020 have accelerated demand for process integration and automation in the market. And the on-going invasion of Russia into Ukraine that started around the end of February 2022 has led to reviewing where their energy, food or other resources are coming from, and restructuring supply chain considering geopolitical risks. Whatever the changes in the environment may be, it is essential to make more effective use of all management resources, and to establish a lean machining process through process integration and automation, which DMG MORI has been advocating. This lean machining process also leads to green transformation, which contributes to the reduction of carbon footprints.

Furthermore, in terms of digital transformation it is becoming crucial to collect, analyze, and visualize information generated in the entire process through AI and digital technology for continuous process optimization. We optimize machining processes through process integration and automation, thereby contributing to green transformation, and manage this entire process by digital technology. We have defined this management system as "Machining Transformation (MX)", a revolution in the machining industry. The medium-term business plan 2025 is aimed at promote providing our customers with consistent machining system.

This management strategy is expected to continue beyond 2025, the final year of this medium-term business plan, to 2030 and beyond. In other words, we believe that this three-year medium-term business plan will result in a firm foundation for sustainable growth beyond its term.

It was not until the mid-2010s that we fully began to promote automation and turnkey systems, by combining processintegration machines, such as 5-axis machines and mill-turn centers, with robots and other peripheral equipment. At that time, a major shift began in our conventional business model, which focused on manufacturing and selling stand-alone machines which pursued high precision, high speed, high rigidity, and high durability. In the beginning, we focused on developing products that are important to maximize the effective use of complex machines such as 5-axis machines and mill-turn centers. Analyzing customers' production processes, we first developed software products which assist scheduling such as DMG MORI Messenger and ISTOS for time efficient machine setups without redundancies. Next, for the machining stage, we developed Technology Cycles, application software that assists loading and unloading workpieces to and from the machine, facilitates machining of complex shapes, or performs measurement and monitoring. We also broadened our lineup of DMQP (DMG MORI Qualified Products), which are peripheral equipment compatible with our machine tools. In the post-production stage, in which we offer service, we have introduced my DMG MORI, a portal site that allows customers to view the installation history of DMG MORI machines, access manuals, and obtain order history of service and spare parts, and order spare parts online. In this way, we have expanded our product and service offerings to provide our customers with comprehensive support for optimizing their machining processes.

Subsequently, the introduction of solutions to the "three machining evils" of chips, coolant, and mist led to longer automatic operation times. The increasing complexity of workpieces and the growing demand for 5-axis machines and mill-turn centers capable of multiple operations in single chucking have led to the increased use of CAM software to generate machining programs. CELOS DYNAMIC*post* is a software package that integrates three functions in one: toolpath conversion to NC programs, cutting simulation, and cutting force optimization. This enables customers to significantly shorten the time from programming to the start of machining. It also contributes to reduced energy consumption because trial machining on the actual machine can be eliminated to zero.

In addition to these measures, our unique management policy of expanding our trading and engineering functions has become very important. We have approximately 12,000 employees globally, of which approximately 7,200 (60%) are involved in marketing, sales, engineering, and service, and approximately 4,800 (40%) are involved in manufacturing. Our overwhelming strength is our in-house ability to propose value to our customers, realize it, and further improve it. We recognize that this enhanced internal management resources of development, manufacturing, sales, engineering, and service will further solidify our ability to achieve process integration, automation, digital transformation, and green transformation.

Recently, our competitors have also come up with strategies similar to ours, such as process integration and automation. However, DMG MORI has a rich lineup of process-integration machines such as 5-axis machines, mill-turn centers and AM, and has a large amount of accumulated know-how for machining complex-shaped workpieces. In addition, we have differentiated ourselves by our ability to support customers' machining process with in-house developed software and offer DMQPs. Above all, our strength is that we can directly provide all machining processes to our customers, such as high value-added solution proposals and installation of automation and turnkey systems, through direct sales, direct service, and in-house engineering.



NTX 500 + MATRIS Light

This medium-term business plan was prepared by a group of executive officers, general managers, and group managers in their late 30s to early 40s who will lead DMG MORI into the next era. The group worked on the plan internally two to three times a month, and it took about one year to complete it. In addition to the fact that this medium-term business plan includes specific management indicators and action plans, a system has been established for each manager to thoroughly implement the PDCA cycle

 $(Plan \rightarrow Do \rightarrow Check \rightarrow Act)$ . The medium-term business plan also provides for the training of the next generation of executives.

### What are the key points in the Mediumterm Business Plan?

As stated in our mission statement, "Play hard, study continuously, work together," we believe that employee engagement is the most important factor in the sustainable growth of a company. On this basis, as we have already commented, on the business side, we will promote process integration, automation, digital transformation, and green transformation. In addition, social and environmental stability is an essential prerequisite for sustainable corporate growth, and we will further strengthen our efforts to reduce carbon footprints and effectively utilize water resources. Supply shortages and logistics disruption have emerged while we were facing a rapid recovery in demand for machine tools since the latter half of 2021. We recognize that strengthening supplier engagement and in-house production of key components are also important issues. Furthermore, we also place importance on risk management, such as responding to stricter export regulations of our products (P.101) and cyber security (P.103) due to growing geopolitical and other risks.

#### **Employee Engagement**

The most important management resource for sustainable corporate growth is our employees, and in January 2021 we announced the "DMG MORI Health Management Declaration". We have been striving to improve the physical and mental wellness of our employees by enhancing medical checkups, providing Smart Meal (which is a nutritionally balanced meal that helps promote good health) at in-house restaurants, and supporting employees with mental health issues. We have introduced the following management indicators for each employee as effective indicators: 2,000 hours of total annual working hours per person, a maximum 10 hours per day in office, at least 12 hours interval between leaving the office on the previous day and arriving at the office on the next day, and 20 days of paid leave taken per year. In 2022, we were busy as our orders reached a record peak, but we were able to meet our target of 1,980 total annual working hours. On the other hand, the number of annual paid vacations taken was 18.8 days, slightly below the target. We will strive to achieve the target as soon as possible by promoting appropriate staffing and digital transformation.

As a global leader in the machine tool industry, our company is pursuing cutting-edge technologies, and in order to achieve sustainable growth, the recruitment and retention of highly skilled employees is an urgent issue. To solve this issue, we have revised employee salaries on a global basis. We revised the salaries for Japan-based employees in July, so that they are comparable to European and United States standards. In fiscal 2022, the average annual salary grew to JPY 8.35 million, a 15% increase from JPY 7.23 million in fiscal 2021, with the contribution for six months. In FY2023, the average annual salary is expected to be approximately JPY 9 million with a full year contribution, which is about 24% increase compared to FY2021. In addition, a substantial revision of the starting salary and starting annual salary for new graduates will be implemented from April 2023, but we decided to retroactively apply this revision to employees who joined the Company in

April 2022. The monthly salary for university graduates and technical college graduates has been increased from JPY 272,210 to JPY 300,00 after the revision, and that for doctoral graduates has been increased from JPY 334,150 to JPY 475,000. We believe that this provides our employees with a secure foundation for their livelihood.

We have also been striving to support women in the workplace and have strengthened our childbirth and childcare support systems. We have established permanent company-led DMG MORI Nursery Schools at the Iga and Nara Campus to accommodate a total of about 100 preschool children. The average annual salaries of male and female employees in Japan are almost the same for each managerial title, such as staff, manager, and general manager, and we have a salary system that is commensurate with duties and performance without distinction between men and women. However, it is an issue that the ratio of women in management positions remains low. We strive to increase the ratio of female employees at the recruitment stage, and work to raise the ratio of women in managerial positions through training and work experience.

#### Average annual salary\*



#### Average annual salary by gender (FY2022)\*



\* Salary revisions for Japan-based employees were announced in August 2022 and reflected from July 2022; starting in January 2023, salary revisions will contribute to the full year.

In recent years, it has also become increasingly important to secure personnel with expertise in software development, artificial intelligence, and other areas in order to expand automation and digitalization. We will continue to strive to secure excellent IT personnel on a global basis. In August 2022, we held an opening ceremony for the Nara Product Development Center ("Nara PDC"), DMG MORI's largest global R&D center, in Nara, where the Company was founded. The designers in this center will develop advanced digital technology, next-generation 5-axis machines and mill-turn centers, peripheral equipment and software products by utilizing the next generation telecommunication technology, Al and digital twin technologies. It will also be used as a venue for industry-academia collaboration, exchange and training of engineers. Prior to this, in April, "WALC Inc." ("WALC") was established to take over the "Emerging Technologies Laboratory" launched in 2017. The Company will promote digital transformation in manufacturing using advanced technologies such as AI, IoT (Internet of Things) and cloud computing. We will continue to explore new and unknown fields of technology as well as deepen our existing technologies.

#### **Review the Supply Chain**

Supply chain disruptions triggered by semiconductor supply shortages became a major problem. In the machine tool industry, the prolonged lead times for CNC (computer numerical control), control panels and plastic parts became a critical issue. We were able to keep supply chain disruptions relatively minor due to our efforts to diversify our procurement sources, mainly in Japan and Europe, and to promote in-house production of key components such as spindles, ball screws, turrets, and castings.

Many machine tool suppliers are small and medium-sized enterprises, and they face many issues, including low wages, harsh working environment, and delays in carbon footprint reduction measures. To ensure sustainable growth, we believe it is essential to improve the treatment of these small- and medium-sized suppliers. In March 2022, DMG MORI announced its "Declaration of Partnership Building" to promote coexistence and co-prosperity throughout the supply chain that transcend size, affiliation, and other factors. In addition, using the platform provided by INTEGRITY NEXT GmbH in Germany, we monitor 16 sustainability issues, such as human rights, worker health and safety, elimination of harmful substances and measures environmental protection, and work with suppliers to identify problems and implement improvement activities. The number of targeted suppliers is about 800 globally. Sustainability of suppliers is labeled by following three categories: Sustainable (green), Less Critical (yellow), and Critical (red). We will continue to make improvements so that by 2025, the final year of the mediumterm business plan, we will eliminate companies placed in the critical category.

With regard to our in-house production initiatives, we have been manufacturing key components such as spindles, ball screws, and turrets that help improve and maintain machine quality and shorten procurement lead times. However, the reduction of CO<sub>2</sub> emissions related to purchased parts has also emerged as a critical issue. Among purchased components, the reduction of CO<sub>2</sub> emissions from castings is a particularly significant issue. We have made DMG MORI CASTECH CO., LTD. (formerly Watanabe Steel Works) a group company, and by switching from a conventional coke oven to an electric furnace and using CO<sub>2</sub>-free electricity as the power source, we are planning to reduce CO<sub>2</sub> emissions related to castings. By 2025, when the electric furnaces are in full operation, we target to reduce CO<sub>2</sub> emissions casting production at DMG MORI CASTECH by 98% compared to 2020. We schedule to implement similar measures in Poland and India in the future to ensure a stable supply of castings in the global market and to promote environmental protection in the production of castings.

#### Environmental Protection Measures, Reduction of CO<sub>2</sub> Emissions

Since the beginning of 2021, our DMG MORI machine tools produced around the world have been carbon neutral in the range from Scope 1 to Scope 3 upstream under the third-party certification by PricewaterhouseCoopers GmbH in Germany. Since January 2021, all of our machine tools manufactured worldwide have been marked with the "GREENMACHINE" mark, indicating that they are manufactured in a carbonneutral way. In July of the same year, we also published a report in compliance with TCFD recommendations. In November of the same year, our targets for reducing our carbon footprint by 2030 were also certified by the Science Based Targets ("SBT") Initiative. Based on the targets with SBT certification, we target a 25.2% reduction in CO<sub>2</sub> emissions by 2025 and a 46.2% by 2030 in Scope 1 and Scope 2, compared to 2019 emissions. For Scope 3, we target a 7.4% reduction by 2025 and a 13.5% reduction by 2030.

In 2022, a biomass power generation system was put into operation at our main Iga Campus, and we are also actively promoting the purchase of CO<sub>2</sub>-free electricity. These measures also contributed to a steady reduction in CO<sub>2</sub> emissions in 2022, which were about 7% ahead of the aforementioned targets with SBT certification. To further reduce CO<sub>2</sub> emissions in Scope 1 and Scope 2 areas, we are installing large-scale solar power generation systems at Iga and Nara Campus. Once operational in 2024, these solar power generation systems are expected to cover up to 50% of the electricity demand at each factory and approximately 30% of the average annual electricity demand. We will promote the reduction of CO<sub>2</sub> emissions by reducing the power consumed by machine tools themselves through the adoption of **GREEN**MODE technology with functions such as minimizing machining time and power consumption monitoring.

In addition, we will accelerate reduction of CO<sub>2</sub> emissions by advancing introduction of process integration, automation, and digital transformation in our factories. For Scope 3 upstream (CO<sub>2</sub> mainly contained in procurement from suppliers), we are working to reduce CO<sub>2</sub> emissions by sharing our know-how with suppliers based on the data collected through the aforementioned supplier monitoring platform. For Scope 3 downstream (CO<sub>2</sub> emissions of customers which use DMG MORI products), we have been helping our customers reduce their electricity consumption by installing the **GREEN**MODE technology as standard equipment since 2017. Our MX also enables our customers to optimize their machining processes, helping them protect the environment through improved productivity.

#### Carbon footprint

Scope		2019	2020	2021	2022	2019 vs 2022	
		total amount	total amount	total amount	total amount	fluctuation	fluctuation [%]
Scope 1		43,193	33,917	34,150	33,147	-10,046	-23%
Scope 2		65,689	42,652	28,380	13,884	-51,805	-79%
Scope 3	Upstream	675,200	409,987	683,950	774,944	99,744	15%
	Downstream	949,061	625,922	650,773	733,703	-215,358	-23%
total amount		1,733,143	1,112,478	1,397,252	1,555,678	-177,465	-10%

\*The results of the above calculations have received a limited certification by PricewaterhouseCoopers GmbH. (Unit: tons)

# Continued investment in medium- to long- term growth, employee training and environmental protection measures: allocate JPY 100 billion each to capital expenditure and R&D over three years

In 2022, we have reorganized the Iga Campus to be the largest machine tool assembly and factory for key component production, and the Nara Campus to be the largest system solution factory. In Germany, we introduced a state-of-the-art automated and digital logistics center at our Pfronten factory, the largest production site for 5-axis machines, to significantly shorten lead times for parts supply and to improve productivity, while reducing logistics costs.

During the period of the medium-term business plan, we will expand the system solution factory at the Nara Campus to approximately triple the 2022 level in terms of value-added based sales. We will also expand to a system capable of providing system solutions at the Davis factory in the United States and at factories in Europe to meet the growing global demand for process integration, automation, digital transformation, and green transformation.

As for investments in environmental protection measures, as already mentioned, we will expand casting production using electric furnaces with CO<sub>2</sub>-free electricity in Japan, Europe, and India, and increase in-house power generation capacity by installing solar panels at major factories of group companies.

In addition, to meet the demands for training not only our employees but also those of our customers, DMG MORI Academy will be expanded to various locations in Japan. We have already decided to set up academies in five cities: Hamamatsu, Kanazawa, Sendai, Okayama, and Fukuoka. 5-axis machines are becoming even more popular in Japan. We believe that this expansion is due in part to the fact that we have been actively promoting the training of operators through 5-Axis Machining Association since 2018. We will build on this momentum and promote sales of new technologies we have developed, as well as our low-code programming software TULIP (which is a cloud-based manufacturing support application creation platform developed by Tulip Interfaces, Inc., an independent company founded by MIT Media Lab in the United States) by having customers experience them at DMG MORI Academy.

Machine tools are products that can make a significant contribution to society by pursuing ultra-high precision, ultra-high speed, high rigidity, and high durability, and by consolidating machining processes to reduce various management resources and energy consumption. In addition to further pursuing this core technology, we will continue to develop more cutting-edge machining technologies with high efficiency.

Our "NZ-Platform" for flexible turning centers that can mount up to four turrets with an added B-axis function (turning function) extended the line of process-integration machines. "NTX 500" is the smallest mill-turn center in the series, capable of machining small, complex-shaped workpieces with a single machine. It saves space and increases production per unit area. Suitable for machining parts with complex shapes used in fields such as medical, aerospace, optical equipment, and robots, "NTX 500" has led to the development of new customers. "NHX 10000 µPrecision" is a large horizontal machining center that combines high rigidity with ultra-high spatial accuracy of 15  $\mu$ m or less. Spatial accuracy is measured by the maximum amount of displacement of the cutting edge when a machining area of 1.7 m on the X-axis, 1.4 m on the Y-axis, and 1.51 m on the Z-axis is stroked. This means that for a space of 3.6m<sup>3</sup> (equivalent to the space occupied by four units of refrigerators with about 500-liters capacity, a size common for a Japanese household of 3 to 4 people), the error is only one-third the width of a human hair. It is suitable for machining large workpieces for aircraft, vessels, energy, or construction machinery, where ultra-high precision is becoming more and more important. Combined with automation systems such as pallet pool systems, it also contributes to improved productivity and reduced power consumption and less CO<sub>2</sub> emissions. "LASERTEC 3000 *DED hybrid*" has been highly evaluated in the field of AM, which has finally begun to enter the diffusion stage. It is being applied not only to parts manufacturing, but also welding, coating, repair, and other fields, contributing to a significant reduction in processing time and significant savings in materials and other resources used.

It is important to provide measurement solutions to guarantee high-precision machining. "Tool Visualizer" performs non-contact, automatic measurement of cutting tools on machine tools. In addition to high-precision cutting tool compensation, it also detects deformations of cutting tools, which is an important element of automation. We have developed a non-contact on-machine measurement system that uses a laser scanner to measure the shape of the workpiece after machining, eliminating the need to change the workpiece to a dedicated measuring device outside the machine, thereby reducing the workload and measuring lead time by about 50%. As workpieces become more complex in shape and at the same time require higher accuracy, we believe it is essential to improve the technology for measuring spatial accuracy on the machine.

We will also aggressively increase capital spending in our group companies for the medium- to long-term growth. Demand for ultra-precision measuring components for next-generation semiconductor production equipment continues to bring business to Magnescale CO., LTD., which manufactures and sells such parts. In addition, since customers are demanding a stable supply, we will consider diversifying the risk of our production sites. These investments are planned to double the sales of group companies by 2030 compared to FY2022.

#### Building a Resilient Structure to Overcome **Changes in Business Environment**

We aim for stable earnings growth that is not greatly affected by fluctuating market demands. In the past, when market demands deteriorated, we pursued volume expansion, including strategic measures such as shorter delivery times and lower prices. As a result, sales and profitability fluctuated dramatically in response to market demands. However, when demand for machine tools declined due to the United States-China technology friction and COVID-19 pandemic, we made a break with our strategies including short delivery times and low-priced sales, and focused on further enhancing our ability to offer value to customers through process integration, automation, digital transformation, and green transformation. As a result, the discount rate has decreased, and profitability has stabilized by linking the abundant order backlog to sales. In addition, our sales structure, which is tailored to the needs of our customers in the global market, has enabled us to steadily pass on the price hikes in materials and others from the beginning of 2022 onward.

This policy will be further reinforced in the future. We plan to keep the annual order, production, and sales volume at around 8,000-9,000 units for the foreseeable future, while we focus on providing qualitative value to increase the satisfaction of individual customers. By providing highquality, high-productivity automation and full turnkey systems, the unit price per order will rise to around JPY 50 million excluding the sales-driving impact of the depreciation of the Japanese yen. In addition to an abundant order backlog, spare parts and service departments, peripheral equipment and engineering departments, and group companies will contribute to stability in business performance.

Against this backdrop, we plan stable growth in sales and profits during the period of our medium-term business plan, which ends in 2025. In the final year of the plan, ending December 31, 2025, we target sales revenue of JPY 600 billion, operating profit of JPY 72 billion, operating profit margin of 12%, net profit of JPY 48 billion, and net profit margin of 8%.

#### Average order price per unit



FY2012 FY2013 FY2014 FY2015 FY2016 FY2017 FY2018 FY2019 FY2020 FY2021 FY2022 102.6 129.7 140.4 134.3 120.3 126.7 130.4 122.1 121.8 129.9 138.1 (EUR / JPY)

#### **Emphasis on Healthy Financial Structure and Capital Efficiency**

The financial target at the end of 2025 is set at zero for the balance of interest-bearing debt, excluding perpetual subordinated loans and debt, from JPY 47.6 billion at the end of December 2022. The net interest-bearing debt balance, including perpetual subordinated bonds and loans, is set at JPY 80 billion. The balance of perpetual subordinated bonds and loans was JPY 118.8 billion as of December 2022. We will prioritize the repayment of borrowings through 2025, the final year of the medium-term business plan. The current weighted average interest payment ratio on perpetual subordinated bonds and loans holders is below 1.5%, which remains low relative to our cost of capital. However, the interest payment ratio of the perpetual subordinated bonds and loans will increase upon the arrival of each optional redemption date . The Company plans to redeem JPY 8.0 billion of the subordinated bonds that will come due in August 2023. Further portions of the subordinated bonds and debt will subsequently reach their optional redemption dates in the second half of 2025 and thereafter, and the Company intends to redeem them sequentially, using free cash flow as the source of funds.

We plan to raise the shareholders' equity ratio to over 50% from 36.1% at the end of December 2022, leading to much healthier financial structure. The machine tool industry has had low tolerance level of financial risk due to the high volatility of the business environment and business performance. However, we aim to significantly improve our tolerance level of financial risk by changing our business model, reducing our discount rate through high value-added proposals, and enhancing our performance stability and capital adequacy through our abundant order backlog. By promoting equity enrichment mainly through improved profitability, we expect to achieve a return on equity ("ROE"), which indicates capital efficiency, of at least 12% in the final year of the medium-term business plan, further improving from the 11% level in FY2022 and aiming for continuous improvement in equity value.

We will continue our efforts to return profits to shareholders by increasing dividends. We have traditionally maintained a dividend payout ratio (the ratio of returns to shareholders to net profit) of approximately 30% and will continue this policy in the future. As a result, we plan to increase dividends per share consistently to JPY 80 for the fiscal year ending December 31, 2023, JPY 90 for the fiscal year ending December 31, 2024, and JPY 100 for the fiscal year ending December 31, 2025.

In summary, DMG MORI will strive to satisfy all stakeholders by responding appropriately to societal issues and striving to sustainably enhance its corporate value.

### Efforts to Address Medium- to Long-term Management Issues

DMG MORI aims to achieve sales of JPY 800 billion to JPY 1 trillion by 2030 by promoting Machining Transformation (MX) consisting of process integration, automation, digital transformation and green transformation. In order to achieve this goal, there are issues such as the shortage of engineers and the enhancement of the supply chain. On November 11th at the venue of JIMTOF2022 held at Tokyo Big Site, we had an opportunity to have a discussion with institutional shareholders and institutional investors arranged by securities analysts to clarify their concerns.

**Miyagi:** Thank you very much for providing us with the opportunity to have a meeting with President Mori and Executive Vice President Kobayashi today (November 11th, 2022) at the JIMTOF venue. The business environment has been changing drastically, and the capital market is very interested in how top management is attempting to respond to these changes.

### Review of Third Quarter Financial Results (Ended September, 2022)

**Miyazaki:** Before moving to my questions, I would like to highlight some major figures from the financial results for the third quarter. In your announcement, you mentioned that consolidated orders peaked in the second quarter (April-June, 2022) and entered an adjustment phase in the third quarter (July-September, 2022), and lowered your FY2023 order forecast from its previous estimate of JPY 550 billion to JPY 500 billion.

However, you indicated that despite the worsening environment for order intake, DMG MORI expects sales and profits to continue growing in the coming year of 2023. The reasons you mentioned are as follows: the Company has an abundant order backlog due to its strategy of process integration, automation, and digital transformation; the contribution of sales revenues for spare parts and services, which are stable businesses with around JPY 100 billion; and profitability is improving due to higher order unit price and lower discount rates as a result of providing high added-value to customers. Dr. Mori has always commented on the importance of stabilizing business performance for the lean utilization of management resources, and I am hopeful that your strategy will finally be realized.

Considering the competitiveness and growth potential, I believe that corporate valuations for companies in the Japanese machine tools industry are at a very low level. Roughly speaking, corporate valuations tend to be determined by growth potential and future volatility factors (risk) such as business performance. I believe that low valuations to date have been largely due to the business volatility. I expect the market perception to change in the future by maintaining a certain level of profits stability during slowdowns in demand.

Mori: Looking back to the previous cycle in demand for machine tools, order intakes peaked in the first half of 2018, and while order intakes declined through 2019, we were able to peak in operating profit in FY2019 thanks to an abundant order backlog. We had planned for a steady earnings growth from the mid-2020 with an expectation of order recovery. However, COVID-19 pandemic which started in the spring of 2020 caused another decline in order intakes. Nevertheless, we were still able to secure profits in FY2020, with sales revenue of approximately JPY 328 billion and operating profit of just over JPY 10 billion. In the past, we fell into the red during phases of rapidly declining order intakes. However, the fact that we were able to remain profitable even during a phase such as COVID-19 pandemic when orders were rapidly declining, reinforced our confidence that our current management strategy has been in the right way. We currently expect the order backlog at the end of December 2022 to be around JPY 260 billion, and our production / sales plans are already filled until about the third quarter of FY2023. So unless the environment changes significantly from this point on, we believe we will be able to secure the financial targets (sales JPY 500 billion, operating profit JPY 50 billion, operating profit margin 10%) we have already announced for FY2023. We expect that orders will begin to recover in the second half of 2023 or at latest the first half of 2024, and we aim to achieve sales of around JPY 600 billion in fiscal 2025, the final year of the next medium-term business plan.

Miyagi: What kind of profit structure do you envision around 2030?

**Mori:** As we have already indicated in our financial results presentation and in the Integrated Report, we expect sales to be around JPY 600 billion in the medium-term business plan through FY2025, and JPY 800 billion to JPY 1 trillion in sales by around FY2030. I believe that process integration, automation, and digital transformation will continue to advance in the future. Machine tool operators perform many tasks that do not add much value, such as transporting workpieces and attaching them to machines. Therefore, it is necessary to leave such tasks to robots and



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Hirotake Kobayashi Member of the Board Executive Vice President Finance DMG MORI CO., LTD

other peripheral products, and let operators concentrate on attractive tasks directly related to productivity improvement, such as programming, tool selection, and fixture creation. As the unit price of orders for machines will further increase due to process integration, automation, and digital transformation, we expect the average unit price to be around JPY 50 million, excluding the effect of any fluctuation in the currency exchange rate.

Based on the annual sales volume of 9,000-10,000 units, sales revenues of machine tools alone will amount to about JPY 500 billion. In addition, sales revenue of the spare parts and service departments, which is to amount to approximately JPY 100 billion in FY2022, will probably reach JPY 150 billion or more by the time the overall sales revenue reaches JPY 800 billion. With engineering-related sale revenue of about JPY 50 billion expected, combined sales revenue of the aftermarket spare parts and service departments will be about JPY 200 billion. In addition, group companies such as Magnescale, TAIYO KOKI, and TECHNIUM, which provide services using digital

KUKI, and TECHNIUM, which provide services using digital tools, are also planning capital investments to increase capacity to meet growing demand. In 2030, we expect the contribution from these group companies to be in the range of JPY 80-100 billion, up from the current JPY 35 billion. Thus, we are on track to achieve sales revenue of about JPY 800 billion around 2030 through organic growth alone. If DMG MORI aims to further increase sales to JPY 1 trillion, M&A may be an option.

Masahiko Mori CEO, DMG MORI Group President, DMG MORI CO., LTD., Dr. Eng. Chairman of the Supervisory Board, DMG MORI AG Hanshu Zhang Portfolio Manager Balyasny Asset Management (Hong Kong) LTD Koji Miyazaki Senior Analyst Technology Team Research Department Sumitomo Mitsui Trust Asset Management Co., Ltd.

#### About M&A

**Miyagi:** DMG MORI's current global market share is just over 10%. You mentioned M&A as an option earlier. What do you think will happen to the remaining 90% of the machine tool market in the future? How does DMG MORI plan to attack changes in this market? Please share your thoughts on M&A strategy.



**Mori:** Basically, M&A targets are subtractive machine tool manufacturers. Although DMG MORI covers AM, and we regard it as an important business segment for us, we focus on subtractive machining because we can provide value and

demonstrate strength in this area. Even if a giant IT platform provider or a general electronics manufacturer were to enter this field today, they would not be able to offer total value propositions to customers, including such functions as test cutting and proposals for optimal fixtures for machining, because they do not have the machining know-how. In addition, one of our major strengths is that we have contacts with 300,000 customers globally, including over 100,000 existing customers and remaining potential customers in the future.

**Miyagi:** Does that mean that you are intending to acquire other companies in the same industry?

**Mori:** We will be considering other companies in the same industry. Our main goal is to acquire the customer base that the target companies have, and to acquire development designers, mainly those who are skilled in software. Regarding the expansion of our customer base, since I took office as president, we have acquired overseas distributors, entered into a business transfer from Hitachi Seiki for the Japanese market, and merged with AG of Germany to expand our customer base, leading to an expansion in sales revenue. We currently have about 1,300 development designers worldwide at our major bases in Japan, Germany, and the United States. But we would like to have about 500 to 600 more to accelerate the development of new products and the speed for remodeling.



**Miyazaki:** In relation to hiring development designers and strengthening the engineering department, DMG MORI has grown by expanding its market into peripherals which are used in connection to machine tools. The strategy is for DMG MORI, which interacts more densely with the customers, to take on areas that are handled by so-called system integrators. What is the status of resource development for strengthening these areas?

**Mori:** Of around planed JPY 550 billion in consolidated order intake in 2022, order intake for machinery is expected to total around JPY 420-430 billion, of which about JPY 40 billion accounts for automation projects. In other words, we currently have the capacity to handle about 10% of these orders with automation, and we would like to increase this to JPY 100 billion. The definition of automation is quite difficult. Increasing a customer's productivity by incorporating simple peripheral equipment and software is also a form of automation. However, what we mean by automation is to maximize our customers' management resources and increase their value-added productivity by optimizing robots and transfer equipment and focusing the work of operators on intellectual fields. To this end, we are in the process of completely remodeling our Nara Campus into a system solution factory over the next 3 years until 2025. Similarly, the Pfronten factory in Germany and the Davis factory in the United States are strengthening their capacity to handle automation projects. We have considerably enhanced the necessary resources, including the superiority of our process-integration machines in terms of precision, rigidity, and durability, our in-house software development capabilities, and optimization for factory automation. How to obtain more return out of these investments will be a key point in the future.

### About Human Capital Management and Succession Planning

**Asano:** Perhaps, through such strategies to focus on highly value-added products, the average unit price has been steadily increasing. I believe that you have raised the salaries of new graduates and employees given such circumstances. In the past, labor costs were often viewed negatively as a cost to the Company, but recently the concept of human capital management has become well-known, and there are increasing demands to disclose the status of human capital utilization and data related to human resource.

**Mori:** My basic idea is that since we manufacture and sell the same products and provide the same value to our customers globally, the salary level should be almost the same across the world. We implemented a major salary revision in Japan in July 2022, but even so, considering the current exchange rate, I think the salary level in Japan is still low compared to those in the United States and Europe. An interesting case in point is that we have been gradually raising our per capita labor costs in China over the past several years, and they are now around JPY 5 million. In proportion to this, the EBIT margin of our Chinese subsidiary has improved over the past five years. The source of intellectually productive activities is human, so if our employees contribute to value-added work and improved productivity, I would like to give back to them and thereby increasing their motivation.

**Asano:** In relation to human capital, the topic of gender diversity is also often discussed. I think that if there are equal numbers of men and women, it is probably an economically rational way of thought, beyond the question of morality, to be able to recruit the same number of talented people from either group. DMG MORI has made a strong declaration in its corporate governance report that it is committed to play its roles to make the entire machinery industry less male-dominated, which I greatly appreciate. In fact, when I look at the FY2021 Integrated Report, I see many women in leadership positions, and you provide female employees with the same job rotation opportunities as male employees, creating an environment in which they can grow in the same way. I think this is something that is not easy to do. In this context, I have the impression that DMG MORI is quite advanced as a manufacturing company. In this connection, if I may make one request, I think that the disclosure of time-series data related to female employees in the workplace is somewhat lacking, although you are making advanced efforts among Japanese companies.

**Mori:** I see. We have traditionally taken this matter as a matter of course, and in fact, a recent internal research has proven that there is almost no wage gap at DMG MORI between men and women as long as their job qualifications and positions are the same. I myself have been reflecting on this, but until now I had thought that if we communicated this to the outside world, we would be taken as pretentious. However, I feel that nowadays it is necessary to communicate certain information explicitly to get the message across both internally and externally. We are making internal preparations regarding the information you mentioned, and we would like to enhance our disclosure.

**Asano:** In terms of human capital, I believe that the president of the next generation is the key. Many outsiders consider that you have led DMG MORI with your outstanding leadership. What are your thoughts on your own succession plan at this point? I saw that many employees from the younger generation were featured in Integrated Report 2021, and that the next generation of executive-level managers are on the rise.

Mori: Since I became president of this company in 1999, I will have been in that role for 30 years in 2028, and I will be 68 years old. At that time, I intend to step down as president and pass the baton to my successor. If I can accompany him or her as chairman, I believe that the succession will be smooth. By that time, those currently serving as executive officers, who are around 40 years old, will be around 50 years old, the perfect age to lead an organization. We are also placing emphasis on developing human resources through practical experience by appointing younger generation of managers to executive officer positions and entrusting them with the management of group companies, as well as overseeing the R&D department, finance department, or overseas sales and service offices. In addition, we have introduced divisionalization since January 2022 and the assignment of top management responsibilities in each department are also helping foster the next generation of executive-level managers.

#### About matters of importance as president?



**Miyagi:** I believe that your efforts to improve the stability of DMG MORI's business performance by diversifying customers, industries and regions, and by holding a large order backlog, have been leading to good success. However, looking at the external environment, macroeconomic uncertainty is increasing due to factors such as heightened geopolitical risks. In this environment, what indicators are you focusing on as president from a medium- to long-term perspective?

**Mori:** As president of a global company, which is a fusion of Japanese and German companies, I am fortunate to have the opportunity to visit many parts of the world. Especially in my case, I often visit not big cities but regional cities where many of our customers are located. During the courses of my travels, I have obtained many hints for how to manage the Company by observing the lifestyle and salary level of people including our customers. Similarly, experiences such as the integration with AG of Germany and the construction of manufacturing factories inside and outside the country, allowed me to understand how people are living in other countries, and I refer to such knowledge when deciding management measures. It is interesting from a cultural anthropological point of view, and such a sense is important to understand our customers' needs, and consider succession plans or financing strategies of DMG MORI. In addition, by visiting the various regions, I can see where our competitors are located. I can see where German manufacturers and Italian manufacturers are present, and which leaders in the field of measuring instruments have their bases in the UK. The same is true in the United States and China. I now have a better understanding of how these companies are going to interact with us, or how we should interact with them



**Zhang:** What are your principles in leading the merger of Japanese and German companies? Also, assuming that you will be expanding your business in China in the future, please explain your thoughts on how to develop business in China.

Mori: What I always keep in mind is to treat each other with respect. Europe, the United States, and China have very different cultural backgrounds and values, but I think it is important to respect the other party's point of view. And this is for the long term. Regarding China, both the current head of sales and the head of manufacturing and engineering have been with the Company for 20 years. I have known the head of the engineering department since he was studying in the United States. He joined our company when he was in the United States, and later returned to China at his request, where he continues to be an employee of our group. In India, we are training several engineers as well, and two engineers are currently in the United States for training. After gaining experience there, I assume that they will return to their home countries to play an active role. In short, our strength is that we are able to recruit and train people globally and retain people who will be active in our company for a long period of time. This has created a good cycle for both our employees and the Company. This is not limited to China and Asia, but extends all over the world, including Japan, Europe, and the United States.

**Zhang:** Asia (excluding China) is another market that is expected to grow in the future. Could you please share some of the issues that you feel your customers need to solve in the Asian market and the solutions that DMG MORI can provide to solve them in the next three to five years?

**Mori:** In Asia, the situation differs considerably from country to country, but we basically are developing our business focused on the high-end market in each country, partly to avoid price competition. In terms of our business, Malaysia and Singapore are home to many transformer factories of so-called Western companies, and our customers are also engaged in high-end manufacturing. These companies are the main purchasers of our cutting-edge simultaneous 5-axis machines. In Thailand, we have also recently seen an increase in the number of customers who are looking to do high value-added manufacturing by installing our process-

integration machines. Other countries, such as Indonesia and Vietnam, are still small as our target markets, but they have potential, so we are taking a close look at them. The Indian market is one that we see as promising in the long term. There are quite a few talented engineers in India, and there is a large influx of high-end machines made in Germany. Recently, major smartphone manufacturers have been moving some of their production to India, and investment is gaining momentum. We expect the market to grow rapidly around 2030, just as it did in China 20 years ago. We are currently receiving orders for about 20 units per month, but we believe that by 2030 the market will probably grow to about 100 units per month, the same level as in China today.

#### About Financial Strategy

**Miyagi:** Free cash flow is expected to be around JPY 30 billion in 2022, similar to that of 2021, and I think the Company's increasing ability to generate cash flow is commendable. On the other hand, DMG MORI also raises a lot of funds through measures such as perpetual subordinated bonds, and I am a little concerned about the medium-term repayment plan for such funds. In light of DMG MORI's key financial targets, please explain your thoughts on the future balance sheet structure.

Kobayashi: Currently, due to the weak JPY, the converted amount of assets and liabilities denominated in foreign currencies has increased by about JPY 55 billion. In addition, inventory levels are higher than usual due to advance procurements of parts in response to disruptions in the global supply chain. However, even if we remove the impact of these factors, total assets are still somewhat high. In terms of asset efficiency, I believe that the total asset turnover ratio should ideally be less than one. Since the current sales plan is JPY 500-600 billion, total assets should be reduced to around JPY 600 billion. As you have pointed out, since we have the ability to generate free cash flow, we will first proceed with the repayment of borrowings and aim to improve the efficiency of total assets through measures such as optimizing inventories strictly by managing it per machine unit, collecting accounts receivable early, and securing down-payments.

**Miyagi:** More specifically, do you have any medium-term financial targets in terms of balance sheet, such as equity structure?

**Kobayashi:** The key performance indicators for balance sheet are debt repayment, net debt-to-equity ratio, and shareholders' equity ratio. We plan to reduce debt, excluding perpetual subordinated debt, to zero within the next two to three years, using free cash flow as the source of funds. As a result, the net debt-to-equity ratio will also be zero. DMG MORI is aiming for an equity ratio of around 50%. DMG MORI has been striving to stabilize sale revenues and profits performance with an abundant order backlog backed by development of process integration, automation and digital transformation. In the past, however, the Company has experienced large fluctuations in the demand environment for machine tools. Based on this experience, we are targeting a shareholders' equity ratio of approximately 50% as an equity structure that can withstand risks even in the event of a large drop in demand. We also believe it is important to leverage our shareholders' equity, if necessary, to quickly seize growth opportunities.



Miyagi: Are there any plans to reduce hybrid capital?

**Kobayashi:** The average interest rate on hybrid capital remains low, below 1.5%. However, after 2026, that level will gradually rise by about 1.0%. We intend to repay our hybrid capital before interest rate levels rise; we expect to be finished repaying our borrowings by 2025, after which time we should be able to repay our hybrid capital with free cash flow. In addition to stabilizing the top line, our goal for balance sheet in the longer term is to achieve a 50% shareholders' equity ratio, excluding hybrid capital, by reducing hybrid capital while enhancing capital by improving operating profit margin and net profit margin.

### **Supply Chain Initiatives**



**Asano:** Finally, let me ask you about your supply chain initiatives. Recently, there have been production delays due to the global shortage of parts supply. In addition, I believe that challenges such as labor, wages, and CO<sub>2</sub> emissions

reduction efforts of small and medium-sized suppliers will emerge in the future. Under these circumstances, I see the initiatives at DMG MORI CASTECH (formerly Watanabe Steel Works), which is a group company of DMG MORI CO., LTD. (P.64), as a supply chain engagement. In terms of DMG MORI's supply chain as a whole, is it correct understanding that we will see a kind of "corporate village" being formed in the future in a manner similar to DMG MORI CASTECH model, and by doing so, the parties will be able to achieve sustainable growth as required, including quality improvement, standard wage structure similar to DMG MORI, and environmental responsiveness such as reduction of CO<sub>2</sub> emissions, and the added value of the Company will also increase.

Mori: Looking 10 years into the future, I feel that many suppliers are not sustainable in terms of wage structure, working environment, and environmental responsiveness, not to mention succession issues. This is a worldwide problem, not just in Japan. For castings, which are an important component, we have taken in DMG MORI CASTECH in Shimane Prefecture as a subsidiary, raised wages, and improved the working environment by constructing a new factory. In addition, DMG MORI CASTECH is switching from a conventional coke oven to an electric furnace and thereby reducing their CO<sub>2</sub> emissions by large. The expanded DMG MORI CASTECH's capacity will account for approximately 70% (currently more than 40%) of DMG MORI's casting procurement volume, contributing to stable procurement. When we look at AG of Germany, in addition to reviewing procurement routes for castings in Germany, we are intending to establish a casting foundry in Poland. We are also planning to expand our business partners for power boards from Eastern Europe, an area which we have been heavily reliant on, to Bosnia. We have some idea of which suppliers will and will not remain in the future from a global perspective, so we are taking preemptive measures to strengthen our supply network.

**All:** Thank you very much for your time today. Through today's meeting, we were able to gain a good understanding of DMG MORI's medium- to long-term management perspective.

### Sustainable Growth by Solving Societal Issues

DMG MORI adapts to societal needs through its value chain and achieves sustainable value creation with respect to invested capital.

INPUT

Capitals which support our business





# DMG MORI's Strengths

# Integration of trading / engineering and manufacturing functions



### Marketing, sales, engineering, and service department

Approx. 4,800

Sales and Marketing	Approx. <b>1,100</b>	Service	Approx. <b>1,900</b>
R&D	Approx. <b>1,300</b>	Parts	Approx. <b>300</b>
Machining technology	Approx. <b>1,000</b>	Administration (EG)	Approx. 1,600

### Headcount in production

Production	Approx. 2,800		
Quality Management	Approx.	400	
Purchasing	Approx.	800	
Administration (Production)	Approx.	800	

Total Approx. 12,000 employees

Approx. 7,200



### **Diversification Strategy**

### Order composition ratio for process-integration and advanced technology machines

Against the backdrop of societal changes such as a shortage of engineers and operators and the rise of high-mix lowvolume production, DMG MORI has appropriately responded to customer needs for process-integration machines, which have increased since around the 2010s, and as a result, process-integration machines, represented by 5-axis machines and mill-turn centers, have been driving order intakes. DMG MORI will continue contributing to the automation and digital transformation in the manufacturing industry along by spreading processintegration machines.





### **Balanced industrial base**

DMG MORI's products and services have been supporting customers in a diverse range of industries, from traditional manufacturing industries such as agricultural machinery, construction machinery and energy industry, to cuttingedge growth industries such as medical, electric vehicle ("EV"), aerospace, and semiconductor industries. DMG MORI contributes to the development of industrial society by offering our machining knowhow to customers in a wide range of industries and by working together with them to improve their machining technologies.

### DIVERSITY by region Composition of customers by country / region

The machine tool industry is inevitably affected by demand fluctuations caused by unpredictable macroeconomic changes and capital investment trends. However, DMG MORI is attempting to stabilize its business by diversifying its customer base to many countries around the globe.

DMG MORI intends to obtain sustainable growth by expanding its customer base from markets in developed countries to emerging markets.



### HUMAN RESOURCES Multinational workforce

DMG MORI's workforce consists of approximately 12,000 employees of 59 nationalities, who are diverse in language, gender and field of expertise. At DMG MORI group, employees with different backgrounds cooperate and work with respect for each other.

DMG MORI's diverse employees are the driving force to capture customers' needs and make technological innovations.



### DIVERSITY in business size

### Composition of Customers by size (based on number of employees)

Approximately 60% of over 100,000 DMG MORI users are relatively companies with no more than 100 employees. DMG MORI intends to stabilize its sales revenue and profits by establishing a system that covers both small companies and big enterprises, thereby addressing diverse needs.

DMG MORI's relationships with a wide variety of customers have resulted in the accumulation of our machining know-how. This accumulated expertise creates a virtuous cycle that leads DMG MORI to help even more customers solve their problems.



### DIVERSITY of production sites Diversification of production sites

DMG MORI has production sites in Japan, Germany, other European countries, the United States, China, and other countries. The diversification of production sites enables optimized delivery time to customers, reduces transportation costs. In addition, the dispersion of production bases ensures business continuity in view of geopolitical risks.



### The World's Most Comprehensive and Optimized Lineup of Japanese and German Technologies

### **5-axis machines**



DMG MORI's 5-axis machines boast outstanding milling capability and excellent operability, a cristalization of Pfronten factory's 120 years of experience in development and manufacturing. 5-axis machines, which can index multiple surfaces, enables machining to be completed in a single clamping, reducing the number of setups and simplifying or eliminating fixtures, thereby significantly shortening the process time. This enables high-precision machining that could not be achieved with 3-axis or 4-axis machines.



DMC 125 FD duoBLOCK







### Mill-turn centers



As the name implies, a mill-turn center is a machine that can perform machining operations that were previously performed on separate machine tools with a single machine, without the need for manual intervention by the operator. The high machining capacity achieved by the integration of a turning center and a machining center significantly reduces the production lead time, and the efficient integration of processes, whether the machine is used for high-mix low-volume parts to or mass-production parts, brings great benefits to DMG MORI's customers.



NTX 1000 2<sup>nd</sup> Generation

### Advanced Technologies

Additive Manufacturing (AM) / ULTRASONIC (ULTRASONIC processing machine)

Additive manufacturing is a machining method that creates various shapes by layering metal materials. (P.45) ULTRASONIC machines can efficiently machine advanced materials, which are generally considered difficult to machine, into complex shapes. By superimposing ultrasonic vibration in the Z-axis direction in addition to tool rotation, resistance during the machining process can be suppressed compared to conventional machining. Laser machines enable low-cost, highefficiency machining of all metals and new materials, including molding, micromachining, precision toolmaking, and power drilling.







### Vertical machining centers



%

Machining centers are machine tools designed to perform a wide variety of machining operations, by using different rotary cutting tools for face milling, drilling, boring, or tapping, which are replaced by an automatic tool changer. A vertical machining center is one in which the spindle (rotating axis of the cutting tool) is mounted vertically (facing vertically to the ground).

ALX 1500



### Production Sites around the Globe Expansion to Technology Days (small-group tours)

DMG MORI has production sites worldwide, with the biggest ones in Iga (Japan) and Pfronten (Germany). Our global presence allows us to produce machine tools closer to the end users, optimize transportation, secure short delivery time, and meet the diverse local needs. We also respond to geopolitical risks and ensure business continuity.

### Germany





in the world for simultaneous 5-axis machines Assembly of DMU / DMC and other series



Bielefeld factory



Seebach factory



Stipshausen factory



Pleszew factory (Poland)



Europe

Bergamo factory (Italy)



Tortona factory (Italy)





Lakshmi (Production consignment)

### Japan

### Iga Campus

Biggest production site in the world for turning centers, machining centers and mill-turn machines

Opening of the 2nd assembly factory further enhanced the production capacity of Iga Campus (Operation started in September 2021)



### Nara Campus

**Biggest system solution factory in the world in the machine tool industry** Ongoing renovation of Nara Campus (Operation is scheduled to start gradually in 2023)



### Group Companies (Japan)



TAIYO KOKI



#### Saki Corporation



Magnescale



#### DMG MORI CASTECH



Davis CA factory



USA

Tianjin factory



Pinghu factory (Operation is scheduled to start in the second half of 2023)

# Digital Transformation to Realize Machining Transformation

### Digital Transformation in Design, Manufacturing and Quality

With a history of about 50 years of numerical control since the advent of numerical control units ("CNC") around 1970, and the subsequent digitalization of machine design itself, "machine tools" is an industry with characteristics that are easily adapted to the rapid progress of digitalization in recent years.

DMG MORI is implementing digital transformation in its design, manufacturing, and quality processes to speed up product development, increase productivity in manufacturing, and improve quality control.



Digital transformation in design,

manufacturing and quality

### Factory Digital Twin

Reproduce the operating status of machines, robots and equipment in factory

Simulation of assembly at our Pfronten factory



Digital twin test cuts

### 1 Digital Twin Test Cuts

#### Input information

- CAM data
- NC program
- Workpiece information & 3D model
- Tool information & 3D model



### Reduced analysis time by using RIKEN Fugaku

#### effect

- (1) Conventional test machining: 8 hours  $\rightarrow$  10 minutes (98% reduction)
- (2) Reduces environmental impact by eliminating the use of tools, materials, workpieces, and coolant

This research was conducted with the computational resources of the supercomputer "Fugaku," which was provided for the Company's use through the R3 "Fugaku" Industrial Trial Project (Proposal No. hp210202).

### 2 Digitization of measurement tasks

### Expand utilization of digital measuring instruments (assembly)

Automation of measurement tasks in accuracy inspections, linkage with TULIP

- Improved measurement accuracy by introducing digital measuring instruments and special jigs
- Automatic input of measurement results by linking with TULIP



30 accuracy test measurement items

25 items can be measured automatically

# Digital Twin



Analysis of all mechanical elements

#### Output result

#### • Cycle time

- Machining load and chatter vibration
- Surface roughness
- Optimization of feed and rotational speed (program)



### **3** Digital transformation in quality

#### Product Problem Reporting System

Detailed Report to the Factory for Investigation of the Real Cause and Take Corrective Measures / Parallel Development for Product Improvement



Create a database of product defects and Share defect data quickly within the Company

#### 1995 Started with paper-based system

2000 Digitized with workflow system 2016 Introduced PPR to AG factories as well Digital transformation in design,

manufacturing and quality

### Digital Transformation in Marketing, Sales and Service

DMG MORI is promoting digital transformation in all of its processes which involves customer contact, either before or after the installation of machine tools.

While face-to-face contact with customers remains important in the sales process for machine tools, which are production goods, DMG MORI is working to improve customer satisfaction by combining digital tools and face-to-face contacts as appropriate.

### my DMG MORI: the comprehensive service interface with customers



### Digital transformation tools implemented by DMG MORI at each process of customer contact






#### Digital Twin Showroom 🕩

Full CG (4k quality) copy of Iga Global Solution Center, System Solution Center and Pfronten Factory

- Language: 4 languages (Japanese, English, German, Chinese)
- Exhibited models: 51 models (+11 models)
- DMQP products: 30 products (+10 products)
- Number of contents: 2406 contents





LASERTEC 3000, 6600 DED hybrid





NTX 500

NTX 3000 | 3000 2<sup>nd</sup> Generation

Vertical Mate 85, IGV-3NT (TAIYO KOKI)

#### 2 Sales Manual 2.0

In addition to its capability to present the latest catalogs and 3D promotional videos of DMG MORI products on demand, this software allows area sales managers to show their customers a comparison of different machine specifications, and to access records of previous business meetings with a certain customer. Area sales managers around the world are provided with mobile devices with this sales managers can facilitate communication with customers and engage in sales activities with ease.

## Database of customer information

Approx. 300,000 machines installed / Over 100,000 existing locations / Total 300,000 locations including potential machine tool users

 Installation information / Product specification
 Service and maintenance record

3

BOM / product-specific drawings
 Intellectual property information

 Area Sales Manager / contact history
 Owned machine tool information

· Company Profile · Sales activity history (visits, phone calls, emails)

## Digital Transformation in Service: Remote Repair Service



\*1 TeamViewer is a registered trademark or trademark of TeamViewer GmbH.

## **Digital Transformation in Training and Internal Communication**

For efficient acquisition of knowledge and skills, DMG MORI is actively promoting the use of digital tools for training programs designed for customer's operators and DMG MORI's engineers.

In addition, DMG MORI has set up a common global internal portal site to facilitate internal communication and sharing of information so that employees around the world can easily access the information they need when they need it.

### Tools to support the digital transformation of customers



#### Process Design Advisor Videos 100

#### Process Design Advisor

#### PPA: Process Planning Adviser

Movie collection for customers considering the introduction of 5-axis machine (supervised by Iriso Precision Co., Ltd.)

- · Training for operators after introduction of 5-axis machine
- · Introduction of various fixing methods and machining processes using 5-axis indexing
- 100 CG representation of machining



#### Low-code platform TULIP for production sites

#### Improved production efficiency and quality in the entire shop floors

 $\cdot$  Shop-floor members create an app and operate it immediately

 $\cdot$  Collect and accumulate practical data and equipment data at the shop-floor in real time

Customer

Case Studies







90% reduction in defects



## Digital transformation in training and communication within the Company

#### Engineer training through the use of the Digital Academy

- Take a total of seven courses (five basic and two advanced) to develop highly skilled technical engineers
- e-learning + practical training for efficient skill acquisition









Basic





## Process Design Advisor

#### In-house portal site connecting employees worldwide

- New product information
- · Exhibitions and events in each country
- Internal newsletters
- Management Policy Explanation Video
- $\cdot$  Work management, payroll information inquiries
- Travel expense reimbursement



#### Health Information Home Page (Japan)

#### Promoting employee wellness and "visualization" of health information. Raise employees' health awareness

DMG MORI White Paper on Health and Safety (available for internal use as needed) Health Information Home Page

- · Analysis of results of physical checkups
- Trends in health conditions
- · Response to new coronavirus, etc.





DMG MORI White Paper on Health and Safety

Medium-term Business Plan 2025 VALUE CHAIN Measures

Human Resources Development

# A Year of DMG MORI

(from January to December, 2022)







July

- Opened Nara Product Development Center (Nara PDC), DMG MORI's largest cutting-edge development base. Introduced a twoheadquarters system in Tokyo and Nara.
- Launched e-learning content "Digital Academy" for educational institutions
- Launched sales of video content "Process Design Advisor (Indexed 5-axis Machining)"



• Raise starting salaries for new graduates (effective April 2023, but retroactive to April 2022) and salary revisions for Japan-based employees from July 2022.

- Decided to install Japan's largest solar power generation system for in-house consumption on the roof of the factory building at Iga Campus (Mie Prefecture) (installed area: approx. 130,000 m<sup>2</sup>)
- Exhibition at AMB2022 in Stuttgart, Germany
- Held Technology Days in Chicago, United States



Additive Manufacturing Laboratory & Fabrication ("AM Lab & Fab")

- Launched new services of *my* DMG MORI "Parts Selector" and "Chatbot"
- Opened Additive Manufacturing Laboratory & Fabrication (AM Lab & Fab) in Tokyo Global Headquarters
- Launched a compact size mist collector *"zero*FOG" that can be installed on small machines



- Hybrid of JIMTOF2022 exhibition and Tokyo GHQ Open House first time in four years
- GDS (Global Development Summit) held in Tokyo first time in four years



• Development of NHX 10000 *µPrecision* 

NHX 10000 µPrecision

November

December

Octobel

September

August

Global Corporate Communication & CMO



#### Promoting global marketing that makes full use of digital and physical touch points

Fixed Asset

#### Q. What do you think about the role of marketing at DMG MORI and how it is changing?

Marketing is mainly product communication, or in other words the communication with customers about our products and solutions. This happens through different channels, such as face-to-face at Technology Days, seminars, exhibitions and also online through digital events, newsletters, SNS channels and of course via our homepage and digital twin showrooms. It is our job to visualize and make complex technological features easy to understand through different communication channels and also in different languages suitable for different markets all over the world.

But Marketing is also important to position our brand and corporate identity, to make DMG MORI well known and to communicate our values, beliefs and what the Company does. This becomes in my opinion especially important in a highly competitive labor market where skilled workers are in demand.

In addition, internal communication plays a major role in a global company. One purpose is to communicate the strategy, DMG MORI's goals, vision and future plans to involve all employees all over the world and the other purpose is to inform about products, technologies and new developments to our sales engineers to give them the best possible support.

#### Q. What were your key milestones in 2022?

In 2022 we revitalized physical events step by step. Technology Fridays were held not only in Japan but also in USA and Europe, and the first Open Houses took place again with successful events in our factory in Pfronten and our sales and service office in Chicago where we held the Chicago Innovation Days. We will continue to strengthen our in-house events more and more. This is a great advantage for us as we have so many nice factories and sales and service offices with showrooms where we can show our customers the production sites or host in-house events.

In addition to the local events in our showrooms, the first

exhibitions took place again after the pandemic. JIMTOF in Tokyo was successfully held as well as AMB show in Germany. It was a milestone for us to combine physical exhibitions with the digital content which we developed in the last years. At AMB show in Germany for example we had a huge LED wall showing the Digital Twin Showroom of Iga Campus, this was very interesting for our customers. I believe that the effective combination of digital and face-toface touch points in our communications has paid off. Our Digital Twin Showrooms provide a huge variety of technology which can be experienced by our customers. This experience is now in tie with a trade show with real people, real machines and personal exchange.

#### Q. What are the goals and action plans for the marketing department under the medium-term business plan 2025?

The main strategy for the medium-term business plan 2025 is to pursue process integration, automation and digital transformation. Our action plan for communicating this strategy has mainly two steps. The first step is the internal communication. It is important that our colleagues all over the world are well acquainted with our strategy and the medium-term business plan and that all persons who are in



Opening of Digital Twin Showroom at Pfronten factory in May, 2022

contact with customers can explain process integration, automation and digital transformation. Our colleagues, in particular the sales engineers, are the communication multipliers for our customers. This means that we need to prepare a clear internal communication strategy and give our sales colleagues the best possible support to be able to explain our values to our customers.

The second step is the external communication to our existing and potential customers. We will put process integration, automation and digital transformation in the center of our external communication, globally in a variety of languages and suitable for different communication channels, digital and physical.

In 2023, the EMO show, the world largest exhibition in our industry, will take place in Hannover, Germany again. The main theme for DMG MORI at this show will be process integration. I'm looking forward to this special event where we will combine digital content and physical machines for the visitors who will come from all over the world.

#### Q. What challenges do you face in achieving your goals?

Challenges are always great chances. I'm very much looking forward to bringing the product communications in our industry to the next level together with my colleagues all over the world. This means that we are facing the wonderful chance to strengthen and continue to build our digital contents, which will display our technology and solutions in a more comprehensible way, while we are allowed to concentrate on the real face-to-face interaction with our customers. When we start a marketing project, we now first think about the digital contents like videos, 3D models in our Digital Twin Showrooms, our website and SNS portals, and then, in the second step, think of how we can combine these elements with real events such as showrooms and exhibitions. In a further step, we then make everything available for different markets and in different languages. To properly plan and implement different steps, and to utilize adequate channels for different regions is a great challenge and chance to position DMG MORI as a total solution provider in the manufacturing industry.

## On-site events (Open House, Technology Days) held by DMG MORI and large-scale exhibitions which DMG MORI participated





## Improving value to customer and contributing to carbon neutrality by innovative products and technologies

## Q. What is the role and emphasis of the development department?

DMG MORI's development department develops total solutions to support process integration, automation, digital transformation, and green transformation in our customers' machining. We contribute to sustainable economic growth by improving machining accuracy and efficiency, thereby reducing energy consumption and CO<sub>2</sub> emissions. Specifically, we facilitate the introduction of automation through process integration using high-precision, high-efficiency 5-axis machines and advanced machines, and visualize operating conditions by connecting automated machines to a network. In addition, we optimize production schedules based on digitized machine operating information. Through these efforts, we are developing a system that will enable the production of highprecision products using fewer machines and less energy, with an emphasis on reducing CO<sub>2</sub> emissions.

## Q. What are the goals and action plans under the Medium-term Business Plan 2025?

The ambitious new product lines of recent years are the result of our contemplation about what is needed in our customers' production process and what should be realized in the near future, and the measures we initiated to make that possible. Based on this, in our medium-term business plan, we are formulating a vision not only for 2025, but also for 2030 and beyond. First, we will realize process integration, automation, digital transformation, and green transformation at a higher level. In addition, we will create a vision of what the machining process should look like, centering on machine tools, from a top-level perspective, and work to realize it. Through digital transformation, we will make proposals that maximize the return on investment in response to customer requests, while at the same time providing an accurate picture to the customer in advance how they can profit by introducing our products in their factories. This will contribute to the construction of a highly efficient and highly accurate manufacturing environment for our customers.

#### Q. What challenges do you face in achieving your goals?

Regarding goals that are technically challenging, it is important to link the high-level vision and instructions with practical considerations on how to realize them. On the other hand, for goals which pertain to conventional development, the challenge is in how to develop efficiently or how to utilize development resources efficiently to achieve multiple development items. To achieve this, I will promote the use of 3D data consistently from design to manufacturing. Our goal is to improve development efficiency by 25% through full digitalization of development. In addition, by deploying cuttingedge technology in in-house machining, it is necessary to improve in-house production technology, and to raise the level of functionality and quality of the technology to the next step.

#### Q. What are strength of DMG MORI's development team?

In DMG MORI's development, specialists in each department, such as mechanical, electrical, elemental, AM, software, measurement, and automation, refine unique products and cutting-edge technology every day. In addition, the barriers between departments are low, and the teamwork among different departments, including machining technology, manufacturing, sales and service, is strong. I believe that our greatest strength is our ability to work together to solve common problems. I am confident that we will be able to provide unique new solutions by listening to the voice of our customers and working together with the same goal in mind.

#### Global Development Summit (GDS / Global Development Summit)



A total of about 1,300 development engineers work in our development bases in Japan, Germany, the United States, Italy, and Poland. At Global Development Summit ("GDS") held once a year, the persons in charge at each base meet face-to-face to discuss their latest projects. After confirming future development plans at the plenary session, we discuss and share new technologies in the market and the latest trends of customers in the subcommittees for each specialized field. GDS in 2020 and 2021 were held online. On November 2022, a hybrid-style GDS was held in Tokyo with about 100 development employees from Japan and overseas gathering in person and about 200 employees attending online. This was the first time in three years that we have held a face-toface meeting, albeit partially. This global accumulation of knowledge is one of our strengths in design and development.

#### Sensing & Measurement



Measuring solutions are important for achieving high-precision machining. First, for tool shape measurement, we developed the "Tool Visualizer," which performs non-contact automatic tool measurement on the machine tool. This product not only enables high-precision tool compensation but is also reliable for detection of tool abnormalities that helps automation. In addition, we have developed a non-contact on-machine measurement system that uses a laser scanner to measure the shape of workpieces after machining. This eliminates the need to load the workpiece onto a dedicated measuring device, which reduced the workload on the operator and the measuring time by 50%.

## Nara Product Development Center ("Nara PDC")



We opened the Nara Product Development Center ("Nara PDC"), the largest R&D center of DMG MORI, to establish digital transformation and develop cutting-edge technology. Specifically, the center develops next-generation communication technology, AI (artificial intelligence), DX technology that utilizes digital twins, machine tools and peripheral equipment for next-generation multi-tasking machines, and software. Nara PDC has a dedicated development experiment center, and conducts state-of-the-art and innovative development experiments on machine tools, peripheral devices, and control software to be installed in them, including industry-academia collaboration with universities and companies.

## Pursuit of high-precision machining and reduction of environmental impact



NHX 10000 µPrecision

Spatial accuracy of 15  $\mu$ m or less over the entire machining area

Our basic policy for product development is to develop machine tools that have a smaller environmental impact while improving machining accuracy through high rigidity and high precision. As an example, in December 2022, we developed the NHX 10000  $\mu Precision$ , a large horizontal machining center that combines high rigidity and high precision with a spatial accuracy of 15  $\mu$ m or less. This product enables high-precision machining of large workpieces for the construction machinery, aircraft, molds, automotive, and energy industries, and contributes to reduce our customers' environmental impact by reducing power consumption compared to conventional machines. We will continue to contribute to the realization of green transformation through the development of products that reduce environmental impact while meeting advanced parts machining needs.



#### AM technology which contributes to process-integration, carbon-neutrality, and circular economy

#### Q. What is "AM"?

The additive manufacturing ("AM") industry has made remarkable progress since its core technology was first patented in 1986. Along the way, people's interests changed from rapid prototyping to functional prototyping. Thereafter, it has been spreading in various industries as alternative method of manufacturing that adds new functions. In addition to making parts from scratch, it can also be used for repairs and maintenance, contributing to the reduction of waste and energy consumption. The Company is working on two types of AM technology with a high industrial level, and has development bases in three countries: Germany, Japan, and the United States. Under a global system, we are deploying this technology in various industries as well as in the space industry. In the early days of DMG MORI's AM technology, customers in the aerospace industry accounted for a large percentage, but in recent years, the number of cases in other industries has increased. According to the 2021 Annual Report of the Environment, the Sound Material-Cycle Society and Biodiversity, companies and financial institutions are taking the opportunity of the Paris Agreement to incorporate the reduction



of  $\mathsf{CO}_2$  emissions into corporate management worldwide, along with the movement of ESG finance. AM technology is attracting more and more attention as a manufacturing method that supports these major goals.







\*Based to AMPOWER Report 2021 for the relationship between the level of industrialization and



Based on figures from AMPOWER Report 2021 and Forecast Buyer 2025



#### Benefits of DED

 Process integration ·Combination of different types of materials



## Q. What is the role and focus of the AM Development Department?

AM machine is also a machine tool. The role of machine tools is that they are commercial products that benefit the customer. When human beings try to lead a decent lifestyle, they have to wear clothes, eat, and sleep on beds and mattresses. Humans need machine tools somewhere in the process to produce such goods. Process integration, automation, and digital transformation are key to produce more supplies with fewer people. Automation will become easier because more things can be handled by a single machine, and when automation is possible, fewer people will be needed to take care of the machines, and instead there will be a need for sensing what has previously been looked after by humans. The big data collected as a result is analyzed by AI, and it leads to digital transformation that continues to improve.

In the field of machine tools, we can support the productivity improvement of our customers by improving the performance of our products, and we can also reduce energy consumption by shortening operating times. This is not at all different in AM machines. In order to benefit our customers, we conduct research with universities and various research institutes, use that research to develop elements, combine elements to develop products, guarantee quality, and then take the profits from sales necessary to conduct these activities. Maintaining a balance between these five elements is what we at AM Development Department consider as most important, and we believe it is our role to promote carbon neutrality and circular economy in the world.

#### Q. What are the goals and action plans under the mediumterm business plan 2025?

We aim to achieve sales of JPY 10 billion for machine models that are equipped with Selective Laser Melting ("SLM") and Directed Energy Deposition ("DED") methods, respectively, including relevant services, spare parts, and contract processing, for a total of JPY 20 billion. AM has many advantages that are not yet well known in the market.

- By molding only the necessary parts, wasteful chips are reduced (e.g. impellers, die-cut rolls, etc.)
- If a part is broken, it can be repaired or maintained, or if there is a minor model change, the existing part can be reused, and it can be used until the part's life limit.
- Molding of integrated parts eliminates the need for dies and eliminates energy consumption that is necessary in the processes of mold production, management, or disposal.
- By coating the surface of parts with a high hardness material using AM,
- (1) coils for induction hardening will no longer be required, reducing the energy generated in coil manufacturing;
- (2) furnace necessary to process the batch, such as carburizing, quenching, and nitriding, will no longer be required, reducing the energy required to control the temperature of the entire furnace; and
- (3) hard chrome plating will no longer be required, eliminating concerns about environmental impact in waste liquid treatment after plating.

We have accumulated such success stories with our customer, and we believe it is important to disseminate them as much as possible we can utilize our experience to help more customers improve their profits.



#### Q. What challenges do you face in achieving your goals?

We realized that we were too committed to improving the profits for more customers, and as a result, we were not able to increase our internal use of this technology. Therefore, with the help of the production technology department, we started using LASERTEC 3000 *DED hybrid* to machine tool spindle parts. Upon application, we realized that we could replace hard chrome plating, which used to take more than 5 days of lead time, with 1.5 minutes of coating, which is by far the fastest and cheapest way to manufacture. We believe that by increasing the number of such applications and sharing them with our customers, we will be able to achieve our goals.



LASERTEC 65 DED hybrid 2013 First AM hybrid machine introduced to the market



LASERTEC 65 DED 2017 Launch of AM machine without cutting function



LASERTEC 6600 *DED hybrid* 2020 Launch of largest AM machine in the series



LASERTEC 4300 *DED hybrid* 2015 Launch of AM machine with capable of turn-milling



LASERTEC 125 DED hybrid 2019 Large AM machine introduced to the market



LASERTEC 3000 *DED hybrid* 2021 Launch of latest model

Production





#### Contributing to maintaining high quality, stable supply, and less CO<sub>2</sub> emissions

#### Q. Why is it necessary to produce parts in-house?

There are three major reasons for in-house production. First, highprecision, high-rigidity, and high-durability machine tools require suitable parts, and in-house production allows to improve and maintain quality. In addition, in-house production allows us to accumulate machining technology and cost information of core components internally, which is also important for coexistence with suppliers. Secondly, there is a risk that the lead time from ordering to delivery is longer with external suppliers, as part designs vary according to the many different functions of machine tools. The purpose of in-house production is to secure competitive advantage in procurement lead time from after the completion of development to completion of production. Thirdly, the demand for machine tools has been cyclic. Suppliers, on the other hand, do not have the capacity to meet peak demand for machine tools. There is an advantage that any supply shortages at external suppliers can be compensated by in-house production. For these three reasons, DMG MORI has promoted in-house production. From the beginning of 2022, DMG MORI spun off its precision components manufacturing departments for spindles, ball screws, turrets, cross roller bearings, and precision sheet metal into Precision Components Division to expand business and thoroughly manage profits.

## Q. What are the goals and action plans under the medium-term business plan 2025?

Demand for machine tools recovered rapidly after bottoming out in the second quarter of 2020. During this recovery process, supply shortages from suppliers became an issue across all industries. However, DMG MORI was able to respond relatively well to production by promoting in-house parts production, building long-term relationships of trust with suppliers, and globally diversifying suppliers. However, in 2022, as orders increased more than planned, supply chain issues for some parts emerged. In the medium-term business plan 2025, we aim to increase the value-added output of in-house parts by approximately 60% compared to that of FY2022. In particular, we will increase production of spindles, ball screws, and ATCs. In order to contribute to maintaining high quality, stable supply, and reducing CO<sub>2</sub> emissions in response to the increasing

demand for 5-axis machines and mill-turn centers. In addition, we will improve productivity in order to absorb cost increases such as rising material prices and revisions of employee salaries. We have already reduced the number of processes required for in-house production of ball screws to one-third that of conventional processes. We will improve efficiency by using the latest machine tools, peripheral technologies, and digital technologies produced within the group. In the next three years, we will start using DMU 1000 SE to machine large castings and equip DMG 340 with in-machine automatic measurement to further reduce machining time. Combining these process integration and in-machine measurement with digitalized production management using TULIP will lead to improved quality and productivity.

#### Q. What challenges do you face in achieving your goals?

We are aware that the lack of skilled engineering personnel for the launch of production systems is a major issue for machining of new parts, and we are therefore training engineers for the launch of new products and parts. On the other hand, we have the advantage that we can deploy cuttingedge machinery and digital technology from group companies for the machining of precision parts. For subtractive machining, we can introduce cutting-edge 5-axis machines and mill-turn centers, and for grinding processes, we can utilize TAIYO KOKI's technology. Furthermore, in order to automate these processes, we utilize the accumulated know-how of in-house engineering, digital twin test cuts, and new digital transformation technology such as programming automation. We will make good use of these in-house resources to achieve our goals.

## Reducing CO\_2 emissions related to in-house parts also contributes to DMG MORI's $\mbox{\bf GREEN} \mbox{MACHINE}$

In order to realize a machine that is environmentally friendly, reducing CO<sub>2</sub> emissions related to individual parts is also a critical issue. The Company is already purchasing CO<sub>2</sub>-free power, but we have reduced power consumption by integrating the manufacturing process to shorten the machining time and introducing **GREEN**MACHINE produced in-house. Through these measures, we will contribute to achieving DMG MORI's carbon footprint reduction targets with SBT certification by 2030.

#### In-house production of key components



DMG MORI is working on in-house production of major parts for the purpose of not only improving quality and shortening delivery times, but also shortening product development time and ensuring stable supply. As with ball screws and ATCs, the spindle factory plays an important role with a consistent process from machining, assembly, to inspection. We are expanding in-house production in Japan, Germany, and other parts of the world.

#### Released New models of high-performance spindle compactMASTER and turnMASTER

In June 2022, DMG MORI released two types of spindles. One is the turn-mill spindle named "compactMASTER 40 | 250", which is the smallest class in the world with a total of 250mm in length but has high output and a maximum rotation speed 42,000min<sup>-1</sup>. The other is "turnMASTER 5in.", which is a high-precision and high-performance spindle for use in turning centers and mill-turn centers. In February 2023, DMG MORI developed a high-performance turning spindle "turnMASTER 12in.C", which is about 18% smaller than the conventional model and can hold a chuck as large as 12 inches on a small machine tool. Since DMG MORI manufactures key components in-house, we are able to develop and manufacture a variety of spindles. In addition, DMG MORI is so confident in its quality that we offer a 3-year warranty period for spindles. DMG MORI provides machine tools which are equipped with high-speed, high-performance spindles and manufactured under a carbon-neutral system, thereby contributing not only to improve the productivity of its users, but also contributes to reducing CO2 emissions and realizing environmentally friendly production sites.



#### Digitization of production sites -TULIP introduced to global production sites

DMG MORI has introduced "TULIP," a platform for creating applications to support production, to its main production sites. TULIP enables shop-floor personnel to create various applications which can be used for work instruction, quality control, equipment monitoring, and data linkage with other systems such as Manufacturing Execution System ("MES"). In addition, TULIP digitizes paper-based work procedure manuals, quality check sheets, and daily inspection items, making it easier to visualize and analyze production data. This enables rapid process improvement.





#### Improve customer productivity through process integration and automation

## Q. What is the background behind the growing importance of the engineering department's role?

The demand for machine tools is expanding from the mass production industry in the past to the high-mix, low-volume production industry such as semiconductor production equipment, medical, and aerospace. In addition, the owners of small and medium-sized enterprises, which account for the majority of our customers, are undergoing a generational change, leading to the introduction of new technology as well as machines and systems that emphasize investment efficiency. In particular, cuttingedge machine tools such as 5-axis machines and mill-turn centers as well as MATRIS Light, which was launched in the market in August 2021, are rapidly gaining interest among small and medium-sized enterprises. As the needs of our customers change in this way, our role of providing the most productive processing methods, automation, and digital transformation is increasing. The role of engineering includes proposing optimal machining methods, designing automation, installing the system at the customer's factory, and checking the operation. Through proposals for machining technology, time studies, or test cuts, our department secures quality such as work accuracy and pursues higher productivity. This increases customer satisfaction, thereby contributing to DMG MORI's increase in order intake.

#### Q. What is your competitive advantage in engineering?

In the medium-term business plan 2025, improving customer satisfaction through process integration, automation, and digital transformation is a core strategy. The most important thing for our customers is to keep their machines running. In addition to complex and ultra-precision parts, as high-mix, low-volume production increases, machine non-operating time increases due to changes in machining programming, setup changes for fixtures and tools, loading and unloading of work pieces, and measurement of machined parts. In order to reduce the non-operating time of the machine, we recommend first introducing process-integration machines such as 5-axis machines, mill-turn centers, and AM. With integration of processes, it is possible to reduce peripheral measures such as fixtures, tools, robots, and operators that were previously required for each process, and achieve more efficient automation. In addition to being able to offer

services such as machining support using application software, a wide range of peripheral equipment including robots, installation of automation systems, and prompt delivery of spare parts. Our greatest strength is that we can deliver such services as a one-stop provider. In addition, the extensive experience and number of automation that we have delivered since the early 2000s gives our customers peace of mind when introducing process-integration machines and automation systems.

## Q. What are the challenges in your medium-term business plan 2025?

In order to expand the engineering business, other than increasing the number of process-integration machine models, it is essential to develop engineers who can propose optimal production methods including peripheral equipment for automation, systems, and digital transformation. As for process-integration machines, we have developed the largest number of models in the industry, such as 5-axis machines, mill-turn centers and AM with sufficient competitive advantages. As for peripheral equipment, MATRIS Light has been well received by customers. We have also solved the 3 evils of machining, developing "AI chip removal", "zero sludge coolant tank", and "zeroFOG" to prevent machine stoppages. These devices have become essential for the introduction of automated systems. Autonomous Mobile Robot ("AMR") has drawn much attention from customers at the Japan Machine Tool Exhibition ("JIMTOF") held in November. Peripheral devices have also been enhanced considerably. In the future, I think that the development of more accurate on-machine measuring devices will become more important in order to further promote automation. The biggest challenge is the development of engineers. We need personnel who can propose machining methods, machine tool selection, and automation systems in accordance with the customer's work piece. Experience is our greatest weapon. Fortunately, DMG MORI has built up a global track record of complex and ultraprecision parts machining and automation, and we have also built a portal that makes it easy to search for this information and know-how using Al. In addition to hands-on experience, we intend to train engineers through digitized programs, so that we can improve our ability to make proposals that satisfy customers, and contribute to the expansion of DMG MORI's engineering business.



Benefits • High shape accuracy

#### **Reduction in**

- Setup time for each process · Intermediate work-in-process inventory
  - Assembly time
- Electricity consumption • Carbon footprint

## Machining time: 33% Power consumption: 22% (12.4 kWh) / piece

#### **Technology Cycles**

• High dimensional accuracy

• High surface quality

Technology Cycles are solutions that make complex machining easier and faster. Machining, setup, and measurement, which used to be performed by specialized machines, programs, and cutting tools, can now be performed easily and with high quality by anyone using general-purpose machine tools and standard tools and fixtures.



#### Technology Cycles "Multi-Threading 2.0

Worm gear machining with a general-purpose machine

- To machine special-shaped screw
- To simplify complex programming

#### Outcome (post-introduction)

- Various thread shapes to be easily created in an interactive format
- Machining programs for special shaped threads to be created on the machine without CAD / CAM
- Worms with involute curve tooth forms possible



# **Automation Solutions**

#### 13 product lines, 57 products

From automation systems that dramatically improve machine tool productivity to state-of-the-art smart factories that utilize digital data, DMG MORI provides everything including fixtures, tools, and programs to meet customer needs as a one-stop provider.



\*1 DMP, CMX V, CMX U, DMU, DMU monoBLOCK, DMU eVo, LASERTEC \*2 NHX, DMC H linear, monoBLOCK, duoBLOCK, Portal \*3 DMC 65 monoBLOCK, DMU 65 H monoBLOCK

Scalability



# DMG MORI Qualified Products (DMQP)

#### **DMQP: DMG MORI Qualified Products**

By combining DMG MORI's machine tools with high-performance, high-quality peripherals that are most suitable for them, customers will be able to start their production faster and further improve productivity.

DMQP is a collection of carefully selected and certified peripheral devices for DMG MORI machines that excel in quality, performance, and maintainability.

Together with DMQP partners, DMG MORI will create maximum value for its customers.

#### **Benefits of DMQP**

#### Four DMQP Categories





Peripherals and solutions made by DMG MORI



Al chip removals

zero sludge coolant tank



*zero*FOG

Medium-term Business Plan 2025 VALUE CHAIN Measures



#### my DMG MORI is a comprehensive service portal and provides product planning software

#### Q. What is the role and focus of TECHNIUM CO., LTD.?

TECHNIUM CO., LTD. was established in 2018 as a joint venture between DMG MORI CO., LTD. and Nomura Research Institute, Ltd., which is known for its information technology. Since then, TECHNIUM has launched a membership service platform "*my* DMG MORI," which serves about 10,000 registered customers in Japan and about 50,000 worldwide. We have also expanded sales of our IoT service, "CELOS Club," which currently provides connectivity to more than 3,000 customer machines in Japan. *my* DMG MORI also offers an e-learning service, "Digital Academy", on its website with seven courses including 5-axis machines, mill-turn centers and AM. In addition, TECHNIUM is engaged in the software sales business such as CAD / CAM software.

TECHNIUM works closely with DMG MORI SALES AND SERVICE CO., LTD. to bring the latest digital solutions to the customer's shop floor as well as machine tools.

## Q. What are the goals and action plans under the medium-term business plan 2025?

Our biggest challenge over the next three years is to transform *my* DMG MORI from a service platform into a platform that meets the comprehensive needs of machine tool users. At the heart of this is an online shop for the consumables, cutting tools and peripherals that DMG MORI customers need every day. Therefore, in August 2022, we opened e-commerce site for spare parts and consumables named "Parts Selector" on the *my* DMG MORI portal. This is part of a plan to grow online sales volume to JPY 2.5 billion while improving the usage rate of *my* DMG MORI toward 2025. In addition to e-commerce, we plan to use *my* DMG MORI as a portal for new cloud services that will be deployed from 2023. In the medium term, our goal is to consolidate all service contact points for customers into *my* DMG MORI.

Another goal is to launch a business that sells and supports installation of software related to production management for

small and medium-sized enterprises (SMEs). We expect that there is a great business opportunity in helping SMEs to improve their efficiency, as SMEs still often manage their production, including production planning, in an analog way. TECHNIUM will start selling subscription-based production scheduling software "ISTOS" from 2023. Together with "DMG MORI GATEWAY," a software that connects all the equipment in the customer's factory, it is possible to automatically link the production schedule and actual machine operation data, leading to improving the efficiency of manufacturing for the customer. By linking this system with the integrated production control system for automated cells or "MCC-TMS," a tool management system provided by DMG MORI, we will be able to provide customers with packaged digital vertically integrated solutions.

#### Q. What challenges do you face in achieving your goals?

In order for customers to use the online shop provided by *my* DMG MORI, we need to address their diverse needs, such as internal approval processes, authorization management, and payment methods when purchasing goods. Therefore, we understand the challenges our customers face, and in parallel, we research functionality of e-commerce sites in other industries to create cutting-edge online store. In addition, in order to succeed in subscription-based software sales, we need to closely follow up with our customers to ensure that their adoption of our software is economically viable. For this purpose, we would like to work on customer success management.

#### Q. Long-term outlook

CELOS X, a new cloud solution to be released in 2023, will make the use of machine data more flexible than ever before. The use of such data enables innovation in business models. In the long term, TECHNIUM aims to continue to provide its customers with creative and innovative digital solutions without being bound by the past.

#### **DMG MORI GATEWAY**



## Transforming customer's production site with digital transformation

The latest digital and sensor technologies digitize various machine tool parameters. DMG MORI GATEWAY is a service that allows customers to connect not only DMG MORI machines but also other machines in the factory to DMG MORI's server, check machine information via the internet, and use the data. Data is accumulated through a server on the cloud, which is protected by strong security. Therefore, the service can be introduced safely and at low cost. Real-time data visualization makes it possible to formulate management strategies based on data and maximize asset utilization.



\*umati is a trademark or registered trademark of Verein Deutscher Werkzeugmaschinenfabriken e.V.

\*MTconnect is a trademark or registered trademark of The Association For Manufacturing Technology.

\*OPC UA is a trademark or registered trademark of the OPC Foundation.

\*MQTT is a trademark or registered trademark of International Business Machines Corporation.



#### my DMG MORI

In September 2019, we introduced the membership service platform "*my* DMG MORI" as a service that directly provides customers with added value through digitization. As a result, customers can instantly check the machine number, delivery date, or warranty period of their machines in each factory, as well as view operation manuals and easily obtain historical information of on-site service and repair or replacement parts. In addition, we have added the ability to directly request repairs online and the ability to order spare parts.

#### **CELOS DYNAMIC**post

#### Realization of digital twin in the machining floor Software that seamlessly connects CAM and machine tools

The newly developed CELOS DYNAMIC*post* is a PC software that combines three functions into one: post processor\*1, cutting simulation, and cutting capability optimization, which previously had to be purchased separately. Developed by DMG MORI, a machine tool manufacturer, CELOS DYNAMIC*post* provides standard support for functions specific to DMG MORI machines and generates highly reliable NC programs that maximize machine performance. In addition, the product reduces the need to manually adjust NC programs and significantly shortens the time from program creation to machining. CELOS DYNAMIC*post* also contributes to reducing energy consumption by allowing digital machining simulation and thereby eliminating the need for trial cutting on the machine.

\*1 Post processor: A function to convert toolpaths (machining paths) generated by CAM into NC programs suitable for the control of machine tools.



Medium-term Business Plan 2025 VALUE CHAIN Measures

Human Resources Development

Group Companies



#### Human Resources Development Policy for 2025

On December 14, 2022, the Company announced its three-year medium-term business plan until 2025. In the plan, we determined that it is essential for our company's growth to secure and develop employees with a high level of vision, who are able to look at the direction management should take in the rapidly changing machine tool industry, and to act on their own initiative with a sense of ownership.

#### Q. Investment in Employees

Currently, the DMG MORI group employs about 12,000 employees, who vary in terms of language, nationality, gender, and field of expertise, and work in countries, including Japan, Germany, the United States, Italy, Poland, and China. Employees represent 59 different nationalities. The regions, industries, and size of our customers and suppliers are also diversifying. In order to deliver optimal solutions to all customers around the world, the employees must brush up their skills and knowledge. The Company has also been diversifying its hiring process, and recruiting not only graduates from universities, graduate schools, technical colleges, junior colleges, high schools, but also doctoral course graduates, overseas university graduates, and those who are in their mid-careers. Securing highly skilled employees at international standards will become even more important in the future. Therefore, in July 2022, the Company has raised the starting salary for new graduates in Japan in order to adjust the salary level to a global standard. The starting salary for new graduates has been significantly revised for the first time in four years since 2019. For new employees joining the Company from April 2023, doctoral course graduates will be raised from JPY 334,150 to JPY 475,000, master's course graduates from JPY 254,280 to JPY 310,000, and undergraduates and technical college increased from JPY 272,210 to JPY 300,000 (all monthly salaries). At the Company, there is no wage gap between male and female employees. We will continue to work to recruit highly skilled employees regardless of nationality or gender.

#### Q. Providing opportunities for individual employees to grow

The Company also places great importance on employee training, and in addition to the traditional training by job level, the Company provides many opportunities for employees to grow. To give a specific example, DMG MORI holds the Global Development Summit as an initiative unique to our company with a global development system. This is an annual large-scale conference with a total of about 300 developers from all over the world, mainly Japan and Germany, in which the attendees discuss medium- to long-term development plans for each technology field over several days. The discussions among participants with different positions and responsibilities, while experiencing firsthand the discussion styles of both the Japanese and German sides, are not only an encouragement to the Japanese-German cooperative development system, but also function as a powerful opportunity for participants to gain stimulation and learning, and to reconsider their individual career development. We have started training for managers from October 2022. The purpose of this program is to establish a cycle to sustainably develop human resources that will contribute to our growth in 2025 and beyond. The HR department selects managers, who will participate in the training and are expected to demonstrate leadership in their respective workplaces as "in-house trainers." In 2022, the training was held twice, with about 10 participants each time, and the Company aims to train about 100 "in-house trainers" by the first half of 2023. We are also encouraging employees to pursue their professional developments. From 2022, the Company has become a platinum member of the Metaverse School of Engineering established at the University of Tokyo. Our employees can enroll in online educational programs which teach them the latest trends in engineering and beyond, such as artificial intelligence, entrepreneurship, and nextgeneration communication. In collaboration with WALC Inc., which was established in April 2022, the Company will continue to strongly promote the development of employees' resources who can lead the shift to digital transformation.

#### Q. Measures regarding Gender Diversity

In terms of diversity, the Company will also focus on increasing the ratio of female managers. In the medium-term business plan announced in December 2022, the Company set a goal of increasing the ratio of female managers to 15% or more by 2025. Even at present, we are not closed to career opportunities based on gender. However, in general, women in the manufacturing industry tend to be concentrated in certain positions, such as back office work. I believe that it is important to increase the number of women who can be active in various fields and to promote a change in the awareness of career development among female employees.

## Creating an environment where everyone can work comfortably

#### Practice "play hard, study continuously, work together"

The most important foundation for providing high-quality products and services to our customers and achieving sustainable growth as a company is a highly motivated and innovative group of employees. DMG MORI has continuously been working to create an environment in which each employee, regardless of gender or individual life stage, can work with a sense of fulfillment and vitality.

#### Increasing employee engagement

In order to hire excellent employees who can provide higher added value to our customers and keep them highly motivated, DMG MORI has revised the salaries of our employees globally in 2022. In particular, the Company has revised the starting salary and annual income of our employees in Japan to wage levels comparable to those in Europe or the United States. In addition, in order to practice one of DMG MORI's mission statements, "Play hard, study continuously, work together," the Company has been working to reform employee work styles, improve productivity and create a working environment in which each employee can play an active role and live a sustainable life. The Company is strictly managing working hours and office hours, ensuring intervals between working hours, and encouraging all employees to take a full 20 days of paid leave per year.



Revision of starting salary for new graduates (effective from April 2023, but retroactively effective to those who started working from April 2022)

Final educational background or degree	Average age	Starting salary	Starting annual salary
Doctoral degree	27 years old	JPY 475,000*1	JPY 6,825,000*2
Master's degree	24 years old	JPY 310,000	JPY 4,650,000
University (undergraduate degree)	22 years old	JPY 300,000	JPY 4,000,000
Technical college specialized course			
Technical college regular course Junior college	20 years old	JPY 290,000	JPY 3,700,000
High school	18 years old	JPY 280,000	JPY 3,500,000
			4 4

\*1 Including JPY 50,000 / month of qualification allowance and JPY 100,000 / month of skills allowance \*2 Including JPY 1.2 million / year of skills allowance \* This data is based on Japan-based employees (regular employees and fixed-term employees)



 Includes base salary, qualification salary, position salary, bonus, child allowance, housing allowance, and overtime allowance.
 Excludes dormitory / company housing, meal allowance, commuting allowance, employee stock ownership incentive, childcare expense support, travel expense support for family visits, medical checkup support, and other benefit related payments. Average number of days of paid leave taken per person per year



<sup>\*</sup> This data is based on Japan-based employees [full-time employees and fixed-term employees] Number of paid leave days is converted to 20 days granted.

Average total working hours per person [hours / year]



#### Gender diversity and equal opportunity

In order to incorporate diverse perspectives into management and product development in the face of drastic changes in customer demands and society, the Company will also give due consideration to gender diversity, and will work to increase the ratio of female managers by 2025 in Japan, where the percentage of women in management positions is particularly low. As a medium- to long-term measure, the Company is also working to increase the ratio of women in new hires in order to lead the increase of female ratio in the machinery industry.

To enable female employees to maximize their potential, the Company provides opportunities for growth through job rotation and internal and external training so that they can gain work experience regardless of their gender, and has a salary structure that is commensurate with their individual duties and achievements. As a result, there is almost no difference in average annual salary between male and female employees by position.



Medium-term Business Plan 2025 VALUE CHAIN Measures

Human Resources Development

#### Work-life balance

#### Taking actions under the Act on Advancement of Measures to Support Raising Next-Generation Children

The Company formulated an action plan based on the "Act on Advancement of Measures to Support Raising Next-Generation Children" and received "Kurumin," a certification mark issued by the Ministry of Health, Labor and Welfare to companies that actively work for the development of the next generation.

The "Kurumin" certification can be obtained by companies that have achieved the goals set forth in the action plan, and is a proof of recognition as a company that actively promotes support for work-life balance.

The main initiatives we have undertaken to date are as follows

- 1. Extension of childcare leave until the child reaches the age of two
- Expansion of the scope of application of the reduced working hours for childcare until the child graduates from elementary school
- 3. Introduction of a one day paid leave that fathers can take when a child is born
- 4. Introduction of a system that allows employees to take time off to care for their children on an hourly basis
- Introduction of a preferred re-hiring system for employees who left the Company due to childbirth or childcare
   Introduction of a system in which a total of 20 days of childcare leave is paid for if the employee takes more than 10 days off at a time (can be separated in two occasions).
- 7. Provision of financial allowance during childcare leave
- 8. Provision of financial allowance if the employee decides to return to the workplace prematurely from childcare
- 9. Provision of financial allowance for the full childcare cost
- 10. Establishment of nursery schools on company premises
- 11. Organization of periodic information sessions about the Company's childcare leave program aimed at male employees

Currently, the Company is continuing its efforts by formulating the "Eighth Action Plan". The Eighth Action Plan (June 1, 2022 - May 31, 2025) is available at (Released on June 2, 2022) https://www.dmgmori.co.jp/corporate/recruit/worklifebalance/pdf/worklife\_20220601.pdf



## Enhancing employee benefits related to childbirth and childcare

DMG MORI Nursery School, a company-led nursery school, is permanently established at the Iga and Nara Campus, and is ready to accept a total of 100 preschool children. The nursery is available free of charge thanks to DMG MORI's daycare subsidy allowance, and operates on national holidays in accordance with the Company's work calendar. From 2022, we introduced a new benefit program that allows employees to take paid leave in one-hour increments to accommodate various working styles. We will continue to listen to our employees and continue to develop a comfortable working environment.



DMG MORI Child Care Center (Iga Campus)



#### Female empowerment

The Company has established actions plan to enable female employees to fully demonstrate their abilities in various fields. The percentage of female employees among all new graduate employees hired by DMG MORI CO., LTD. in 2022 was 17.4%. In addition, the Company has set a goal to encourage all employees to take 20 days of their paid leave, and in 2022, the average number of paid leave reached 18.8 days.

The Company is working to create an environment in which female employees can have sense of fulfillment and pride in their work. At DMG MORI, female engineers are active in domestic and overseas locations. Once a male-dominated workplace, the number of female engineers within the Company is steadily increasing, and the Company hopes that this will indirectly cause to increase the number of female operators at the customers' sites as well. In addition to female employees working as engineers, female employees in administrative positions are also active as professionals in their respective fields of expertise.



#### Encouraging male employees to take childcare leave

So that the employees can devote themselves to childcare with peace in mind, the Company has introduced a system under which employees who take childcare leave for 20 or more consecutive days receive the first 20 days as paid leave, starting in January 2020. Furthermore, in order to realize an environment where everyone can work comfortably regardless of gender, the Company believes that it is necessary to change the mindset of the entire workforce, including male employees. The Company actively encourages male employees to take childcare leave with the expectation that by doing so, male employees will take on the role of childcare, which has traditionally been regarded as the role of women. As a result of the Company changing the mindset of those in managerial roles and establishing support systems in the workplace, the number of male employees taking childcare leave has increased from 16 in 2021 (acquisition rate of 17.4%) to 77 in 2022, resulting in 100% of qualifying employees utilizing the system. The feedback from male employees who have taken childcare leave is positive, saying that the way they interact with their colleagues and the way they approach their work has changed.

In order to further accelerate the transformation of the entire company and the mindset of individual employees, the Company has set a goal of maintaining a 100% childcare leave utilization rate among eligible male employees in its medium-term business plan.





Calculation is based on criteria set by Kurumin

Number of male employees who started childcare leave during the fiscal year / Number of employees whose spouses gave birth to a child during the fiscal year

A Year of DMG MORI (from January to December, 2022) Medium-term Business Plan 2025 VALUE CHAIN Measures

#### Support for customers' operator training

#### Establishing DMG MORI Academies in various locations in Japan

The Company intends to establish DMG MORI Academy in five cities in Japan, Hamamatsu, Kanazawa, Sendai, Okayama, and Fukuoka (location to be determined), by 2025 to support the training of young engineers. Each academy will be equipped with several DMG MORI machine tools, such as DMU 50 3rd Generation, a 5-axis machine and, NTX 1000 2nd Generation, a mill-turn center, TULIP, a digital transformation tool, and a 3D measuring equipment, which will be used for private lessons to customers.

With DMG MORI Academy opening at various locations in Japan, customers will have the opportunity to touch DMG MORI products at their nearest location at their convenience. The Company is convinced that it can maximize the learning experience of customers' operators by combining online classes on DMG MORI Digital Academy, and practical machining training at one of its DMG MORI Academy locations.





DMU 50 3rd Generation

#### 5-Axis Machining Association



In 2018, the Company lent out 70 units of DMU 50, a standard 5-axis machine, to 70 customers throughout Japan as part of its 70th anniversary project. 5-axis machines are capable of machining complex shapes with high precision, but on the other hand, they require a high level of skill and experience to operate, such as unique programming. As a result, the penetration rate of 5-axis machines in Japan remained low compared to those in other countries. Therefore, the Company formed a "5-Axis Machining Association" and took measures to promote 5-axis machining technology, by dispatching its engineers twice a month to the companies to which it loaned DMU 50, holding private lessons to which customers around the area were invited as well, and offering a total of 1,161 lessons to its customers' operators. In 2021, in response to the positive feedback from customers to these activities, the Company redefined the "5-Axis Machining Association" as an organization that aims at fostering communication among member companies and advancement of 5-axis machining technology. The new organization has been conducting activities such as hosting biannual general meetings, publishing newsletters, holding technical seminars by DMG MORI engineers, and organizing a contest in which the member companies showcase their 5-axis machining skills. As of the end of 2022, there are 140 member companies and organizations. Through these activities, the "5-Axis Machining Association" helps customers recruit and train operators as well as provides a forum for member companies and organizations to interact and exchange information, thereby expanding business opportunities for customers and stabilizing their operations.



Dialogue at the general meeting

DMU 50 maintenance training



Newsletter

#### Training of in-house engineers

#### DMG MORI Academy

DMG MORI Academy was established to enhance the professional skills, management capabilities, and international mindset of employees. In addition to a total of three locations in Japan (Iga Campus, DMG MORI's largest production site in the world, Tokyo GHQ, and Nagoya), there are facilities in Chicago, U.S.A., and Stuttgart, Germany, which function as regional hubs to support the continuous improvement of service and application engineers' skills.

Furthermore, DMG MORI Academy will open new locations in Japan through 2025 with the aim of not only serving as training facilities for customers' operators, but also as a place for in-house application engineers based in various regions of Japan to practice machining techniques.



#### Repair and restoration skills training center

In 2021, the Company opened the "Repair and Restoration Skills Training Center" on Iga Campus. This center is the Mecca of approximately 2,000 service engineers worldwide, and is devoted to generate highly-skilled engineers who can handle all-round repairs for all machine models, automation solutions, digital solutions, and so on. Service engineers not only from Japan but also from Asia and other countries around the world receive training here on a regular basis to improve the skills of engineers.

As demand for 5-axis machines, mill-turn centers, and automation systems increases, service engineers are required to have higher skills. The Company intends to increase the number of service engineers who can respond quickly, properly, and safely to the customers' service requests by utilizing more than 40 units

of machines, including 5-axis machines, mill-turn centers and automation systems, which are permanently installed for training purposes.



#### Machining measurement skills training center

The Company offers machining measurement training programs for both customers and junior DMG MORI engineers. As for the internal training, our junior engineers spend 18 full months at the training center, away from their normal job duties, and learn how to operate mill-turn centers and 5-axis machines. By increasing the number of in-house experts, the Company will be able to meet increasingly complex machining needs in the future as well.



## **M&A History and Its Effects**

The current DMG MORI group was formed in 2015 through the integration of the former Mori Seiki Co., Ltd. and GILDEMEISTER AG ("DMG") of Germany.

Even before this integration, the Company has been actively acquiring technologies and know-how through corporate acquisitions and business takeovers, which lead to its growth in business.

This section looks back at the major mergers and acquisitions to date and their effects.

#### **DMG MORI**

DIGITAL

Acquisition of DMG MORI Digital Co., LTD. (formerly known as DMG MORI B.U.G. CO., LTD.)

TAIYO KOKI TAIYO KOKI CO., LTD.

#### becomes a group company

- By having TAIYO KOKI, which developed the industry's first vertical grinding machine, as part of the group, TAIYO KOKI became a metal machining manufacturer with a full lineup that covers everything from cutting to grinding.
- TAIYO KOKI is listed in the JASDAQ Securities Exchange in December 2007. (Since April 2022, TAIYO KOKI is listing on the Tokyo Stock Exchange Standard Market)



1948

- DMG MORI Digital contributed to the development of CELOS, an operation software for machine tools
- DMG MORI Digital's software technology led to *my* DMG MORI and other technologies which enables IoT to date

#### Business succession of Hitachi Seiki Co., Ltd. (Japan)

• By taking over the business of Hitachi Seiki in Japan, which had strengths in mill-turn centers, the Company strengthened its product lineup

- The Company, which originated in Kansai, and has its business focus in western Japan, expanded its presence in eastern Japan
- Hitachi Seiki's mill-turn technologies have been inherited by Iga Campus

2001 2002

#### 2007

#### Acquisition of DIXI machines S.A. (Switzerland)

- The Company gained access to the world's well-known customers with the DIXI brand
- The Company obtained high-precision, high-rigidity technology including scraping technology
- The Company accumulated overseas production know-how as its first overseas production site
- DIXI machine's technology was inherited by Pfronten factory in Germany, after the closure of the DIXI factory in Switzerland in 2016.

#### **GILDEMEISTER** (DMG)



The Company is able to supply sensing parts and devices necessary for the manufacturing of semiconductor (pre-process) to the utilization of semiconductor (post-process).

#### Magnescale

Establishment of Magnescale CO., LTD. through taking over business from the current Sony Group Corporation

- The Company acquired measuring equipment technology such as scales and sensors, which are essential parts of semiconductor production equipment as well as machine tools.
- Magnescale's ultra-precision measurement technology enables the Company to realize ultra-high precision machine tools.

#### Saki Consolidation of Saki Corporation

- The Company acquires technology related to in-line automated inspection systems for mounting circuit boards and semiconductors.
- Saki Corporation's technology enables the company to expand its customer base in the field of next-generation communication systems and EVs
- The Company realizes "defect-free" smart factories

#### Transfer of small-size turning center business from AMADA CO., LTD.



#### Consolidation of DMG MORI CASTECH CO., LTD. (formerly Watanabe Steel Works)

 DMG MORI CASTECH enables the Group to realize in-house production of castings used for machine tool beds and columns, stabilize its supply,

2008



## Medium to Long term Business Strategies of Group Companies

## Magnescale

#### Magnescale CO., LTD.

45 Suzukawa, Isehara City, Kanagawa, Japan https://www.magnescale.com/en/

## Contributing to higher accuracy of manufacturing and measuring equipment with magnetic and optical precision position detection technology

Magnescale CO., LTD. has been providing high-precision position detection systems based on magnetic and laser light detection principles to the machine tool and industrial machinery fields for more than half a century. "Magnescale", which is also the name of the company, is a product that takes advantage of the features of magnetism to demonstrate reliability even in harsh environments such as metal cutting. "Laserscale" has achieved the world's highest resolution of 2.1 picometers, contributing to the quality improvement of cutting-edge semiconductor production equipment and ultra-precision machine tools. "Digital Gauge," which is an application of high-precision position detection systems, supports measuring that occurs in manufacturing and assembly processes with digital technology. The company is also accredited as a



calibration service provider for length and angles under JCSS (Japan Calibration Service System = measurement traceability), and provides traceable products in compliance with Japanese standards. The demand for ultra-high precision in machine tools and semiconductor production equipment is increasing, and the demand for Magnescale and Laserscale is growing rapidly. At the same time, since the number of companies that can provide high-precision scales is limited, customers are demanding a stable and sustainable supply system. In order to expand supply capacity and ensure a stable supply, the company has decided to establish a new factory in Nara, where DMG MORI CO., LTD. was founded. By increasing its supply capacity, the company intends to cultivate new customers and aim for further growth in sales revenue and profits.



## 

TAIYO KOKI CO., LTD.

221-35, Seiryo-machi, Nagaoka City, Niigata, Japan https://www.taiyokoki.com/en/

#### Fulfilling customers' needs through customization An all-round manufacturer of grinding machines

TAIYO KOKI CO., LTD. is a specialized manufacturer of grinding machines that has developed vertical grinding machines with outstanding creativity and technology. Grinding machines, which are responsible for the final process of metal machining, require the highest precision among machine tools. The company has a flexible R&D system in place to realize the needs of its customers. Founded in 1986, the company became a member of the DMG MORI group in 2001 and was listed on the JASDAQ Securities Exchange in 2007. Currently, this listing has moved to the Tokyo Stock Exchange Standard Market. As the markets for semiconductor production equipment, wind power generation and other new energy fields, medical-related products, and electric vehicles expand, so does the demand for higher-precision components. The company's brand recognition is increasing in overseas markets as well,



and its overseas order intake ratio has exceeded 30%. Against this backdrop, the company expects demand for its grinding machines to further increase and has decided to build a new headquarters and factory (as disclosed on October 26, 2022). TAIYO KOKI CO., LTD. will have approximately twice the assembly production capacity of the current headquarters and factory upon the completion of the new factory. In addition, the precision assembly room and precision measurement room will be expanded to promote the development and manufacture of high precision grinding machines. In fiscal year 2019, the company achieved sales revenue of JPY 10 billion for the first time since its establishment. With the expansion of production capacity at the new headquarters and factory, the company aims to achieve sales of JPY 20 billion by 2030, and will strive to expand earnings and increase corporate value.



CNC cylindrical grinding machine CGX25 / 100



CNC vertical multi-process grinding machine CVG-9

#### SaKI Saki Corporation

DMG MORI Tokyo Digital Innovation Center, 3-1-4 Edagawa Koto-ku, Tokyo, Japan https://www.sakicorp.com/en/

## Contributing to improvement of manufacturing quality through automatic inspection equipment for electronic component mounting processes

Saki Corporation develops, manufactures, and sells in-line automatic inspection systems for electronic modules such as mounting boards and power semiconductors. In the field of electronics, where technological innovations are remarkable, such as automobiles, airplanes, smart phones, personal computers, and the base stations and data servers that support these communications, various technologies are connected by networks to build the infrastructure of today's digital society. Electronic modules, which are the heart of all of these products, support the digital society by becoming the quality of the infrastructure itself, and are therefore required to be highly reliable and safe, and automated quality inspection in high-



SMT line consisting of mounting and inspection machines

density mounting processes and semiconductor back-end processes is becoming increasingly necessary. The company is contributing to the realization of "defect-free" smart factories with its total lineup of state-of-the-art optical and X-ray 3D imaging and measurement technologies, and Al-based highspeed, high-precision quality inspections. Furthermore, in response to rapidly changing market needs, the company has begun offering an evolutionary inspection system with a variety of optional functions and excellent scalability. Saki Corporation will continue to expand its business by contributing to solving environmental issues with sustainable automated inspection solutions that evolve together with our customers' factories.



Inline automated inspection system

#### **DMG MORI**

CASTECH

1378 Otsu-cho, Izumo City, Shimane, Japan https://dmgmori-castech.com/

#### DMG MORI CASTECH CO., LTD. (Formerly Watanabe Steel Works)

#### Offering stable supply of ecological, high-quality casting products

DMG MORI CASTECH CO., LTD. produces castings for beds and columns of machine tools. Castings are critical parts that determine the accuracy, rigidity, and durability of machine tools, and it is important to ensure high quality and stable procurement. In addition, the production and procurement of castings contribute largely to our carbon footprint, so it is necessary to take measures to address this issue. To solve it, the company is rebuilding its headquarters with the aim of replacing production equipment as well as expanding production capacity. Casting production capacity was less than 10,000 tons per year in 2022, but will increase to about 20,000 tons per year in 2025. The company currently delivers a little more than 40% of the amount used in DMG MORI's production sites in

Japan, and intends to increase this ratio to about 74% by 2025. With the construction of the new factory, we will switch from the conventional coke oven to the electric furnace. The new electric furnace will use CO<sub>2</sub>-free electricity and renewable energy. DMG MORI CASTECH's carbon footprint will be reduced from 6,665 tons per year in 2020 to about 140 tons per year in 2025 (down 98% from 2020). In this way, DMG MORI CASTECH will contribute to the stable supply of casting for DMG MORI's production in Japan by increasing the production of castings, which are the main parts of machine tools, and will strive to protect environment by reducing CO<sub>2</sub> emissions through the introduction of new facilities.





Medium-term Business Plan 2025 VALUE CHAIN Measures

Human Resources Development

#### **DMG MORI**

#### DIGITAL DMG MORI Digital Co., LTD. (Formerly DMG MORI B.U.G. CO., LTD.)

1-14 Techno-park 1-chome, Shimonopporo, Atsubetsu-ku, Sapporo, Hokkaido, Japan https://www.bug.co.jp/index.html

#### Contribute to the promotion of MX through the development of IT solutions

DMG MORI Digital Co., LTD. was established in Sapporo, Japan in 1980 as an IT venture "B.U.G. CO., LTD." originating from Hokkaido University. The company has been developing cutting-edge computer-related technology based on its advanced hardware and software technologies. It became a group company of DMG MORI CO., LTD. and has been involved in the development of user-friendly and competitive next-generation operation software such as CELOS and MAPPS. "CELOS DYNAMIC*post*," which is a PC-based software developed by DMG MORI Digital, can integrate three functions into a single software package: post processor, cutting simulation, and cutting force optimization. As a result, customers can greatly reduce the time from program creation to the start of machining. Furthermore, by eliminating the need for test cutting on an actual machine with its digital simulation capability, the software allows customers to reduce power consumption. The company also focuses its resources on developing connectivity functions, and provide solutions so that customers can improve their productivity and conduct adequate preventive maintenance by monitoring machine operation information. DMG MORI's idea of "Machining Transformation" (MX) is to make the machining process leaner through process integration and automation, and to improve the entire process by utilizing cutting-edge technologies such as IoT and AI. DMG MORI Digital will contribute to the promotion of MX through the development of IT solutions.



#### TECHNIUM TECHNIUM CO., LTD.

DMG MORI Tokyo Digital Innovation Center, 3-1-4 Edagawa Koto-ku, Tokyo, Japan https://www.technium.net/

#### Offering long-term support for installed machines through digital services

In 2018, TECHNIUM CO., LTD. was established as a joint venture between DMG MORI CO., LTD. and Nomura Research Institute, Ltd. The company provides digital services to help customers improve productivity, reduce costs, and educate operators throughout the lifecycle of machine tools. The company's membership portal "*my* DMG MORI" was launched in 2019, initially offering customers easy access to manage information such as machines' serial numbers, delivery dates, warranty expiration dates, basic information manuals, and history of on-site service, or spare parts information. New functions have been gradually added, and new communication options have been realized, such as making online service requests, or attending e-learning courses for machine operation. In 2022, two new services, "Parts Selector" and "Chatbot," were launched. These services contribute to improved productivity by reducing the time customers spend on inquiries and waiting for responses. In addition to *my* DMG MORI, the e-commerce business, including the CELOS Club business, CAM business, and digital parts business, is steadily expanding.





DMG MORI Tokyo Digital Innovation Center, 3-1-4 Edagawa Koto-ku, Tokyo, Japan https://tprj.co.jp/

#### Promoting the low-code platform "TULIP" to realize digital transformation on the shop floor

Since its establishment in September 2020, T Project CO., LTD. has been providing sales and services in Japan for TULIP, a cloud-based application creation platform for manufacturing support developed by Tulip Interfaces, Inc. in the United States. Since TULIP is a low-code application, it can be developed and operated without outsourcing the task to an IT engineer, and it is easy to link with production equipment, external systems or and services, allowing the shop floor employees to work efficiently and improve quality. DMG MORI has already introduced the platform at its production sites on a global basis, which has led to improved productivity and

quality. TULIP is an application development platform for the manufacturing industry, but its use is expanding dramatically since it requires a minimal training time and excels in report creation and traceability. In August 2022, the company opened the Tulip Experience Center ("TEC") at the Tokyo Digital Innovation Center to promote the use of TULIP by providing customers with hands-on experience to understand its ease of use and effectiveness. Companies that have once introduced TULIP are expanding its applications and repeat orders from the same companies are also contributing to expanding the company's business.



## WALC Inc.

13-15 Sakuragaoka-cho, Shibuya-ku, Tokyo, Japan https://walc.co.jp/

#### Exploration future technology - a newly established company to provide software services

Following its establishment on April 1, 2022, WALC Inc. held its opening ceremony in Shibuya, Tokyo on July 15, 2022. The company succeeds the "Emerging Technologies Laboratory," which was launched in 2017 as a place to develop employees to lead the digital revolution in the manufacturing industry, and inherits its predecessor's goal of providing software products that will promote digital transformation. "WALC" means "Waltz" in Polish, and its mission is to develop human resources who are proficient in the three key areas of AI, Internet of Things ("IoT"), and cloud computing. The company has developed and sold "BR Controller," which enables automatic operation and high precision gripping of automated guided vehicles, "WALC CARE," which is a health monitoring service that performs predictive maintenance for machine tools, "WALC VISION," which inspects board and appearance with automatic image recognition technology, "WALC EYE," which analyzes people's movements or on-machine status, and "WALC COMPREHEND," which extracts certain knowledge from text data. In addition, the company also recruits IT engineers and actively accept internships, thereby finding, developing and supporting top talents of the field.



Management Resources Policy Development

Quality

Social Responsibility

# Sustainability (ESG / CSR) Initiatives

Social issues

DMG MORI's initiatives

Human

Aiming for a sustainable society, DMG MORI is making efforts to reduce CO<sub>2</sub> emissions and create a resource-recycling society.

In particular, from 2021, all products produced globally by DMG MORI have been carbon neutral from procurement to shipment (Scope 1, Scope 2, and Scope 3 upstream) by partially using internationally certified CO<sub>2</sub> credits.

## DMG MORI







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## Environmental Protection

• Efforts against climate change

- Reduction of environmental load
- Forest conservation



<ul> <li>Carbon neutrality in the process of procurement to shipment (Scope 1, Scope 2 and Scope 3 upstream) by partially using internationally certified carbon credits (since 2021)</li> </ul>	P.69
<ul> <li>Climate-related disclosure based on TCFD-recommendations</li> </ul>	P.71
<ul> <li>SBT accredited Carbon footprint reduction targets</li> </ul>	P.73 P.75
Environmental protection by utilizing     abandoned farmland	P.83



## Social

#### Measures against labor shortage

- Transfer technical knowhow to next generations
- Improve job satisfaction and productivity
- Diversify human resources
- Coexistence with local communities



# Promotion of employee wellness P.7' Support for doctoral students in engineering P.8' DMG MORI Academy to develop skilled P.60 engineers Engagement in local communities P.8' Support of cultural activities and local communities Social responsibility in procurement throughout entire supply chain

## Governance

## • Corporate governance as foundation to contribute to a sustainable society

Realize a peaceful society



<ul> <li>Diversified board structure</li> </ul>	P. 91
<ul> <li>Development of next generation of executive-level managers</li> </ul>	P.100

• Strict export control system and risk P.101 management



#### **Sustainability**

#### Addressing climate change is a priority

The world's average temperature has already risen over 1°C since the industrial revolution. We have been witnessing various damages caused by abnormal weathers such as large-scale floods and typhoons attributed to global warming. The main cause of global warming is believed to be the increase in CO<sub>2</sub> emissions from the combustion of fossil fuels, and there is no time to spare to reduce such emissions. Under these circumstances, the Company is actively working to reduce its CO<sub>2</sub> emissions. Carbon neutrality is essential for the formation of a sustainable society and is a key issue in corporate social responsibility.

#### CO2 emissions reduction based on third-party assessment

The Company has achieved carbon neutrality in 2021 in its supply chain from raw material production to product shipment (Scope 1, Scope 2, and Scope 3 upstream) through self-help efforts and offsetting of carbon footprint by investing in internationally-accredited climate protection projects. DMG MORI's production sites around the world have achieved carbon neutrality based on a calculation formula guaranteed in 2021 by PricewaterhouseCoopers GmbH, a third party, and have been manufacturing machines in manufactured in a climate-neutral way called **"GREEN**MACHINES."

The Company is also working to reduce CO<sub>2</sub> emissions throughout our supply chain by setting targets certified by the Science Based Targets (SBT) initiative in 2021. The goal of the SBT Initiative is to limit the increase in global temperature to less than 2°C above pre-industrial levels, as adopted in the Paris Agreement, and strive to limit the increase to within 1.5°C. The Company aims to reduce the total amount of CO<sub>2</sub> emissions in Scope 1 and Scope 2 by 46.2% and in Scope 3 by 13.5%, respectively from the base year level of 2019 by 2030.

The Company will implement various initiatives to achieve its targets. The main initiatives are as follows:

#### Active introduction of solar power generation facilities

The Company will strive to increase the utilization rate of renewable energy throughout the Group. Specifically, the Company will switch from purchasing electricity to generating its own electricity from solar power. The Company has been promoting the introduction of CO2free electricity throughout the Group since 2020. The Company's factory, Iga Campus, introduced CO2-free power in April 2021. CO<sub>2</sub> emissions related to electricity consumption at the Iga Campus is already zero, but the Company will further increase the use of renewable energy by introducing solar power generation facilities. Solar panels will be installed on the approximately 130,000 square meter factory roof throughout Iga Campus. The panels will have a capacity of approximately 13.4 megawatts, which will provide approximately 30% of the Iga Campus's annual electricity demand. This is the largest on-site, self-consumption solar power system in Japan.

Solar power generation will begin partially in 2023, and by the end of 2024, the facility will generate approximately 14 million kilowatt-hours per year. The effect of reducing CO<sub>2</sub> emissions through the introduction of solar power generation is about 5,300 tons annually, and it plays an important role not only in reducing CO<sub>2</sub> emissions but also in terms of business continuity. In response to the risk of energy procurement due to tight power supply and soaring fuel costs due to political instability and foreign exchange rates, on-site power generation by solar power generation enables the factory to run continuously by securing a long-term stable power source and reducing costs through long-term fixed unit prices in PPAs (Power Purchase Agreements). In the future, the Company will actively introduce solar power generation at Nara Campus and Group companies to increase the use of renewable energy and reduce CO<sub>2</sub> emissions.

#### CO2 emissions reduction initiatives in the supply chain

DMG MORI CASTECH (Izumo City, Shimane Prefecture), a subsidiary of DMG MORI that produces castings, a key component of machine tools, is working to reduce CO<sub>2</sub> emissions from the casting process to virtually zero by 2025. In order to reduce CO<sub>2</sub> emissions and build a robust supply chain, casting procurement will be switched from overseas to domestic and casting production at DMG MORI CASTECH will be increased. DMG MORI CASTECH has been replacing the conventional coke oven, which emits a large amount of CO<sub>2</sub>, with an electric furnace to achieve clean casting production using solar power and CO<sub>2</sub>-free electricity. This will reduce CO<sub>2</sub> emissions from the combustion of coke fuel and other materials, as well as CO<sub>2</sub> emissions from renewable energy sources.

Reducing CO<sub>2</sub> emissions at the parts manufacturing stage requires collaborative efforts with suppliers. We will work with suppliers of major parts to calculate emissions for each part and reduce emissions.

## Promoting business strategies contributes to $\ensuremath{\text{CO}_2}$ emissions reduction

The Company's products contribute to green transformation at customer factories by improving productivity through process integration, automation, and digital transformation, and reducing CO<sub>2</sub> emissions during their use by making products and peripheral equipment more energy efficient. More specifically, the machining process, which used to be done on multiple machines, can be integrated by using 5-axis machines and mill-turn centers which is capable of simultaneous machining with single chucking. On top of process integration, automation solutions can reduce machine idling-time caused by loading and unloading workpieces or cleaning chips with air blow. The machining time per workpiece can be reduced by optimizing the machining process using digital twin technology. In this way, process integration, automation, and digital transformation, not only improve productivity, but also reduce power consumption and CO<sub>2</sub> emissions by reducing the time spent for and between machining processes. Furthermore, the Company intends to make peripheral equipment, which accounts for about 70% of the power consumption required to process workpieces, more efficient and reduce related CO<sub>2</sub> emissions.

In the world of subtractive machining, mist, chips, and coolant are known as the three evils, and they adversely affect machining accuracy and downtime of the machines. In order to solve these three evils, the Company developed and launched a new peripheral devices in 2021. Mist collector "zero FOG" reduces power consumption of the peripherals thanks to its optimally-designed mechanical parts, and "AI chip removal" recognizes the distribution and amount of chips in the machining chamber and stops the coolant pump when the amount of chips is low, thereby reducing power consumption. "Zero-Sludge Coolant" efficiently collects fine chips in the coolant tank, prevents them from building up in the tank, and inhibiting the growth of bacteria, thereby extending the replacement cycle time of the coolant oil due to decay. Extended life of coolant oil reduces the amount of oil waste and CO<sub>2</sub> emissions associated with final disposal of coolant oil.



#### Reducing CO<sub>2</sub> emissions throughout the supply chain

# Climate-related Disclosure in Accordance with TCFD-recommendations

Quality

Management

Policy



Governance

Risk

Management

DMG MORI endorses the intention of proactively disclosing items related to climate change-related risks and opportunities in accordance with the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) and are taking the following measures.

Human

Resources

Development

Sports

Marketing

Social

Responsibility

Environmental

Data

#### Governance

SUSTAINABILITY

# A dedicated department for planning, implementing, and monitoring climate-related measures

The Company have established Sustainability Promotion Department as a department that assesses risks and opportunities for business due to climate change, and plans, implements, and monitors the Company's countermeasures. This department reports the results of the Company's CO<sub>2</sub> emissions to the Board of Directors as necessary, and requests approval for CO<sub>2</sub> emissions reduction plans as well as related important capital investment plans from the Board of Directors.

**Fnvironmental** 

Protection

Employee

Wellness

Governance structure for climate-related risks and opportunities



#### Role of Climate-related Organizations

Organization	Role	Frequency to discuss climate-related issues
Board of Directors	Evaluates and manages climate-related risks and opportunities, and makes decisions on necessary investment	At least once a quarter (Board meeting is generally held once a month)
Executive Officers Meeting	Assesses and identifies climate-related risks and opportunities, and considers counter-measures to respond to specified issues	Once a month
Sustainability Committee (sub-committee of Executive Officers Meeting)	Implements action plans including measures to reduce CO2 mmittee emissions in entire group, manages its progress and report to higher organizations.	

#### Strategy

# Contribute to environmental protection through machine tool business itself

The Company believes that its machine tool business itself contributes to environmental protection through process integration, long product life and reduced or effective use of resources. Furthermore, the Company helps maximize the management resources both of its customers and its production sites by promoting process integration, automation, and digitization. In addition, "GREENMODE" technology contributes to the reduction of cumulative power consumption over the period of machine use.

## Benefits of 5-axis machines and mill-turn centers

Less machines Less manual labor Less work-inprogress Less energy consumption



Achieve high accuracy in dimensional, shape and surface by machining with single chucking

Green transformation
#### **Risk & Opportunity**

# Considering proactive measures to address societal demands and environmental changes

When it comes to climate-related risks and opportunities, it is necessary to examine both "transitional" risks and opportunities caused by changes in policies, regulations or societal demands arising from customers and other stakeholders, and "physical" risks caused by natural disasters or rising temperatures.

The Company regards the risks and opportunities associated with its business as follows.

#### Climate-related risks

Туре	Climate-related Risks	Potential financial impacts	Magnitude of impact	Specific description
	Increased carbon pricing mechanism (e.g. carbon taxes)	Increased direct costs	Medium	Procurement costs may increase due to the introduction of carbon taxes.
- Transitional risk -	Stricter reporting obligations related to carbon footprint	Higher compliance costs	Medium-Low	
	Increased prices of raw materials and energy	Increased production costs due to changing input prices (e.g. energy, water) and output requirements (e.g. waste treatment)	Medium-Low	In particular, prices for electricity generated from renewable sources may rise due to the increased demand for such electricity.
	Reduced sales revenue caused by falling demand for products and services (due to shift in consumer preferences)		Medium	Manufacturers may choose climate-neutrally produced capital goods to achieve climate-neutrality throughout their supply chain. If the Company fails to respond to such trends, it may lose the competitive advantage.
	Increased concern or negative feedback from stakeholders	Reduced access to capital or increased equity cost	Low	The Company assumes that the risk of being subject to divestment is relatively low, since its business is not a carbon-intensive industry.
Physical risk	Intensified extreme weather	Reduced production capacity due to supply chain interruptions Impairment loss of existing assets due to damages caused to real property and other assets due to flooding, etc.	Low	The Company assumes this risk to be relatively low, since most of its production sites are not located in areas which are considered to be "high-risk."
	Rising temperatures	Increased operating costs (e.g. cost of air-conditioning for factories)	Medium	Power consumption may increase to implement strict temperature control measures in factories to maintain the current precision of machine tools.

#### Climate-related opportunities

Туре	Climate-related opportunities	Potential financial impacts	Magnitude of impact	Specific description
Products and Services	Development and / or expansion low-CO2 emissions product lines	Increased sales revenue caused by increased demand for low-CO <sub>2</sub> emissions products	Medium	Customers may prefer DMG MORI's carbon-neutral products as they reduce CO <sub>2</sub> emissions throughout the entire supply chain.
	Access to now markets ( Markets			<ul> <li>New markets may emerge, such as those related to parts machining related to offshore wind power generators or those associated with the expansion of EV (electric vehicle) production.</li> </ul>
Markets	Access to new markets / Markets Expansion in conventional markets	Emergence of new markets	High	<ul> <li>Demand for high-precision machine tools may increase caused by demand to improve engine efficiency and reduce C02 emissions in existing industries that rely on diesel engines, such as ships, trucks, buses, and construction machinery.</li> </ul>

#### SUSTAINABILITY

Human Resources Development

#### Climate-change, Sustainability and Risk management

### Engagement as a critical management issue

The Sustainability Promotion Department identifies climate-related risks on a daily basis and reports them to the Sustainability Committee, which is held once a month in conjunction with the Executive Officers Meeting. The Board of Directors has established a process for discussing and making decisions on relevant agenda items at least quarterly or as needed.

The monthly Sustainability Meeting sets a focus topic for each session and addresses a wide range of sustainability-related agenda items, including but not limited to climate change, and shares updates on the Company's progress.

#### Sustainability Conference

	ESG Category	Focus topic	Reporting month
1	Environment	Climate change	January
2	Society	Employee wellness	February
3	Governance	BCP (Business Continuity Plan)	March
4	Society	Product and service safety	Мау
5	Society	Diversity	June
6	Society	Human rights, supply chain management	August
7	Environment	Climate change	September
8	Society	Employee wellness	November

Agenda items ESG (Environment, Society, Governance)

Contents of report The Company's measures Response to risks Response to opportunity

#### **Metrics and targets**

### Accredited by SBTi\*1

In order to make its measures against climate change even more effective, the Company has set targets for carbon footprint reduction to be achieved by 2030. In November 2021, DMG MORI's targets were accredited by the international environmental body "SBT Initiative". The Company intends to reduce its greenhouse gas by 46.2% in Scope 1 and 2, and 13.5% in Scope 3, respectively, by 2030 compared to the base year 2019.



\*1 Abbreviation of "Science Based Targets" (the target is consistent with the Paris Agreement, which aims to limit the increase in global temperature to 1.5-2°C above pre-industrial levels). The Company's targets are at reduction rates that take into account the increase in the amount of activity compared to 2019.

### Actual carbon footprint results in 2022 and progress against carbon footprint reduction targets accredited by SBT

In order to measure the progress towards its carbon footprint reduction targets accredited by SBT certification, the Company calculates the actual carbon footprint of the entire group each year and obtain limited assurance from a third party (PricewaterhouseCoopers GmbH). The carbon footprint results for fiscal 2022 are shown in the chart below, and the reduction progress in total amount was ahead of the carbon footprint reduction targets accredited by SBT.



Period: January 1 to December 31

#### Carbon footprint for Scope 1, 2 and 3 (consolidated)

Scope	Category	Source of emission	2021 (cons	olidated)	2022 (cons	olidated)
			ton	Ratio	ton	Ratio
Scope 1		Direct emissions from the Company	34,150	2.4%	33,147	2.1%
Scope 2		Purchased energy (electricity)	28,380	2.0%	13,884	0.9%
	Category 1:	Purchased parts and services	614,552	44.0%	692,776	44.5%
	Category 3:	Fuel and energy related activities not included in Scope 1, 2	17,035	1.2%	17,593	1.1%
	Category 4:	Transportation and distribution (Upstream)	32,338	2.3%	36,456	2.3%
	Category 5:	Waste generated and water consumption in operations	530	0.0%	535	0.0%
	Category 6:	Business travel (airplane, train, car, bus, etc.)	5,309	0.4%	12,505	0.8%
Scope 3	Category 7:	Commuting (public transportation, car)	14,186	1.0%	15,079	1.0%
	Category 9:	Transportation and distribution (downstream)	11,180	0.8%	11,957	0.8%
	Category 11:	Use of sold products	606,332	43.4%	686,594	44.1%
	Category 12:	Disposal of sold products	33,095	2.4%	35,002	2.2%
	Category 15:	Investments	165	0.0%	150	0.0%
		Scope 1+2+3	1,397,252	100.0%	1,555,678	100.0%

#### Carbon footprint trend (compared to carbon footprint reduction targets accredited by SBT)



++CDP



Both CO and AG responded to CDP Climate Change Questionnaire 2022

Environmental Employee Protection Wellness

Management Resources Policy Development

Quality

Human Social Resources Responsibility

Sports Envir Marketing

## Achieving Carbon Neutrality Throughout the Entire Value Chain by Using Internationally Certified Carbon Credits

DMG MORI was one of the first companies to obtain certification by the SBT initiative for its carbon footprint reduction targets in the industry to address global climate change. The Company has been working on reducing its carbon footprint throughout the entire value chain based on specific action plans by 2030.

# Promoting carbon footprint reductions by obtaining limited assurance from a third party (PricewaterhouseCoopers GmbH)

Gradually switching to CO<sub>2</sub>-free electricity and introducing solar power generation at major global production sites







#### Optimizing energy efficiency and reducing carbon footprint

New policy for machine model development: To reduce carbon footprint by 30% by 2030 (compared to 2018)



#### **Contributing to Green Technology**

- Increased demand from industries related to renewable energy
- Increased demand caused by machining of high-precision, lightweight parts used in EVs

### <u>2022</u>

### 2023

2030

Biomass power generation started operating at Iga Campus



Large-scale solar power generation starts operating at Iga and Nara Campus (cover approx. 30% of annual electricity demand upon full operation)

Coke oven is replaced with electric furnace at DMG MORI CASTECH (Shimane)



#### Major initiatives in Scope 3 (downstream)

- Saving customers' management resources such as power consumption by proposing process integration, automation, and digital transformation
- GREENMODE as a standard to save power when using the machine (2017-)
- Energy saving of new products



\*1 Carbon credits are consideration for investment on climate protection projects which are certified internationally in compliance with the CDM framework (ex. development of renewable energy facilities). This is a common practice in Europe. Environmental Employee Protection Wellness Quality Human Management Resources Policy Development

Human Social Resources Responsibility

# **Promoting Employee Wellness** The Company aims to improve the physical and mental wellness of its employees through it "Health Management Declaration."

#### Kasumi Hirose

Staff R&D Human Resources Department Member of Health Management Promotion Committee



#### Kaori Taniguchi <sub>General Manager</sub>

General Affairs Department Member of Health Management Promotion Committee Norio Kurumatani, M. D.

Director Health Care and Promotion Center Occupartional physician Ph.D. in Medicine

Reporting

#### Activities of the Health Management Promotion Committee

- The Company has been ambitiously implementing measures to promote employee wellness, which includes the introduction of mandatory 12-hour work interval in 2018, full medical checkups, which are above and beyond the level of legal requirements, in 2019, and a total ban on smoking on the Company's premises in 2020.
- 2) The top management has, in the form of "Health Management Declaration" (please refer to the right page), announced its devotion to implement employee wellness measures in a more multifaceted, systematic, continuous, and organized manner both internally and externally.
- 3) Based on the Company's mission statement and this "Health Management Declaration," the Health Management Promotion Committee (please refer to the right) is promoting Company-wide efforts to further improve the physical and mental health of employees and help them feel more energetic at work under the guidance of the Management Meeting.



Discussion and decision

### Infrastructure development for promotion of health measures

#### [A] Promoting work-life balance

The Company aims to realize one of its mission statement, "Play hard, study continuously, work together".

- The Company will continue to provide a 12-hour work interval, which is longer than the legally required interval hours.
- The Company will attempt to increase the average number of annual paid leaves taken by employees.
- 3) The Company will aim for 100% male employees with childcare duties to take childcare leave.

#### [B] Providing full medical checkups

The Company's full medical checkup include not only the statutory items in accordance with the Occupational Health and Safety Law, but also items added from a welfare perspective (ex. abdominal echo for all employees, gastroscopy and colonoscopy, chest and abdominal CT, mammography, cervical cancer screening for those of appropriate age), and are aimed at early detection of health issues such as cancer.

#### [C] Offering supporting after full medical checkups

A support system is in place to ensure that abnormal or suspicious findings identified in full medical checkups are addressed by treatment or follow-up examinations. Exclusive industrial physicians, commissioned industrial physicians, public health nurses, and nurses at the Health Management and Promotion Center, which is under the direct control of the administration department, provide follow-up services after medical examinations.

#### [D] Promoting measures against the new coronavirus infection

- 1) The Company has established a temporary health laboratory (licensed) that is capable of PCR testing.
- The Company has offered vaccination opportunities at the workplace not only to its employees but also to their families and employees of its business partners.
- The Company has initiated an in-house registration system for employees who tested positive to predict and evaluate outbreaks within the Company.

#### [E] Upgrading the Company cafeterias into in-house restaurants

The Company has been transforming its on-premise cafeterias into "restaurants," by redesigning the interior and upgrading its menus with the expectation that they become places where people can enjoy, taste, and eat

wisely, and where they can naturally acquire nutritional knowledge. All employee restaurants at all production sites and major business locations have received the highest rating of 3 stars under the Smart Meal (a nutritionally balanced meal that supports health) program, which is certified and evaluated by an association of professionals. Restaurant "Basho" on Iga Campus was featured in a Japanese magazine, "Weekly Bunshun."



#### [F] Securing and managing venues for exercise and sports

The Company's production sites and dormitories feature in-house sports facilities (such as an all-weather sports dome) and fitness studios with full-scale training machines. The Company also subsidizes employees' use of commercial fitness studios.

Based on these activities, the Company has been certified as a "Company Promoting Sports (Sports Yell Company)" by Japan Sports Agency.



#### [G] Operating recreational facilities

The Company operates recreational facilities where people can get away from work and refresh themselves. In addition to Warashina Highlands Lodge and Nemu-no Sato, Hayama Clubhouse is scheduled to open in the spring of 2024.

#### DMG MORI Health Management Declaration

DMG MORI places great importance on the health management of its employees and will promote efforts towards the realization of "Health Management."  $^{**1}$ 

DMG MORI describes the following in its Mission Statement: "Play hard, study continuously, work together" DMG MORI believes that the employees' vitality is connected to a healthy mind and body. This vitality is essential to the sustainable growth of our company. DMG MORI pledges to support the health improvement activities of its employees and to implement health improvement strategies to foster a corporate culture in which each employee's health can reach its fullest potential.

> January 4th, 2021 Masahiko Mori, Dr., Eng. President DMG MORI CO., LTD.

\*1 "Health Management" is a registered trademark by the NPO "Kenkokeiei"

#### DMG MORI ranking among Top 500 for Excellent Health & Productivity Management

In March 2023, DMG MORI was certified as one of the top 500 enterprises for excellent "Health and Productivity Management" by the Japanese Ministry of Economy, Trade and Industry, and the Japanese Health Council Nippon Kenko Kaigi. Each year, the top 500 companies are selected out of over 3,000 applications in recognition of outstanding efforts for employees' well-being. At DMG MORI, we have made it our mission to encourage employees to play hard and be dynamic, study continuously and be open, and work together and be innovative. We will further strengthen our initiatives for employees' well-being.



#### Initiatives to promote a healthy lifestyle

### [H] Promoting of health management by industrial physicians and industrial nurses

- The Company provides specific health guidance for employees over the age of 40 as required by the Ministry of Health, Labor and Welfare
- 2] The Company provides health guidance for employees under the age of  $40\ {\rm according}\ to\ its\ {\rm own\ criteria}$
- The Company offers a health consultation service such as "support for balancing treatment and work"
- The Company identifies and guides employees who self-interrupt their hospital visits and medication
- 5) The Company assess dependency levels and supports smokers and heavy drinkers to change their behaviors

#### [I] Supporting lifestyle improvement

Since 2020, the Company has been offering "Lifestyle changes 101," a three-month program designed to create opportunities for employees to improve their lifestyles and strengthen their motivations. The program has thus far focused on topics such as "exercise class for the mildly obese," "measures to prevent lifestyle-related diseases starting while you are young," and "nutrition class for the severely obese."



- Health management is defined by the Ministry of Economy, Trade and Industry as "the strategic implementation of employee health management from a corporate management perspective."
- ☑ Led by the management team, DMG MORI CO., LTD. is committed to becoming a corporate organization where employees can enjoy a more rewarding and satisfying working life, with good physical and mental health.
- ☑ The Company is developing ambitious employee wellness programs with the aim of achieving the target set for the end of the mediumterm business plan year (2025).
- ✓ The newly redesigned website provides a message from the president, a "Health Management Strategy Map" based on the Company's mission statement, and details of the Company's initiatives. Please visit the URL for the website, https://www.dmgmori.co.jp/sp/health/.

#### [J] Supporting employees with mental issues

More often than not, workplace factors play a role in mental illness. Supporting employees with mental issues is an important topic for health

- management. 1) The Company conducts annual stress check as required by law
  - The Company interviews highly-stressed individuals based identified by stress check
  - 3) Commissioned psychiatrists supports and determines if employees with mental issues can return to the workplace
  - 4) The Company implements workplace measures based on group analysis

#### Online Training for Managers 2022

"Looking after the health of subordinates and ensuring health in the workplace"

Episode 1	Advance Health Management
Episode 2	Reaffirm the Occupational Health and Safety Law
Episode 3	Foster Healthy Lifestyle Habits
Episode 4	Look after the health of your subordinates
Mental	Monitor depression and returning to work

#### [K] Conduct in-house training for managers

The Company conducts online training on the expected role of managers regarding the health care of their subordinates. Approximately 400 employees at the section manager level and above are required to complete this training. Mental health training by a psychiatrist is also provided.

#### [L] Improve health literacy

The Company has set up a health information website featuring easy-tounderstand materials and explanatory videos on health maintenance, desirable lifestyle habits, and common illnesses to improve employees' health literacy (the ability to find health-related information and link it to appropriate health actions).

#### Monitor progress and identify issues

 Health and Safety White Paper (issued every April): This is an annual report that reports on the overall health situation at DMG MORI CO., LTD., focusing on

analysis of the results of physical examinations. 2) Group Analysis of Stress Checks: This is

- 2) Group Analysis of Stress Checks: This is used as basic data for discovering workplace factors of stress, establishing countermeasures, and promoting improvements.
- Health management progress evaluation index survey: This tracks certain index values such as "Work Engagement" through annual surveys.



Health and Safety White Paper No. 2 (2022 / 4)

## **Supply Chain Initiatives**

Employee

Wellness

Environmental

Protection

SUSTAINABILITY

#### Announcement of "Declaration of Partnership Building"

In March 2022, DMG MORI CO., LTD. announced its "Declaration of Partnership Building" in support of the "Declaration of Partnership Building" established by the Cabinet Office, Ministry of Economy, Trade and Industry, Small and Medium Enterprise Agency and others. The Declaration is centered on the following two points.

Human

Resources

Development

Sports

Marketing

Social

Responsibility

Environmental

Data

Governance

Risk

Management

### Coexistence and co-prosperity throughout the supply chain and new collaboration beyond scale, affiliations, etc. Compliance with "Promotion Standards"\*.

\*"Promotion Standards" based on the Law for the Promotion of Small and Medium-sized Subcontractors

#### declaration public website https://www.biz-partnership.jp/declaration/13339-05-18-tokyo.pdf

Quality

Management

Policy

As stated in the Company's mission statement, "We prosper together with our partners," we continue to strive to build and maintain long-term relationships of trust with our business partners by establishing fair and equitable business relationships with them.



#### Introduction of a supplier management platform

# Increasing awareness of social responsibility throughout its supply chain

As social responsibility through the supply chain becomes increasingly important, we are using the platform provided by INTEGRITY

NEXT GmbH of Germany to monitor our suppliers and conduct due diligence on human rights and environment in order to build a sustainable supply chain. For 16 sustainability issues such as environmental protection, human rights compliance, and worker health and safety, we work with suppliers to identify problems and implement improvement activities.

Through these activities, we are able to understand the international conventions and rules that companies must comply with, leading to an increased awareness of compliance throughout the supply chain. We will continue this activity to build a sustainable supply chain.



#### Main hearing items

Classification	Major items (excerpts)
Sustainability / CSR	• Environmental protection • Carbon footprint • Human rights and labor rights
Product safety	<ul><li> Conflict minerals</li><li> RoHS Directive</li></ul>
Company overview	<ul> <li>Company information</li> <li>Quality management</li> </ul>
Cyber-attack countermeasures and data security	• EU General Data Protection Regulation (GDPR)
Others	• Response to COVID-19

#### Survey results as of December 31, 2022

Number of companies by evaluation	CO (Japan) *Introduced in January 2022	AG (mainly German companies) *Introduced in July 2019		
Sustainable	60% (127)	53% (335)		
Less Critical	7% (14)	27% (172)		
Critical	33% (70)	20% (124)		
Number of suppliers in the scope	211	631		

# Quality Improvement Through TQM (Total Quality Management)

#### Ideal form of TQM

DMG MORI promotes TQM (Total Quality Management) activities to achieve management goals. In each organization, department heads and staff members incorporate top management policies into the goals of all employees. However, in the rapidly changing machine tool industry, if we only pursue the goals and policies set at the beginning of the year, the organization may head in the wrong direction. Therefore, all employees will be able to think about which direction they should go on their own, scientifically analyze the gap with the current situation, and reflect it in the actions of their departments and projects. This is the way DMG MORI aims for TQM.



#### Achieving the Medium-Term Business Plan

DMG MORI has formulated its Medium-Term Business Plan 2025. The formulation, implementation, and progress management of this plan have been carried out by six subcommittees. The subcommittees are small groups of personnel from various departments. Policies established by these subcommittees are then rolled out to each department so that all employees can align their day-to-day work in order to achieve the plan. While top-down policy management may lead to strong sectionalism due to stove-piping, a crossdepartmental sub-group allows employees to work from the perspective of the Company as a whole.



#### QC circle activities (Quality Control)

In addition to performing daily tasks based on an understanding of company-wide policies, all employees form QC circles of approximately 400 teams to solve problems and accomplish tasks. The themes of QC circle activities reflect the policies of each department, and the system ensures that daily improvement activities lead to improved organizational capabilities. Every year, we hold a QC circle presentation contest to present the results of the year's QC circle activities and share the results learned throughout the Company. Each department conducts a first round (document screening) and a second round (presentation), and the seven teams that pass the preliminary rounds advance to the finals, where they make presentations in front of the president and other members of management. We have received feedback from outside consultants that the level of the competition has improved every year, and the competition also serves as an opportunity for human resources development.

Human

Resources

Development

Social

Responsibility

Quality

Management Policy

DMG MORI feels responsible for developing human resources in the machine tool industry. DMG MORI has internal training facilities worldwide, offers scholarships, and lends machine tools to fulfill our obligation to society.

#### Mori Manufacturing Research and Technology Foundation

Employee

Wellness

# Support for current and future generation of developers

Environmental

Protection

Since its establishment in 2016, the Foundation has concentrated its effort in supporting activities which contribute to the development and sustainable growth of not only the machine tool industry but also the global industry, focusing on the three areas of "human resources development," "community and culture," and "research and development." The Foundation will continue to strengthen its ties with local communities and fulfill its part of social responsibility.

#### 1) Human resources development program

The Foundation continues to provide support for the endowed Chair of Digital Design and Production, Precision Measurement and Processing Research Consortium, which was established in April 2020 as part of Kyoto University's 125th anniversary project, as well as the

**SUSTAINABILITY** 



Graduate School of Advanced Integrated Studies in Human Survivability, Kyoto University ("Shishu-Kan") and the Japanese-German Center Berlin "Young Leaders' Forum". In addition, from 2019 onwards, we provide 3-year scholarships to engineering graduate students at Kyoto University, Keio University, and the University of Tokyo. 5 students from the first term received their doctoral degrees in March 2022, and are now active in their respective fields, either working for private companies or continuing their research at universities. 5 students from the second term will be awarded in April 2023. In April 2023, one of the five second-term students is scheduled to join DMG MORI CO., LTD. Furthermore, from April 2023, the program will be expanded to five graduate students in the humanities and social sciences at Kyoto University.

Continuing from last year, a technical get-together by the scholarship recipients was held at the Nara PDC (Product



Technical Reception at Nara PDC on August 17, 2022



Mori Manufacturing Research and Technology Foundation (General Incorporated Foundation)

https://morifound.dmgmori.co.jp/

Risk

Management

Development Center) in August 2022. It was a very meaningful time with lively discussions that transcended the boundaries of universities and majors. We will continue to actively provide opportunities for exchanges like this to increase the number of doctoral students with advanced expertise and global activities.

#### 2) Community and culture programs

Sports

Marketing

Environmental

Data

Governance

Japan National Orchestra Co., Ltd., established in May 2021, performs concerts and other outreach activities for children at elementary and high schools in Nara Prefecture. In addition, the 140 cherry trees planted along the Bodaisen River in Yamato Koriyama City, Nara prefecture, where DMG MORI CO., LTD. was founded, have been well appreciated by many people including local residents. In addition, through its support for the reconstruction of shrines and temples as well as festivals and events, the Foundation shows its respect to the history and culture rooted in the region and contributes to further development.

#### 3) Research and development programs

While DMG MORI CO., LTD. funds R&D activities of machine tools and related technologies, the Foundation funds R&D programs with and loans or donates machine tools to universities and research institutes worldwide. Another main focus area of the Foundation is providing support for international academic conferences, etc.

### Number of scholarship recipients by the Mori Manufacturing Research and Technology Foundation

the Morr Manalactaring Rescaren and Teenhology Foundation							
		2019	2020	2021	2022	Plan for 2023	
Number of scholarship recipients	Engineering	6	5	3	8*	3	
	Humanities and social sciences	_	_	_	_	5	
Accumulated number		6	11	14	22	30	



#### Industry-University collaboration and training of engineers

### Advanced engineer training at Nara Product Development Center

The Nara Product Development Center (Nara PDC), which opened in July 2022, serves as a development center for digital transformation and advanced technologies, as well as a place to train and employ human resources skilled in cutting-edge digital transformation technologies and elemental technologies of machine tools. The center also serves as a base for promoting exchanges among engineers, including industry-academia collaborations, by taking advantage of its location, which is easily accessible from both Keihanshin (Kyoto, Osaka, and Kobe), a major center of electronics, industrial machinery, and medical equipment companies in Japan. The facility is also equipped with practical training facilities for students of the Faculty of Engineering at Nara Women's University to support the development of women in engineering.



#### **Cooperation with national universities**

### Promoting diversity including gender equality in engineering

We signed a comprehensive agreement with Nara Women's University, the first women's university in Japan to establish an engineering department. We support the development of female human resources in engineering by dispatching lecturers and devising curricula that utilize machining technology.

Under the theme of "Advanced Design and Production Engineering," which organically links and teaches design and development technology, production technology, and advanced technology, eight lectures were held for 2022. In 2023, in addition to eight lectures, eight practical training sessions are planned, of which six will take place at DMG MORI's Nara PDC. The program will contribute to the development of engineers who can apply their specialized skills, knowledge and comprehensive knowledge of the manufacturing industry to the real world.



#### Fostering research and development activities

# Joint R&D with universities and research institutes, and funding academic conferences

DMG MORI CO., LTD. promotes joint research and development<sup>\*1</sup> of machine tools and related technologies<sup>\*2</sup> with universities and research institutes in Japan and abroad. The Mori Manufacturing Research and Technology Foundation also provides operational support for international academic conferences such as CIRP (College International pour la Recherche en Productique: International Academy of Production Engineering). ICPE (International Conference on Precision Engineering) was held at the Nara Convention Center from November 28 to December 2, 2022. President Mori of DMG MORI CO., LTD. was appointed as the chairperson of the conference, and Executive Officer Irino was appointed as the vice chairperson, supporting the welcome party at the Nara Product Development Center and the banquet held at the hotel. On the final day, a tour of the Nara System Plant and the Nara Product Development Center was held. 290 presentations and nearly 400 participants made the first face-to-face ICPE meeting in four years with a great success.



ICPE (International Conference on Precision Engineering) 2022 held at Nara Convention Center

\*1 The University of Tokyo, Kyoto University, Keio University, University of California (Berkeley), Leibniz University Hannover \*2 Joint research and development mainly in the fields of machining technology, intelligent systems and network technology

## Social Responsibility

Employee

Wellness

Based on the belief that trust is fostered by fulfilling social responsibilities, DMG MORI takes active measures that contribute to society. It maintains the landscape in the areas around its campuses and promote culture, sports and other activities.

Human

Resources

Development

#### **Environmental protection initiatives**

Environmental

Protection

# Promoting agriculture

**SUSTAINABILITY** 



Quality

Management Policy

https://www.mahorobafarm.co.jp/

In December 2017, the Company established Mahoroba Farm Co., Ltd., cleared abandoned farmland near the Iga Plant, and started cultivating wine grapes in 2019. The Company is gradually increasing the area, and currently we are cultivating 5,300 vines on 5 hectares. In 2022, the Company harvested a total of 3,500 kg of grapes from 9 varieties.

In addition, the Company has been actively promoting the employment of people with disabilities and aim to employ about 10 people in the future. The Company is working to enable people with disabilities to play an active role with confidence and purpose in life and participate in society.



Environmental

Data

Governance

Risk

Management

Sports

. Marketing

Social

Responsibility

#### Coexistence with local communities

# Revitalization of the area surrounding the Iga Campus

In cooperation with Mie Prefecture and Iga City, where our Iga Campus is located, and the local community, the Company has been working to improve the landscape of the area surrounding Shindo Station on the JR Kansai main line, the nearest station. In front of Shindo Station, the Company has constructing a complex facility that will house a library, administrative offices, financial institutions, and other facilities to promote interaction among local residents and improve convenience for the community. The complex facility is scheduled to open in the fall of 2023, and is expected to serve as a center for promoting the landscape and attractions of the Iga region and to be the core of regional revitalization.

#### **Creating local landscapes**

### Planting cherry blossom trees around Nara Campus

DMG MORI has been making efforts to improve the scenery around the Nara Campus (along the former highway Route 24) since December 2021.

Besides planting around 100 cherry blossom trees, the Company has also been renovating the pavement and streetlights. By improving the scenery around the Nara Campus, the birthplace of DMG MORI, the Company aims to create a beautiful environment that can be enjoyed by employees and residents.





#### Support for musical activities

# Nurturing and promoting music culture

The Company has been supporting musician Kyohei Sorita since 2018 and established Japan National Orchestra, Co., Ltd. in May 2021. Together with Mr. Kyohei Sorita and 19 young soloists, the Company works in Nara, where the Company was founded, and globally to contribute to the creation and development of



new culture and art through classical music. On February 28, 2022, the Company signed a "Collaboration Agreement on the Promotion of Cultural Activities" with Nara Prefecture, and started outreach activities to elementary, middle, and high schools in Nara Prefecture, with the aim of providing high-quality classic music.



©Kenryou Gu



Outreach activities: Kyohei Sorita giving piano lesson at Nara Prefectural Takamado Senior High School



JNO recital series: "The World of Violinist Tomohiro Arita"



JNO recital series: "The World of Violinist Kaoru Oe"



Concert rehearsal

#### Aiming for improving skills and motivation for operators at customers

### **Cutting Dream Contest**

Environmental

Protection

Employee

Wellness

SUSTAINABILITY

Dream contest special site

Environmental

Data

Governance

The Cutting Dream Contest has been held since 2004 for companies, schools, and research institutes in Japan that are involved in the machining industry and use cutting-type machine tools, additive manufacturing, laser cutting machines, and other advanced machining equipment, with the aim of improving and exchanging technology and skills. The technologies and ideas contained in these masterpieces, as well as the spirit of improvement that spares no effort, support the world's manufacturing.

In 2022, the 17th edition of the contest, we welcomed seven judges, including the chairman of the judging committee, Mr. Mamoru Mitsuishi, Director<sup>\*1</sup> of the National Institution for Academic Degrees and University Reforms, Japan. As a result of rigorous screening, out of 50 entries, 5 were selected from the Industrial Parts Machining Division, 6 from the Prototype / Test Machining Division, 3 from the Artistic Modeling Division, 3 from the Advanced Machining Division, and 5 from the Academic Division, and was presented at the JIMTOF2022 on November 8, 2022.

The award ceremony was held on November 8, 2022 at a special venue in our booth at JIMTOF2022. \*1 As of October 2022

#### 17th Cutting Dream Contest 2022 - Winning Works

Production Parts Machining – Gold Prize Winner

Industrial applications from the automotive, aerospace, medical, die & mold, semiconductor and new energy sector Panasonic "RSE-LG" light guide for automotive applications

Circle & Square Co.,Ltd.



Material: PMMA (Polymethyl Methacrylate resin) Machining time: 30 hours / unit Machine type: Vertical machining center

#### Evaluation comments:

The work is highly evaluated the high precision finish of the light guide, which has a large number of conical dents in the PMMA and continue to be totally reflected on the entire surface.

The high quality of the machining can be seen from the fact that the intensity of the light is beautifully expressed in the fine pattern.

#### Advanced Machining – Gold Prize Winner

Workpieces with unique technical features (additive manufacturing, laser machining, ultrasonic machining)

Steel dragon



Material: maraging steel Machining time: 20 hours / unit Machine type: Additive Manufacturing

#### Evaluation comments:

We are strongly attracted to the dynamic molding beauty of like the real dragon. Although the work is an integral model, it was carefully designed so that all parts can move. The work makes the most of the characteristics of AM with a high degree of perfection. Prototype & Test Cut Machining – Gold Prize Winner Non industry-specific sample parts with unique machining features Ultra-thin metal capsule IC EVEADTH COLLTD



Material: CENA1 IU mm (High-performance precipitation-hardening mold steel)

Machining time: 6 hours / 1set Machine type: Vertical machining center

#### **Evaluation comments:**

We are amazed at the craftmanship that carved the mold from the wall to the bottom with a thickness of 0.02 mm  $\pm$  0.03 mm. The work is also wonderful that it has smooth curved surface and it can be assembled with a fit of H6(h6).

Academic Research – Gold Prize Winner

Works of students (individuals or groups) who are learning machining operations at high schools, technical college, universities or vocational training schools

Ferris wheel (movable gondola) Kobe Advanced Institute of Technology



Material: Chemical wood Machining time: 6 hours / unit Machine type: DMU 50 5-axis machine

#### **Evaluation comments:**

Using chemical wood with low rigidity, thin-shaped parts with moving function are manufactured by integral mold. The machining order is well designed and the work has academic feel.

Artistic Form Machining - Gold Prize Winner Workpieces with unique modeling features

Striped green tit with coloration in the structure Circle & Square Co.,Ltd



25 mm

Material: PMMA (polymethyl methacrylate resin) Machining time: 18 hours / unit Machine type: Vertical machining center

#### Evaluation comments:

The work has the iridescent patten of the features by grooving with a pitch of 2  $\mu$ m on PMMA which is a material difficult to apply soft and fine texture. The butterfly's wings, antennae and legs are all thin and carefully crafted, and the overwhelming microfabrication is highly praised.

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Risk

Management

Human Resources Development

Social Sports Responsibility Marketing

#### Societally responsible activities by DMG MORI AG

# Support and sponsorship to local community

DMG MORI is engaged in societally responsible activities. We are part of society and strongly support it – with numerous campaigns, donations and sponsorships.

We support our employees who do voluntary work – for example in the company fire department. We give them days off for operations, exercises and training.

With joint activities around our sites, we are a strong part of society. In the reporting year, for example, our apprentices made an important contribution to mitigating the already visible consequences of climate change and planted around 100 trees in the Teutoburg Forest in Bielefeld. In the Allgäu region at our



Pfronten site, we once again joined the "Trash-Free Allgäu" challenge and collected just under 600 kg of trash. In the financial year 2022, we spent around € 661,000 on donations and sponsorships. In the region of East Westphalia-Lippe, for example, DMG MORI AG has been involved for many years as a sponsor for the DSC Arminia Bielefeld soccer club – especially in the area of youth development – and as a member of the Alliance East Westphalia. We are particularly pleased that in the reporting year we also supported Arminia Bielefeld's successful U17 women's team for the first time, thus promoting diversity in sports. We also support Bielefeld Marketing GmbH and the Bielefeld Art Association via sponsorship agreements.

Numerous appeals for donations and collection campaigns for the people in Ukraine were also organized and actively supported at the workplace. Donations this year benefited "Aktion Deutschland hilft" in particular – as emergency aid for Ukraine – as well as local clubs, institutions, universities and the young talent foundation for mechanical engineering.

We promote employee wellness – that's why there is always something going on at our sites. Organized by, with and for employees, there are numerous runs, for example the renowned Bielefeld Hermannslauf, joint hiking and climbing. But unusual sports, such as dragon boat races or the ski championship for the deaf, are also on the agenda. In the "Stadtradeln" campaign, employees from more than 10 different DMG MORI locations traditionally pedal together again. In this challenge, the car stays in the garage as much as possible for 21 days – because every kilometer cycled counts. This is climate protection that keeps you fit and healthy at the same time!



## **Realization of a Culturally Rich Society**

Quality

Management Policy

DMG MORI aims to elevate its brand image and realize a society that is not only materially but also culturally rich.

Human

Resources

Development

Social

Responsibility

Sports

Marketing

Environmental

Data

Governance

Risk

Management

#### **DMG MORI SAILING TEAM**

Environmental

Protection

Employee

Wellness

SUSTAINABILITY

The DMG MORI SAILING TEAM was established in October 2018 accompanied by marine adventurer Kojiro Shiraishi as skipper, and from November 8, 2020, the team sailed the Vendée Globe 2020-2021, a solo, no-port, no-supply round-the-world yacht race, finished 16th out of 33 boats (94 days, 21 hours, 32 minutes, and 56 seconds). The foiling boat "DMG MORI Global One" was equipped with some parts machined by our simultaneous 5-axis machines and mill-turn centers. Currently, we are working in accordance with three activity plans: (1) challenge Vendée Globe 2024 with Mr. Shiraishi, (2) promote more sailing culture in Japan, and (3) train young skippers and engineers.

In addition, DMG MORI SAILING ACADEMY was established in June 2021 to nurture young sailors who can play an active role in ocean sailing. In the Mini 6.50 class, which is considered a gateway to success for young ocean sailors, we are working with four trainees to compete in the "Mini Transat 2023," a transatlantic race to be held in 2023.

On January 23rd, 2023, the team member from France, where the team is located, came to Japan to get together with sponsors, and reported the result of the race and plan of activities until 2028. The near-term purpose in the DMG MORI SAILING TEAM is, needless to say, to apply for "Vendée Globe 2024". In addition, the team presented its policy beyond Vendée Globe 2024.

Major topics are as follows:

- JAPAN TOUR 2025
- Build a new ship according to IMOCA class specifications from 2025
- Challenge "The Ocean Race 2027"
- Challenge "Vendée Globe 2028"

The next generation DMG MORI Global One, to be launched in 2025, will be used in races from 2026 onwards, with a view to training skippers for ocean sailing following Mr. Shiraishi. Races such as "The Ocean Race 2027" and "Vendée Globe 2028" will also be tackled by this new boat.

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©Thomas Deregnieaux / QAPTUR / DMG MORI



#### Contribution to the development of the arts

### Support for young artists

Since 2020, the Company has been supporting ARTISTS' FAIR KYOTO, an exhibition of up-and-coming artists in their 20s and 30s, by taking up leading artists in Japan and abroad. Under the supervision of Professor Noboru Tsubaki of Kyoto University of Arts, who is also the director of ARTISTS' FAIR KYOTO, we have exhibited artists' works at our offices and facilities. We display more than 100 works of art, ranging from palm-sized objects to large-scale works up to 10 meters in length with the hope that they will not only be enjoyed by visitors but also stimulate the imagination of our employees and lead to the development of better products.





Mina Katsuki, "0:41:57"

Mina Katsuki, "9:39:24"



Hayaki Nishigaki, "Ogatasozo-Sansui"



Ayaka Nishihara, "The light images. (Two circles)"

#### **Environmental Data**

**SUSTAINABILITY** 

#### (DMG MORI CO., LTD.)

#### Input energy and water consumption Key figures

Environmental Protection

Employee Wellness

INPUT items			Location	Unit	FY2018	FY2019	FY2020	FY2021	FY2022
Energy input		Electricity (*1)	Japan	thousand kWh	48,164	46,002	44,347	47,135	54,307
	Production	Solar power	Japan	thousand kWh	126	121	54	104	128
		Heavy oil (*2)	Japan	KQ	2,218	2,132	1,898	879	714
		City gas	Japan	thousand M³	0	0	0	0	0
		LPG	Japan	t	360	317	262	63	72
Water consumption	Production	Clean water	Japan	thousand m³	139	126	126	110	123
		Groundwater	Japan	thousand m³	72	37	35	3	0

Input energy and water consumption fluctuate depending on production conditions such as changes in production volume and production models in the fiscal year. Transition of crude oil consumption equivalent to all input energy is as follows:

Quality Management Policy

Human Resources

Development

Social Responsibility

Sports Marketing

Environmental Data Governance

Risk Management

INPUT items			Location	Unit	FY2018	FY2019	FY2020	FY2021	FY2022
Energy input	Production	Crude oil equivalent	Japan	KQ	14,757	14,082	12,993	12,771	14,440
OUTPUT items			Location	Unit	FY2018	FY2019	FY2020	FY2021	FY2022
CO2	Production	Carbon footprint (*3)	Japan	t-CO <sub>2</sub>	29,633	26,865	24,791	24,111	2,151
Industrial waste	Draduction	Final disposal amount	Japan (Iga)	t	130	96	39	49	72
	Production	Final disposal rate	Japan (Iga)	%	4	3	3	3	3

[Scope of data] DMG MORI's factories in Japan (Iga, Nara) [Fiscal year period] from January 1st to December 31st. Environmental data fluctuates depending on production conditions such changes in production volume and production models in the fiscal year.

#### Carbon footprint in entire DMG MORI group

Unit: ton	FY2018	FY2019	FY2020	FY2021	FY2022
Total carbon footprint	_	797,248	497,646	613,435	681,807
Scope 1 (direct emission)	—	19,481	14,613	14,375	14,551
Scope 2 (indirect emission)	_	40,896	33,867	17,948	4,363
Scope 3 (Upstream)	_	289,641	179,582	293,811	328,413
Scope 3 (Downstream)	_	447,230	269,584	287,302	334,480

(\*1) Energy input "Electricity" indicates the volume purchased from power generation companies.
(\*2) Energy input "Heavy oil" includes consumption from self-generated power.
(\*3) Volume of carbon footprint was calculated by using emission coefficients published by power generation companies.

#### **(DMG MORI AG)**

#### ENERGY KEY FIGURES (\*4)(\*5)

unit: MWh	FY2018	FY2019	FY2020	FY2021	FY2022
Fuel consumption from fossil energy sources	80,506	90,818	76,803	84,634	78,965
of which natural gas	32,491	33,611	28,730	36,904	25,085
of which liquefied gas	364	338	346	346	261
of which heating oil	55	0	0	0	533
of which fuel	47,596	56,869	47,727	47,384	53,086
Electricity consumption	48,962	52,441	45,956	49,542	45,704
of which procured from the grid	47,489	49,696	43,554	46,955	43,651
of which self-generation from renewable sources	1,473	2,745	2,402	2,587	2,053
Total energy consumption	129,468	143,259	122,759	134,176	124,669

#### AG GROUP-WIDE CO2-BALANCE (\*6)(\*7)(\*8)

Unit: ton	FY2018	FY2019	FY2020	FY2021	FY2022
Total carbon footprint	_	935,934	615,025	783,817	873,871
Scope 1 (direct emission)	_	23,712	19,304	19,775	18,596
Scope 2 (indirect emission)	_	24,793	8,785	10,432	9,521
Scope 3 (Upstream)(*9)	_	385,559	230,405	390,139	446,531
Scope 3 (Downstream)	_	501,870	356,531	363,471	399,223

[\*8] Unlike the figures stated in DMG MORI AG's Sustainability Report 2019, emissions during the pre-value chain due to gray power use are reported in Scope 3 (Category 3) instead of Scope 2. This reclassification has no impact on the volume of total emissions.

(\*9) The determination of Scope 3 emissions is based on data from the previous year and corresponding projections for some categories.

<sup>(\*4)</sup> includes locations in Germany (Bielefeld, Pfronten, Seebach, Geretsried, Idar-Oberstein); Italy (Brembate di Sopra, Tortona); Poland (Pleszew); and Russia (Ulyanovsk). Locations in Würzburg and Stuttgart were also included for 2018. The energy consumption of the above locations and vehicles represents 80% of DMG MORI AG's global energy consumption. Values for 2022 without Ulyanovsk.

 <sup>(\*5)</sup> Conversion factors for liquefied gas and kerosene use is based on 2017 data by the German Association of Energy and Water Industries (BDEW). Conversion factors for fuels use data is based on 2020 data from by the Federal Office for Economic Affairs and Export Control (BAFA), 2022.
 (\*6) Calculated with Ecocockpit software provided by the Energy Agency of the State of North Rhine-Westphalia. The software's emission factors are based on the GEMIS (Global Emission Model for

<sup>(\*6)</sup> Calculated with Ecocockpit software provided by the Energy Agency of the State of North Rhine-Westphalia. The software's emission factors are based on the GEMIS (Global Emission Model for integrated Systems) database. The missing emission factors are supplemented by the Probas database by the Federal Environment Agency. Volume of carbon dioxide equivalents are calculated based on emission of nitrogen trifluoride (NF<sub>3</sub>) and the six main greenhouse gases under the Kyoto Protocol, which are carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), hydrofluorocarbons (HFC), perfluorocarbons (PFC), and sulfur hexafluoride (SF<sub>4</sub>). Other emissions are negligible, and the Company does not intend to report them separately. Indirect emissions are calculated using a simplified location-based method.

<sup>(\*7)</sup> Based on the location-based method, electricity consumption is equivalent to 21,713 t of CO<sub>2</sub> emission. However, this does not take into account that out of DMG MORI AG's electricity consumption in 2020, 76.6% electricity is from renewable sources.

## **Governance Structure**

#### Corporate Governance Structure in 2023



#### **Corporate Governance**

#### 1. Basic Principles on Corporate Governance

In order to realize higher transparency of management of the Company to the entire society including our shareholders, investors, customers and business partners, employees, and members of communities, and to make our business operations fair and efficient, the Company is working on enhancing corporate governance and management monitoring functions.

The Company will continue to work on improving its corporate value with consistency for long term, and to operate its business based on even higher standards of corporate ethics.

#### 2. Introduction of the Audit and Supervisory Board

The Company has adopted a corporate governance structure based on audit and supervisory board. Based on the premise of auditing by a proven audit and supervisory board structure, the Company's basic policy is to conduct business operations in a flexible and efficient manner through a top-down approach.

#### 3. Board of Directors

Out of 12 members of the board of directors, 5 are external directors (42% of total directors) and 3 are female directors (25%) as of March 28, 2023. The Company has been responding to rapid changes in the business environment and technology trends that are unique to the machine tool industry.

Against this background, the Company's management structure was based on a lean board of directors, which enabled quick decision making, supported by operating officers. Since 2015, the Company has been promoting the appointment of external directors to enhance higher transparency and objectiveness. Our external directors are professional in organizational management, while they have specialized knowledge and a wide range of perspectives as well as technological backgrounds. In March 2019, the top executives of DMG MORI AG and DMG MORI USA, INC. became members of the board of directors. At the general shareholders meeting in March 2021, a new female external director was appointed as the board of directors. This has led to management structure in which diverse opinions have been being represented. The board of directors holds discussions on business strategies which are important for the future of the Company. Discussions on daily business operations are conducted at the Executive Officers Meeting and Management Meeting. The contents of the discussions at the Executive Officers Meeting and the Management Meeting are reported and reviewed at the board of directors meetings. This structure enables guick action in business operations as well as transparency to the board of directors.





Nationality: Japan, U.S.A., Germany, Austria

#### 4. Audit and Supervisory Board

The audit and supervisory board consist of one full-time audit and supervisory board member ("Corporate Auditor") who is well versed in internal affairs, and multiple highly independent external audit and supervisory board members. In accordance with the audit policy, Corporate Auditors attend and express opinions at the Board of Directors meetings, Executive Officers Meetings, Management Meeting and other important meetings, inspect important resolution documents, and conduct rigorous audits of departments in the head office, including those of overseas subsidiaries, as well as Campuses and affiliated subsidiaries. Thus, the Company has established an efficient corporate governance system that facilitates prompt decision-making and lively discussions by the Board of Directors and ensures fairness and transparency in its management.

#### 5. Governance of DMG MORI AG

DMG MORI AG, a German subsidiary, has a governance structure that differs from that in Japan. The supervisory board, which is placed above the executive board, is responsible for appointing directors and approving major investments and business plans. The governance structure has been strengthened by the appointment of Dr. Masahiko Mori, president and CEO of DMG MORI CO., LTD., as chairman of the supervisory board of DMG MORI AG in May 2018. In addition, in March 2019, DMG MORI CO., LTD.'s Executive Vice President James Nudo and then Senior Executive Officer Irene Bader (currently DMG MORI CO., LTD.'s director) were appointed respectively as member of the supervisory board. Daily business progress of each sales and service office and production site had been managed by the Joint Committee, a monthly meeting attended by President Mori and executivelevel managers from DMG MORI CO., LTD. and DMG MORI AG, to ensure unified decision-making as a global company. Currently, the function has been integrated into the Executive Officer Meeting held by DMG MORI CO., LTD.

#### 6. Executive Officer

The Company has appointed executive officers to vitalize the board of directors by separating decision making and supervision from operation and to train next generation of executive-level managers. As of March 28th, 2023, the Company has 26 executive officers who vary in age, nationality, and gender. Each executive officer bears great responsibilities as the head of division, such as sales and R&D, or region. Environmental Employee Protection Wellness

Management Policy

Quality

Human Social Resources Responsibility Development

Sports Marketing

Environmental Governance Data

ecision yoto

Affairs

# Members of the Board of Directors

Introduction of Directors As of March 28th, 2023



Masahiko Mori

CEO, DMG MORI Group President. DMG MORI CO., LTD., Dr. Eng. Chairman of the Supervisory Board, DMG MORI AG

lar.	1985	Graduated from the Department of Pr Engineering, Faculty of Engineering, F University
pr.	1985	Joined ITOCHU Corporation
pr.	1993	Joined the Company
un.	1994	Director, General Manager, Planning / Management Office and International Department
un.	1996	Senior Director
un.	1997	Executive Director
un.	1999	President (incumbent)
ct.	2003	Dr. Eng. of the University of Tokyo

- Nov. 2009 Member of Supervisory Board, DMG MORI AKTIENGESELLSCHAFT
- May 2018 Chairman of Supervisory Board, DMG MORI AKTIENGESELLSCHAFT (incumbent)



Hiroaki Tamai

Executive Vice President Director in charge of Administration and Production

- Mar. 1983 Graduated from the Faculty of Commerce, Doshisha University Mar. 1983 Joined the Company
- Jun. 2003 Director, Executive General Manager, Administrative HQ
- Jun. 2007 Senior Director, Executive General Manager, Administrative HQ
- Jun. 2008 Executive Director, Executive General Manager, Administrative HQ
- Jun. 2014 Executive Vice President, Director in charge of Sales and Engineering / Administration, Execu General Manager, Sales and Engineering HQ / Administrative HQ utive
- Executive Vice President, Director in charge of Administration, Executive General Manager, Administrative HQ Mar. 2016
- Feb. 2020 Executive Vice President, Director in charge of Administration / Production, Executive General Manager, Administrative HQ (incumbent)



Hirotake Kobayashi

Executive Vice President Director in charge of Accounting / Finance and Sales

- Mar. 1977 Graduated from the Faculty of Economics, Keio University
- Joined Kirin Brewery Company, Limited (currently Kirin Holdings Company, Limited) Apr. 1977
- Mar. 2012 Representative Director, Managing Director, Kirin Holdings Company, Limited Oct. 2015
  - Joined the Company Senior Executive Officer, Vice Executive General Manager, Accounting / Finance HQ
- Manager, Accounting / Finance HQ Mar 2016 Executive Director, Director in charge of Accounting / Finance, Executive General Manager, Accounting / Finance, HQ Mar. 2017 Executive Vice President, Director in charge of Accounting / Finance, Executive General Manager, Accounting / Finance HQ Jan. 2021 Executive Vice President, Director in charge of Accounting / Finance and Sales, Executive General Manager, Accounting / Finance HQ [incumbent]
  - (incumbent)



#### Christian Thönes

Vice President Director in charge of DMG MORI AKTIENGESELLSCHAFT of the company



James Nudo

J.D Vice President Director in charge of the Americas

- Aug. 1998 Nov. 2001

  - Mar. 2019 Vice President, Director in charge of DMG MORI AKTIENGESELLSCHAFT of the company

(\*1) SAUER GmbH (currently DMG MORI Ultrasonic Laserted GmbH) and DECKEL MAHO Pfronten GmbH are subsidiaries of DMG MORI AKTIENGESELLSCHAFT

- Jun. 1982 Established Law Offices of James V. Nudo
  - 2003 Joined the Company
- Jan. 2017 Executive Officer, General Manager, International Legal / International Human Resources Department
- Jan. 2019
- Executive Director in charge of the Americas, President and Director, DMG MORI USA, Inc. Mar. 2019
- Aug. 2021
- Sep. 2022



Makoto Fuiishima

i ajioinna
Dr. Eng.
Vice President
Director in charge of

Quality

Irene

Bader

Director in charge

Communication

Jun. 2003 Director, General Manager, Control Technology Jun. 2003 Director, General Manager, Control Technology Laboratory of the Company Jun. 2005 Senior Director, Executive General Manager, Development / Manufacturing HQ (in charge of Development), General Manager, Information System Department Apr. 2014 Senior Executive Officer, Manufacturing / Development / Quality HQ (in charge of Electrical Circuit / Control) Jan. 2019 Senior Executive Officer, President, R&D HQ

Department

- Mar. 2019 Executive Director in charge of Research & Development, President, R&D HQ Apr. 2021 Executive Director, Executive General Manager, Quality HQ
  - Aug. 2021 Vice President, Director in charge of Quality, Executive General Manager, Quality HQ (incumbent)
- Jun. 1999 Graduated from Akademie für Sprachen und Wirtschaft Mar. 2001 Joined DMG Büll & Strunz GmbH (currently DMG MORI Austria GmbH) Technical Press and Marketing Manager, GILDEMEISTER AKTIENGESELLSCHAFT (currently DMG MORI AKTIENGESELLSCHAFT) Jan. 2002 Apr. 2005 Marketing Manager, MORI SEIKI GmbH (currently DMG MORI Global Marketing GmbH) Mar. 2012 MBA from The Open University Business School May 2016 Member of Supervisory Board, DMG MORI AKTIENGESELLSCHAFT (incumbent) Jan. 2017 Operating Officer in charge of Global Corporate Communi Jan. 2019 Executive Officer in charge of Global Corporate Communication Jan. 2023 Senior Executive Officer in charge of Global Corporate Communication (incumbent) of Global Corporate

- Jul. 1998 Graduated from the Business Management Department, University of Münster Joined GILDEMEISTER AKTIENGESELLSCHAFT
  - (currently DMG MORI AKTIENGESELLSCHAFT) Managing Director, SAUER GmbH[\*1] (currently DMG MORI Ultrasonic Lasertec GmbH)
- Jul. 2009 Managing Director, DECKEL MAHO Pfronten GmbH(\*1)
- Jan. 2012 Executive Board Member, DMG MORI
- ARTIENGESELLSCHAFT Artiengesells
  - (incumbent)

- Jun. 1981 Juris Doctor of Loyola University Law School Nov. 1981 Registered as Attorney at law to the State of Illinois, U.S.A. and the United States Federal
  - Courts
- Aug. 1992 Joined Yamazen Inc. Apr.
- Jul. 2014 Operating Officer, General Manager, International Legal Department
  - Senior Executive Officer, President and Director, DMG MORI USA, Inc.

Vice President, Director in charge of the Americas, CEO, DMG MORI AMERICAS HOLDING CORPORATION

Vice President, Director in charge of the Americas, President, DMG MORI AMERICAS HOLDING CORPORATION, Managing Director, DMG MORI EMEA GmbH (incumbent)

#### Introduction of External Directors As of March 28th, 2023



Takashi Mitachi External Director

- Mar. 1979 Graduated from the Faculty of Letters, Kyoto University
- Apr. 1979 Joined Japan Airlines Co., Ltd. Jun. 1992 Received MBA from Harvard Business School
- Oct. 1993 Joined The Boston Consulting Group
- Jan. 2005 Japan Co-chair, The Boston Consulting Group
- Mar. 2016 Outside Director, Rakuten, Inc. (currently Rakuten Group, Inc.) (incumbent)
- Mar. 2017 External Director of the Company (incumbent) Outside Director, Unicharm Corporation
- Jun. 2017 Director (Outside Director), Tokio Marine Holdings, Inc. (incumbent) Oct. 2017 Senior Advisor, The Boston Consulting Group
- Jun. 2022 Outside Director, Sumitomo Corporation (incumbent)





External Director Attornev



- Jan. 2001 Director-General, Kansai Bureau of Economy, Trade and Industry, Ministry of Economy, Trade and Industry
- Jun. 2004 Director-General, Trade and Economic Cooperation Bureau, Ministry of Economy, Trade and Industry
- Sep. 2005 Commissioner, Japan Patent Office
- Jul. 2007 Retired from office
- Feb. 2008 Consultant, Sumitomo Electric Industries, Ltd.
- Apr. 2009 Registered as Attorney at law
- Oct. 2009 Managing Executive Officer, Sumitomo Electric Industries, Ltd. Jun. 2010 Managing Director, Sumitomo Electric Industries, Ltd.
- Jun. 2014 Representative Senior Managing Director, Sumitomo Electric Industries, Ltd.
- Jun. 2016 Vice Chairman and Senior Executive Managing Director, Japan Institute of Invention and Innovation Mar. 2017 External Director of the Company (incumbent)
- Jun. 2021 Advisor, Japan Institute of Invention and Innovation (incumbent)



Hiroko Watanabe External Director

- Mar. 1986 l td May 2009
- Mar. 1984 Graduated from the Faculty of Humanities, Jissen Women's University Joined Fuji Electronics Industry Co., Ltd. Jun. 1998 Director, Fuji Electronics Industry Co., Ltd.
- Apr. 1999 Managing Director, Fuji Electronics Industry Co.,

Jun. 2008 President, Fuji Electronics Industry Co., Ltd. (incumbent)

- Director, Osaka Prefectural Manufacturing & Industrial Association (incumbent)
- Jun. 2009 Director, Japan Metal Heat Treatment Association (incumbent)
- May 2016 Director, Japan Industrial Furnace Manufacturers Association (incumbent) Chairperson, Monozukuri Nadeshiko

Jun. 2017 Awarded by the Prime Minister for distinguished contribution toward the creation of a gender-equal society Jan. 2021 Temporary Member, Council for Small and Medium Enterprise Policy, Ministry of Economy, Trade and Industry

- Mar. 2021 External Director of the Company (incumbent)
- Apr. 2021 Chairperson, Monozukuri Nadeshiko (incumbent)

Mamoru

Mitsuishi Ph D. External Director

- Mar. 1979 Graduated from the Faculty of Science, The University of Tokyo Mar. 1981 Graduated from the Faculty of Engineering, The University of Tokyo Mar. 1986 Completed the Department of Mechanical Engineering, Graduate School of Engineering, The University of Tokyo [Doctor of Engineering] Apr. 1986 Lecturer, Faculty of Engineering, The University of Tokyo [Department of Industrial Mechanical Engineering]
- Apr. 1989 Assistant Professor, Faculty of Engineering, The University of Tokyo (Department of Industrial Mechanical Engineering)
- Aug.1999 Professor, Graduate School of Engineering, The University of Tokyo (Department of Industrial Mechanical Engineering) Apr. 2014 Dean of the Graduate School of Engineering and Dean of the Faculty of Engineering, The University of Tokyo
- Apr. 2017 University Executive Director and Vice President, The University of Tokyo
- Feb. 2019 Representative Director, CIRP JAPAN
- Aug.2019 President, CIRP (International Academy for Production Engineering) Apr. 2020 Trestoein; cuint (international cauterity) of Troduction Engineerin Apr. 2020 Director, National Institution for Academic Degrees and Quality Enhancement of Higher Education (incumbent) Specially Appointed Professor, Teikyo University Advanced Comprehensive Research Organization (incumbent) Researcher and Visiting Professor, Future Robotics Organization, Wased University (incumbent)

Jun. 2022 Professor Emeritus, The University of Tokyo



- Eriko
- Kawai External Director
- Mar. 2021

- Oct. 1981 Joined Nomura Research Institute. Ltd. Jun. 1985 MBA from INSEAD (Institut Européen
  - d'Administration des Affaires)

Sep. 1981 Graduated from Harvard University

- Sep. 1985 Management Consultant, McKinsey & Company Oct. 1986 Fund Manager, Mercury Asset Management, SG Warburg
- Nov. 1995 Director and Executive Officer in charge of Investment (CIO), Yamaichi Regent ABC Polska
- Jul. 1998 Pension Fund Administrator, BIS (Bank for International Settlements)
- Pension Fund Administrator, OECD (Organization for Economic Cooperation and Development) Oct. 2004
- Apr. 2012 Professor, Organization for the Promotion of Excellence in Higher Education, Kyoto University
- Jun. 2018 Outside Director, Daiwa Securities Group Inc. (incumbent)
- Outside Audit & Supervisory Board Member Yamaha Motor Co., Ltd. (incumbent) Apr. 2021 Professor Emeritus, Kyoto University
- Jun. 2021 Outside Director, Mitsui Fudosan Co., Ltd. (incumbent)

#### Skill matrix of directors

	Name	Business Management	Global	Marketing	Engineering	Legal & Compliance	Finance & Accounting
_	Masahiko Mori	•	•	•	•		•
	Hiroaki Tamai	•	•			•	•
al	Hirotake Kobayashi	•	•				•
ern	Christian Thönes	•	•	•			•
- Int	Makoto Fujishima		•		•		
	James Nudo		•			•	
	Irene Bader		٠	٠			
	Takashi Mitachi	•	•				•
al	Makoto Nakajima		•			•	
Externa	Hiroko Watanabe	•	•		•		
	Mamoru Mitsuishi		٠		٠		
	Eriko Kawai		•			•	•



## Audit and Supervisory Board Members ("Corporate Auditors")

Human

Resources

Development

Social

Responsibility

Sports

Marketing

Environmental

Data

Governance

Risk

Management

Introduction of Corporate Auditors As of March 28th, 2023

Environmental

Protection



Quality

Management

Policy



SUSTAINABILITY

Masahiro Yanagihara Corporate Auditor

- Mar. 1983 Graduated from the School of Economics. Kwansei Gakuin University
- Mar. 1983 Joined the Company

Employee

Wellness

- Mar. 1998 President, MORI SEIKI FRANCE S.A. May 2005 General Manager, Americas Department
- Apr. 2010 Operating Officer, General Manager of President's Office and Public Relations Department
- Apr. 2014 Operating Officer and Vice Executive General Manager, Administrative HQ
- Senior Director and General Manager, Secretarial Department (incumbent) Nov. 2017

#### Introduction of External Auditors As of March 28th, 2023

University

Corporation

Company, Limited

Cooperation (incumbent)

Sumitomo Mitsui Banking Corporation

Jun. 2017 Special Advisor, Sumitomo Mitsui Finance and



Yoshinori Kawamura External Corporate Auditor

Mar. 1975 Graduated from the Faculty of Economics, Kyoto Mar. 1975 Graduated from the School of Engineering, Nagoya University Completed master's course, Graduate School of Mar. 1977 Engineering, Nagoya University Joined Toyota Motor Co., Ltd. (currently TOYOTA MOTOR CORPORATION) Jun. 2002 Director and General Manager of the Structured Finance Department, Sumitomo Mitsui Banking Apr. 1977 Jun. 2005 Managing Officer, TOYOTA MOTOR CORPORATION Jun. 2005 Managing Director and Head of the Americas Division, Sumitomo Mitsui Banking Corporation Senior Managing Director, TOYOTA MOTOR CORPORATION Outside Audit & Supervisory Board Jun. 2009 Apr. 2008 Director and Senior Managing Executive Officer, Member, Chuo Spring Co., Ltd. Vice Chairman of the Board of Directors, Toyota Motor Asia Pacific Pte Ltd. Apr. 2011 Apr. 2009 Deputy President, Member of the Board, Sumitomo Mitsui Banking Corporation Jun. 2011 President, Sumitomo Mitsui Finance and Leasing Senior Managing Officer, TOYOTA MOTOR CORPORATION Jun. 2011 Takahiro Jun. 2014 President, TOYOTA AUTO BODY CO., LTD. lwase Apr. 2016 Standing Advisor, Aichi Steel Corporation Leasing Company, Limited Director, HANSHIN ELECTRIC RAILWAY CO., LTD. (part-time, incumbent) Jun. 2016 Chairman, Aichi Steel Corporation External Corporate Jun. 2017 External Audit & Supervisory Board Member, Chuo Auditor Spring Co., Ltd. Jun. 2018 External Director, Japan Bank for International Mar. 2021 External Auditor of the Company (incumbent) Mar. 2019 External Audit & Supervisory Board Member of the Company (incumbent) Jun. 2021 External Director of Makita Corporation

(incumbent)

#### Important meetings held in 2022 and status of attendance of each director

In 2022, the Company held 10 board of directors meetings, attended by external directors and Corporate Auditors, in order to formulate management strategies, evaluate the progress and appropriateness of execution of duties by directors, and solve societal issues with a focus on reducing carbon footprint. In addition, the Company held 8 Operating Officer Meetings and 13 Management Meetings, consisting of internal directors and one full-time Corporate Auditor to confirm the progress of the responsible person's business and performance and status of response to risks. Attendance status at the board of directors meetings by each director and Corporate Auditor was as follows

#### Status of attendance at Board of Directors Meetings (January-December, 2022)

Name	Position at DMG MORI	Status of attendance at the board of directors' meetings	Note
Masahiko Mori	President, Representative Director	10 / 10	
Hiroaki Tamai	Executive Vice President	10 / 10	
Hirotake Kobayashi	Executive Vice President	10 / 10	
Christian Thönes	Vice President	8 / 10	
Makoto Fujishima	Vice President	10 / 10	
James Nudo	Vice President	10 / 10	
Irene Bader	Director	_	Newly appointed
Takashi Mitachi	External Director	10 / 10	
Makoto Nakajima	External Director	10 / 10	
Hiroko Watanabe	External Director	10 / 10	
Mamoru Mitsuishi	External Director	_	Newly appointed
Eriko Kawai	External Director	_	Newly appointed

#### **Remuneration of Directors and Corporate Auditors**

The amount of remuneration, etc. of the Company's directors and Corporate Auditors and the method for its calculation are determined within the remuneration framework approved by the annual general shareholders meeting. In case of directors, remunerations are determined by taking each director's contributions to business and the status of business execution into account. In case of Corporate Auditors, remunerations are determined by discussions among Corporate Auditors. The table below shows the remunerations in 2022.

#### 1) Company Policy regarding Deliberation of Remuneration, etc. for Directors and Auditors

To attract and retain personnel who will contribute to the sustainable enhancement of the Company's corporate value on a global scale, the remuneration system of directors and Corporate Auditors shall be based on the short- and long-term business performance and be transparent and competitive as required of a public company in a global market. The Company has adopted the highly transparent remuneration system of Germany, in which remuneration is disclosed regardless of the amount, as its benchmark, given the nature of the Company's business and that the Company appoints non-Japanese directors and has DMG MORI AG, a listed company on the German stock market, as a part of the consolidated result. Accordingly, the remuneration, etc. consists of fixed and variable remuneration.

The variable remuneration consists of a "bonus", based on the short-term business performance of a fiscal year, and a "stock compensation", based on the long-term business performance over multiple fiscal years

In order to distinguish clear responsibilities among directors and achieve the fiscal year's target, the Company takes the company-wide achievement ratio of financial targets such as consolidated sales revenue and consolidated operating profit, and the personal achievement ratio of targets under the jurisdiction of each director into account when calculating the bonus amount. The target of each director includes an achievement of societal responsibility such as carbon footprint reduction.

Furthermore, as set by the Board of Directors as a standard unique to the Company, the remuneration of each director shall not exceed 50 times the average annual salary of the general employee. However, external directors and Corporate Auditors who are independent from the execution of business shall only receive the fixed remuneration, which is the hasic compensation

The policy and composition of remuneration for directors are consulted with a voluntary remuneration committee consisting of one internal director, one external director and one external Corporate Auditor. Upon the opinion from the remuneration committee, the final decision is made in the board of directors meeting including 4 external directors and 2 external Corporate Auditors. The evaluation of business performance and compensation for each director is also consulted with the voluntary compensation committee. After receiving the report, the amount of remuneration for each director is entrusted to and determined by President and representative Director Dr. Masahiko Mori. Upon the opinion from the remuneration committee, the amount and the process of its determination is reported and approved in the board of directors meeting

The fixed remuneration, which is the basic compensation, is based on each director's position and level of responsibility and is set at a ratio of 4:2:1.4 for president and representative director, vice president and representative directors, and other directors (executive vice president). With regard to the remuneration related to business performance, the bonus bound to the result of one fiscal year cannot exceed 1.5 times the basic compensation and depends on the consolidated performance indicators and the individual performance evaluation. However, the bonus of the president and representative director only takes the consolidated business performance indicators into account With regard to stock compensation, stock compensation with transfer restrictions is granted irregularly and is determined by the board of directors on a case-by-case basis. The board of directors has confirmed that the method of determining the details of remuneration, the final remuneration amount, etc. for each director for this fiscal year are consistent with the decision policy resolved by the board of directors.

2) Total remuneration per category, total amount per type of remuneration, etc., and number of applicable directors and Corporate Auditors

	Total	Total amount pe	Applicable number			
Category (Director / Corporate Auditor)	remuneration, etc. (JPY mil.)	Basic compensation	Renumeration based on business performance, etc.	Non-monetary remuneration, etc.	of directors and Corporate Auditors	
Directors (excluding external directors)	931	516	396	18	5	
Corporate Auditors (excluding external Corporate Auditors)	35	30	5	—	1	
External Directors	96	96	_	_	4	
External Corporate Auditors	30	30	—	—	2	
Total	1,092	672	401	18	12	

(notes) 1. All listed figures are rounded down to JPY millions.
 2. The figures listed above include the remuneration of 1 Director and 1 Corporate Auditor who retired at the end of the 73rd annual general shareholders meeting on March 29th, 2021.
 3. The amount of remunerations, etc. of Directors is based on the decision of the 71st annual general shareholders meeting on March 22nd, 2019, determining that the total annual amount of remuneration shall be within JPY 2b billion (including the annual amount of remuneration for external directors, which shall be no more than JPY 200 million).
 In addition, apart from the above, the 70th annual general shareholders meeting on March 22nd, 2018, determined that the total annual amount for transfer restricted shares shall be no more than JPY 300 million for internal directors [and such remunerations shall not be granted to external directors].
 4. The amount of remunerations, etc. for Corporate Auditors is in accordance to the decision made at the 59th annual general meeting of shareholders on June 28th, 2007, determining that the total annual amount shall be no more than JPY 100 million.
 5. The amounts listed above do not include the remunerations, etc. paid by the Company's subsidiaries.

#### 3) Total amount of consolidated remuneration, etc. per director and Corporate Auditor

	Category	Company name	Amount per type of consolidated remuneration, etc. (JPY mil.)			Fiscal Year 2022 (current fiscal year)	Amount of	(For reference) Fiscal Year 2021	(For reference) Fiscal Year 2020
Name or position	(Director / Corporate Auditors)		Basic compensation	Renumeration based on business performance, etc.	Non-monetary remuneration	consolidated remuneration, etc. (JPY mil.)	Performance evaluation (%)	consolidated remuneration, etc. (JPY mil. )	consolidated remuneration, etc. (JPY mil.)
Masahiko Mori	Director	DMG MORI CO., LTD.	199	175	4	379	75	298	177
Hiroaki Tamai	Director	DMG MORI CO., LTD.	99	75	5	180	75	145	91
Hirotake Kobayashi	Director	DMG MORI CO., LTD.	99	70	8	178	70	149	94
Christian Thönes	Director	DMG MORI AG	165	510	_	676	90	453	366
Makoto Fujishima	Director	DMG MORI CO., LTD.	69	59	-	129	85	102	43
James Nudo	Director	DMG MORI CO., LTD./ DMG MORI USA, Inc. / DMG MORI EMEA GmbH	92	87	_	179	95	111	50
External Directors	External	DMG MORI CO., LTD.	96	—	-	96	—	94	90
Toshio Kawayama	Corporate Auditor	DMG MORI CO., LTD.	30	5	_	35	_	33	27
External Corporate Auditors	External	DMG MORI CO., LTD.	30	_	_	30	_	30	28

(notes) 1. All listed figures are rounded down to JPY million

All listed figures are rounded down to JPY millions.
 President and representative Director Dr. Masahiko Mori is also appointed as chairman of the supervisory board of DMG MORI AG and director of TAIYO KOKI CO., LTD., but does not receive any remunerations from either company.
 The applicable number of External Directors is 4 for the fiscal year 2022, 5 for the fiscal year 2021 (including 1 External Director who completed his term and retired at the end of the 73rd Annual General Shareholders Meeting on March 29th, 2021) and 4 for fiscal year 2020.
 The applicable number of External Corporate Auditors is 2 for the fiscal year 2022, 3 for the fiscal year 2021 (including 1 External Corporate Auditor who completed his term and retired at the end of the 73rd Annual General Shareholders Meeting on March 29th, 2021), 2 for the fiscal year 2020.

#### SUSTAINABILITY

Environmental Employee Protection Wellness

Management Policy

Quality

Human Social Resources Responsibility

# Message from Germany



Christian Thönes DMG MORI AKTIENGESELLSCHAFT Chairman of the Executive Board DMG MORI CO., LTD. Vice President

2022 – a year of TOP performance for DMG MORI and at the same time a year of major global challenges: worldwide supply and material shortages, high raw material, energy and transport costs, rising interest and inflation rates, but also the ongoing corona pandemic and above all the war in Ukraine. Peace and freedom always take precedence over business interests.

DMG MORI nevertheless achieved a very successful financial year 2022 with all-time high figures for order intake in our core business with machine tools and services as well as for the EBIT margin. DMG MORI has proven to be a stable and reliable partner also under difficult external conditions. Our strong, long-standing network with customers and partners, innovative product portfolio and our highly qualified employees are the backbone of our success.

Our strategic fit and focus on our customers' shopfloors are a perfect match. The combination of machines, technologies, users, automation and digitization enables a high degree of process integration for resource-saving and efficient production. Our innovative solutions make a decisive contribution to the benefit of humans and the environment.

Following our motto "dynamic . Excellence", we dynamically drive forward our five strategic future fields automation, digitization, sustainability, additive manufacturing and DMG MORI Qualified Products (DMQP). At the same time, we optimize our expertise for excellence. Automation: In addition to our comprehensive machine portfolio with 157 machines, DMG MORI is now also a full liner in automation, too. Our innovative and extensive automation portfolio with 57 products in 13 product lines includes machine-specific, universal and scalable solutions as well as the DMG MORI CELL CONTROLLER LPS 4 as a master control for workpiece, pallet and tool management.

Digitization: DMG MORI Connectivity is the solution for connectivity on the entire shopfloor – incl. 3rd party machines. *my* DMG MORI is our online portal and digital face to our customers. With over 140,000 networked machines, more than 75% of our customers already use *my* DMG MORI and benefit from up to 70% faster response times. CELOS X is a platform-based end-to-end shop floor solution for the connected manufacturing of the future. With CELOS Xperience, local machine and shopfloor tasks are organized in continuous app-based workflows. CELOS Xchange provides a trusted data hub to securely store, analyze and exchange manufacturing data in global production chains. CELOS X will be presented at EMO Hannover 2023.

Sustainability: DMG MORI is globally one of the most sustainable industrial companies. In 2022, we received the platinum medal in the Sustainability Rating from the renowned assessment institute EcoVadis, placing us among the TOP 1% of over 35,000 international evaluated companies. Under DMG MORI GREEN ECONOMY we summarize all initiatives towards the "100% green machine". Both our Company Carbon Footprint and our Product Carbon Footprint are CO<sub>2</sub> neutral through the climate triple "Avoid – Reduce – Compensate". We avoid and reduce emissions wherever possible. We compensate unavoidable emissions with CO<sub>2</sub> certificates. All machines delivered since January 2021 have been produced CO<sub>2</sub>-neutrally [Scope 1, 2 and 3 upstream].

Dear shareholders, DMG MORI has a high degree of resilience and the strength to deal with changes quickly and agilely across the world. 2023 remains challenging but we stay confident. And there are good reasons for this:

- 1. We have a strong foundation and great employees.
- 2. We innovate and invest at a high level.
- 3. We believe in stable partnerships.

Progress through sustainable process integration and technologies – that is DMG MORI.

## Message from External Director



Takashi Mitachi External Director

Today, we are at a turning point in history, and various changes continue to increase in frequency and impact. Under such circumstances, how should the Company seize the wave of major changes ahead of its competitors, and how should the Company combine its offense and defense strategy?

Or, if unimaginable changes occur, how can the Company respond to them in an appropriate and quick manner? Maintenance and improvement of corporate value is the goal of the entire Board of Directors and it is the responsibility of external directors to contribute to such goal by providing different perspectives and information sources to the executive divisions which face these management issues head-on.

In addition to the pandemic, new changes and challenges emerged in 2022, including Russia's invasion of Ukraine, supply chain disruptions, the rise of inflation trends due to soaring energy prices, and major changes in exchange and interest rates. At the same time, the global economic cycle has reached its peak, making it a difficult year for the machine tool industry.

On the other hand, in the longer term, this year can be understood as a start of an era, in which the management of the Company is forced to tackle larger and more significant challenges such as how to deal with the macroscopic trends of climate change and digitalization. For example, with regard to the Corona pandemic, the Board of Directors discussed how the disease may have a major impact on Japanese society and economy at a time when it was merely viewed as a cruise ship issue, and I believe this has helped the executive divisions to respond appropriately to the subsequent suspension of overseas traffic and other situations.

In addition, the machine tool industry is by nature highly sensitive to economic cycles. The simultaneous occurrence of pandemic, the emergence of geopolitical risks, energy price hikes, and supply chain disruptions have caused several industries of our customers to drastically reduce capital investment.

The Company's medium-term management plan is focused on how to overcome these fluctuations of demand in advance, and is designed to create a structure that is less susceptible to the impact of such trends than its competitors and a system that can respond quickly to changes in demand. Based on this, various discussions were held by the Board of Directors, which proactively implemented measures such as diversification of customer industries and regions, review of the scope of in-house production, and various cost-cutting measures.

I believe that this was also due to the fact that the executive divisions and the Board of Directors discussed major strategic issues in advance and prepared for them as much as possible.

This constant review of our customer and geographic portfolio, in turn, will lead to the need to rapidly develop a management team that is able to lead the Company with global perspectives.

The response to digitalization, which is key to our continued growth and profitability, likewise increases the need for a management team with improved digital literacy. While the Company has taken steps in this regard in the past to stay ahead of its peers in the industry, the Board of Directors intends to contribute to the acceleration of this process as the Company moves forward with the next medium-term business plan. Environmental Employee Protection Wellness Quality Management Policy Human Social Resources Responsibility

## Message from External Director



Hiroko Watanabe External Director

#### Key Issues discussed at the Board of Directors meetings in 2022

In addition to ordinary matters such as reporting, reviewing, and approving the realized sales revenue, order intake, profit, and production volume in comparison to their plans, specific measures to achieve ESG management targets and topics related to digital transformation were often on the agenda during the 2022 board meetings.

For the most part, the Company has achieved above and beyond their targets. On the other hand, one of the most important events of 2022 was the impact of the Russian invasion of Ukraine in February and the Company's response to that invasion. I believe that the Company was able to respond promptly and thoughtfully to the situation by swiftly closing factories and sales and service offices, relocating some employees, and taking care of those who were unable to relocate.

In addition, the Company was able to respond promptly to the soaring energy and logistics costs and to the shortage of parts, which have become even worse since the invasion of Ukraine, and have hampered production in many manufacturing industries. This was due, in part, to the fact that the Company had already concluded a contract with an electric power company that limited our power supply to electricity from renewable energy sources, increased the weight of in-house power generation by starting biomass power generation at our Iga Campus, and was producing many of the key components necessary for production in-house. At the same time, I believe that the Company's medium- to long-term planning and implementation, such as lowering the discount rate and raising added value to enable long-term procurement planning, worked to its advantage during these emergencies.

#### Efforts to address Sustainability (ESG) Issues

As mentioned above, many ESG management initiatives have been successful.

Last year, I mentioned in this message page about the dispersion of 20 days of paid childcare leave, and I am convinced that the availability to take childcare leave one day at a time within a given fiscal year, along with the flexibility to take part time off on an hourly basis, will further contribute to increasing the rate of male employees taking childcare leave.

We have been striving to create a workplace in which the employees can work in good physical and mental health. Consultation desks for harassments and compliance helpline have been in existence for a while; however, the Company has clarified the contact point for these reports and made it even easier to report them. In addition, the Company built a system in which the information is conveyed to upper management before the situation escalates, so that the management can promptly make improvements.

Generally speaking, the larger the number of people in an organization, the greater the potential for harassment. In addition, it can be that what is good for one person may be unpleasant for another. That is why the Company is committed to creating a system that allows its employees to exercise their abilities to the fullest through by taking measures to prevent harassment, such as by providing coaching and other forms of training, as well as by properly dealing with personal prejudice and minor misunderstandings, rather than turning a blind eye to them.

#### Points that the Board of Directors should focus on in the future

I mentioned the Russian invasion of Ukraine at the beginning of this article, and I believe that it will become even more important to address economic security issues in the future. It is possible that the government will develop laws, and make various requests and regulations to private companies, including this Company, after considering all possible scenarios which may play out in terms of Japan's economic security. The Company shall consider and implement measures not only within the scope of conventional export control, but also to review the amount and content of parts procured from specific countries, to examine the level of products produced at production sites and the possibility of transfer, and to strengthen management of technical and personal information so that there is no panic in the event of an emergency. Needless to say, even in such cases, we must simultaneously consider how to deal with our employees and serve our customers.

We believe that this is one of the things that should be changed or strengthened at this time, since we have always been quicker to respond than laws and regulations.

# Developing the Next Generation of Executive-level Managers Succession Plan

DMG MORI has dynamically evolved and adapted to an ever-changing business landscape, one of the biggest changes being the business integration with DMG MORI AG. The Company is now developing the next generation of executive-level managers to keep its dynamism alive and ensure sustainable and long-term growth.

#### **Executive Officers structure**

The Company's executive officers are responsible for implementing the PDCA cycle for the departments under their control. As a place to develop the next generation of executive-level managers, the Company places importance on diversity in the composition of our executive officers. The executive officers range in age from those in their late 30s to those in their mid-60s, with the aim of ensuring a stable pool of executive-level managers for the future. In addition, as befits a global company, the executive officers now represent six different nationalities, including one woman. Our goal is to nurture as many people as possible who can take on group-wide managerial responsibilities in the future, starting with the executive officers.

# Experience as a president of a major subsidiary or as a head of a business division

Effective January 2022, DMG MORI CO., LTD. was partially spun off as a separate company, and at the same time, each function within the Company was clarified as a division and a responsible person was assigned to each company and division. The responsible persons are mainly executive officers and department managers in their 40s. Taking on management responsibility, including performance management of each company and division, is a step toward becoming the next generation of executive-level managers.

Age composition of Executive Officers



\*Please refer to the Annual Securities Report for the names of Executive Officers.





#### **Export controls**

#### For World Peace and Japan's Economic Security

#### Q. Why is export control important to DMG MORI?

DMG MORI machine tools are high-performance, dual-use products that can be used for both civilian and military purposes and must be controlled in accordance with the Foreign Exchange and Foreign Trade Act (hereinafter referred to as the "Foreign Exchange Act"). When selling machines to overseas customers, the Company must obtain government permits and approvals after confirming that the product will not be used for military purposes. It is also necessary to track and control the product throughout its life cycle until it is destroyed. This Foreign Exchange Act is for the sake of world peace and stability of the international order, and violations are subject to major penalties including export bans. If exports, which account for more than 80% of our group sales, were to be delayed, the damage would be immeasurable, so the Company makes every effort to ensure that all employees, both in Japan and overseas, are fully aware of these regulations.

#### Q. Please tell us about the flow of DMG MORI's export control.

Broadly speaking, there are pre-export screening and post-export management. In the pre-export screening, the Company investigates the scope of business and purpose of those who are interested in purchasing DMG MORI machine tools, by gathering information via the Internet or by conducting on-site surveys and confirm whether there are any military concerns. After receiving an order, the Company prepares the necessary documents for application to the Ministry of Economy, Trade and Industry ("METI") and conduct a more in-depth investigation. On the other hand, for post-export management, the Company reconfirms whether there are any military concerns when the equipment is relocated or resold. Furthermore, to prevent inappropriate use in countries of concern or for military purposes, the Company is mounting a machine relocation detection device on the machine that uses GPS location information [which will lock machine operation after detecting a tremer / movement].

As for the internal structure, the Export Control Operations Office plays

a central role in practical matters, and the representative and Executive Vice President makes operational decisions. In addition, the Export Control Committee, headed by the Company's president, makes the final decision on matters of strong concern.

#### Q. In 2022, Russia's invasion of Ukraine has had a major impact around the world. How did and will this affect DMG MORI's export control program?

Immediately after Russia's invasion of Ukraine at the end of February 2022, the Company made a decision to suspend exports of machine tools and related parts and technologies to Russia and Belarus, as reported in newspapers and other media. Although some of our products had already been approved for export by the Ministry of Economy, Trade and Industry ("METI"), the Company has decided to prohibit exports, including those that had been approved by METI, and to suspend all transactions with Russia and Belarus. This decision has resulted in an increase in the number of cancellations and inquiries, but we are responding to each case strictly and carefully to ensure that neither DMG MORI machines nor other products will be diverted to military use.

#### Q. Besides Russia, the international situation is changing rapidly. What changes, including changes to your procedures, have you taken as a result?

In Japan, during the period from the latter half of 2021 to the present alone, there have been changes in country categories, embargoes on Russia and Belarus, and revisions to the government's ordinance notifications for "strengthening control of provision of services to non-residents of certain countries" (commonly known as "deemed export controls"). In addition, export control laws and regulations have been tightened overseas, particularly in the United States, requiring increasingly strict controls. In response to these changes in the business environment, the Company has made various changes (as shown in the list below), including the decision to equip machine tools manufactured at subsidiaries of DMG MORI AG in Germany with relocation detection devices. In addition, since global collaboration is also necessary, we launched the Global Export Control Council in October 2022. Although the meeting has only just kicked off, the export control managers from Europe, the United States, and Japan meet several times a year to share information on legal and regulatory updates and procedures in each region, discuss responses to regulations such as the International Traffic in Arms Regulations (commonly known as "ITAR"), which should be managed and operated globally, and determine company-wide direction and operations. The Company is working to raise awareness and strengthen management of export control throughout the DMG MORI group.

#### Main implementation items

item	Outline and Purpose
Suspension of transactions with Russia and Belarus (Law revised on March 15, 2022)	To address amendments to the Foreign Exchange Act of Japan and to prevent DMG MORI products from being used in Russia and Belarus for military purposes, including the invasion of Ukraine
Installation of relocation detection device on DMG MORI AG manufacturing machines (from January 2023)	Equipped with relocation detection deivce step by step To minimize the risk of our machine tools being illegally resold or diverted to military use without our knowledge
Deemed export restrictions (Law revised on May 1, 2022)	Obtain written pledges from all employees once a year To regularly check laws and regulations and to maintain and improve the awareness of all employees
Change in country category	Educate employees (web or in person)
Implement Global Export Control Conference	Share information and decide operations by local responsibilities To enhance DMG MORI's export control

#### Q. What is unique about DMG MORI's export control program?

For the pre-export screening, the Company emphasizes the importance of onsite visits to customers, in addition to collecting information on the Internet and other sources, so that the Company can conduct a more reliable screening. The onsite visits are categorized into three levels depending on the degree of scrutiny, and the Company has a system in place whereby employees at the

managerial level are required to visit customers with whom the Company has even the slightest concern about military use of DMG MORI products. Another unique aspect about the DMG MORI's program is that the Company is one of the first companies to have introduced machine relocation detection devices, and since 2008, all machine tools manufactured by DMG MORI CO., LTD. have been equipped with such devices, even if they are sold to the Japanese market.

#### Q. What export control challenges do DMG MORI face?

In order to obtain the cooperation and understanding of approximately 12,000 employees worldwide, the Company needs to make them aware of the rules, procedures, and "why export control is necessary," including the establishment of a compliance system and training. In the current business environment, it is not enough for only those in charge of export control to be familiar with the implications and regulations. It is essential that all employees across the board, such as sales and engineers, understand the applicable laws and internal regulations, and then conduct business, while making sure that customers, suppliers, and others understand them. To this end, the Company has established the "Global Export Control Conference" stated above and is working to make the regulations easier to comprehend and to develop efficient ways of training.

#### Q. What are your thoughts on the role that the export control program to the society as a whole?

DMG MORI sells machines from each of its production sites, crossing national boundaries and sharing information with colleagues in order to increase satisfaction of customers in diverse industries around the world. At the same time, many nations are tightening law and regulations on exports of products and technologies, and each employee must understand the applicable laws and regulations in different countries and strive to comply with them. Furthermore, we live in a world in which the conflict between the United States and China is intensifying in various areas, including the economic field. In Japan, the term "economic security" was born, and the government is about to strengthen its control on what technology can be shared with other countries. Against this backdrop, I believe that export control is becoming increasingly important not only for the sake of world peace and stability of the international order, but also for the protection of domestic industries and the technology that they rely on.

#### Preventing unauthorized machine relocation using GPS information Objective DMG MORI has established a structure to detect unintentional unlawful acts Delivery of password - Transmitting encrypted data (relocation and resales without pre-informing DMG MORI) and human errors. This Confirmation of installment location - Confirming location by GPS-information prevents violation of export control laws and regulations and use of our machine tools without human judgement However, since the reception of location data is done outdoors away from the machine, proximity to the machine is guaranteed by time for unintended purpos ch as military use. and the device used for data transmission GPS Unlocking procedure Receive installation information \*Location, machine information, date and time <DMG MORI's employee (METI) (HU) in charge of installation> USB cation installation location Apply for export license **(**.. @ Permission for exp Report on work accomplisł \*Location, machine information, date and time alized so Specia Special

SUSTAINABILITY

Governance

### **Information Security**

In response to the recent increase in the risk of cyber-attacks, the Company has positioned information security as an important management issue. In 2015, the Company has concluded an advisory contract with an external security expert and, since then, formulated an information security policy, established an information security committee, and have been working to strengthen its systems related to information security management. Furthermore, the Company has also established information security committees at its group companies and utilizes such platform to share best practices within the DMG MORI group to respond to increasing threats. DMG MORI places the highest priority on the important information entrusted to itself by its customers and are constantly reviewing its management methods and strengthening its security measures.

In addition to internal information management, the Company has also established a security management system centered on the Control Security Committee to protect the security of our customers' networks and services for customers through DMG MORI machine tools. The Company is also promoting the enhancement of security in factories, which are becoming increasingly digitalized, while working together with our business partners.



### Promotion System for Improving Information Security

The Company has established a system in which the "Information Security Committee," headed by the director in charge of administration, who also acts as the chief information security officer of the committee, conducts regular meetings and decides on information security management measures, which are deployed to the Company and its group companies.

The committee formulates security strategies, promotes employee training on information security, implements security measures, and conducts information security audits, incorporating physical, organizational, and technical measures. In addition, global cyber security meetings are held regularly with overseas group companies.



#### BCP (Business Continuity Plan)

The Company first created its disaster preparedness manual after the Great East Japan Earthquake in March 2011. Since then, the Company has been continuously updating this manual. The disaster preparedness plan designates employees who shall take the lead for each region and department, including the group companies, in case a disaster occurs. Our activities for disaster prevention include regular updates of the disaster prevention manual, employee training, inspection of disaster prevention equipment, and tests of satellite phones. DMG MORI's global footprint of 16 production sites not only allows quick responses to customers' requirements, but also contributes to continued business operations in case of large-scale natural disasters. To contain the infection of COVID-19, the Company installed four units of PCR testing equipment in Iga Campus to provide testing to employees quickly and at an appropriate timing. Employees with frequent contact with customers and business partners have regular testing opportunities. The Company will strengthen its efforts for preventing infections and maintaining good health conditions of employees; they are the foundation of stable business operations.

BCP (Business Continuity Plan) Basic Plan	<ul> <li>Updates on Large-Scale Disaster Preparedness</li> <li>Addition of Hazards (Nankai megathrust earthquakes, larger earthquakes occurring directly underneath highly populated regions, Tsunami)</li> <li>Addition of production sites and major offices (Nara Campus, Tokyo GHQ, Nara PDC, Nagoya)</li> </ul>				
	Addition of measures related to pandemic preparedness				
BCP (Business Continuity Plan) Action Plan	Renewal of BCP action plans for each department				

#### **Principles regarding Compliance**

The Company defines criteria for specific actions of directors, executive officers, and other employees by stipulating rules in its Mission Statement, Employee Handbook, Compliance Handbook, Export Control Program, Information Security Policy, and management systems for environment, labor safety and health and quality. By putting these rules into practice, the Company aims to achieve legal and regulatory compliance. The Company has rolled out multiple compliance trainings for new employees and other staff, depending on their managerial level, as well as other learning opportunities. In addition, the Company has established an international whistleblowing service in accordance with the compliance hotline rules. In case of sexual harassment and other problems where special considerations to the privacy of employees are needed, employees can report the matter to a hotline that is operated by a third-party. We have strengthened our global compliance system, which includes overseas group companies, by establishing an additional multilingual hotlines for internal and external reporting in Japanese, English, Chinese, and eight other languages.

#### **Principles regarding Internal Control**

The Company's internal control is based on the "Internal Control Guidelines" resolved by its board of directors.

#### 1. Audit by Corporate Auditors

Corporate Auditors attend regularly held important meetings such as the board of directors' meetings, Executive Officers Meetings and Management Meetings to hear matters to be resolved and reported, and request directors, executive officers, and managers to report as necessary.

#### 2. Internal Audit

The internal audit department, which is an independent dedicated organization with three members and reports directly to the president, audits whether the business of the entire group is executed in an optimized and efficient manner. In addition, the internal audit department evaluates the effectiveness of internal controls of financial reporting (J-SOX) based on the Financial Instruments and Exchange Act. Furthermore, the internal audit department monitors the risk management of subsidiaries and shares it findings upon subsidiary audits by Corporate Auditors and liaison meetings with internal audit departments of subsidiaries. The results of audit carried out by the internal audit department is reported to the president and periodically to the Corporate Auditors, sharing information. The internal audit department has a close cooperation with accounting auditors, exchanging information such as audit schedules and audit procedures as needed.

#### 3. Management of Subsidiaries

With one or more of the Company's directors appointed as directors or corporate auditors of subsidiaries, the directors or auditors attend the board of directors' meeting and other important meetings to receive updates on matters related to business execution from directors of subsidiaries or responsible employees, leading to strengthening the governance of subsidiaries.

# FINANCIAL SECTION

Financial Information

# Key Financial Figures

**Financial Highlights** 

Non-financial Highlights (Employee information)

**Consolidated Financial Statement** 

**Corporate Information** 

### **Key Financial Figures**

	Amount converted into JPY (Unit: JPY million)						
		0040	0000	0001	0000		
FY	2018	2019	2020	2021	2022		
Profit or loss	= = + = + =						
Sales revenues	501,248	485,778	328,283	396,011	474,771		
Operating profit	36,261	37,339	10,674	23,067	41,213		
(Operating profit margin)	7.2%	7.7%	3.3%	5.8%	8.7%		
Profit before income taxes	31,275	31,451	5,106	19,609	36,528		
Net profit	19,374	18,861	1,696	13,231	25,800		
Net profit attributable to owners of the parent	18,517	17,995	1,745	13,460	25,406		
Cash flows							
Free cash flows (*1)	30,378	20,101	△5,212	30,357	24,875		
Financial position							
Shareholders' equity	111,113	124,006	185,420	213,139	245,897		
Total assets	528,423	524,606	526,526	597,117	680,334		
Shareholders' equity ratio (*2)	21.0%	23.6%	35.2%	35.7%	36.1%		
Per share information							
Shareholders' equity (JPY) (*3)	910.25	1,008.36	1,493.86	1,703.51	1,957.61		
Dividends per share (JPY)	50	60	20	40	70		
Other key management indicators							
Return on Equity (ROE) (*4)	16.9%	15.3%	1.1%	6.8%	11.1%		
Return on Assets (ROA) (*5)	6.6%	7.1%	2.0%	4.1%	6.5%		
(Defense converted into EUD)		Amount.com	(ortad into EUP (Upi	t. ELIP million)			
	100 /	400.1	101.0	120.0	100.1		
EUR / JPY	130.4	122.1	121.8	129.9	138.1		
FY	2018	2019	2020	2021	2022		
Profit or loss							
Sales revenues	3,843	3,979	2,695	3,049	3,438		
Operating profit	278	306	88	178	298		
(Operating profit margin)	7.2%	7.7%	3.3%	5.8%	8.7%		
Profit before income taxes	240	258	42	151	265		
Net profit	149	154	14	102	187		
Net profit attributable to owners of the parent	142	147	14	104	184		
Cash flows							
Free cash flows (*1)	233	165	△43	234	180		
Financial position							
Shareholders' equity	852	1,016	1,522	1,641	1,781		
Total assets	4 051	/ 297	/ 322	4 597	4 927		

Dividends per share (EUR) 0.4

21.0%

7.0

(\*1) Free cash flows = Cash flows from operating activities - Cash flows from investment activities
 (\*2) Equivalent to the ratio of equity attributable to owners of the parent company. The figure is calculated by dividing the equity attributable to owners of the parent company is calculated including hybrid capital.
 (\*3) Shareholders' equity per share (equity attributable to owners of the parent company) is calculated including hybrid capital.
 (\*4) Calculated by dividing net profit or loss attributable to owners of the parent company by the average of equity attributable to owners of the parent company by the average of equity attributable to owners of the parent company at the beginning and end of the period.
 (\*5) Calculated by dividing operating income by the average of total assets at the beginning and end of the period.

35.2%

12.3

0.2

23.6%

8.3

0.5

35.7%

13.1

0.3

36.1%

14.2

0.5

#### Changes in accounting standard for leases

Shareholders' equity ratio (\*2) Per share information

Shareholders' equity (EUR) (\*3)

Effective January 1, 2019, the Group has adopted IFRS 16 "Leases." Operating leases and real-estate rents were not previously recognized on Statement of Fiscal Position, whereas they are now recognized under the standard.

Due to the change, additional JPY 16.7 billion of non-current assets (i.e. right-of use assets) were recognized at the beginning of FY2019, compared to the end of FY2018.

Financial Highlights

Non-financial Highlights (Employee information) Consolidated Financial Statement

Corporate Information

## **Financial Highlights**

Consolidated order intake

Average order price per unit

(JPY billion) (JPY million) 531.2 542.4 500.0 50.0 456.0 409.4 49.8 37.1 400.0 40.0 39.4 35.1 279.7 300.0 30.0 200.0 20.0 100.0 10.0 0.0 0.0 2018 2019 2020 2021 2022 Consolidated order intake Average order price per unit

Machine order backlog



#### Order composition by region



#### Order composition by product type


#### Sales revenues



Breakdown of sales revenue



**Operating profit** Operating profit margin



Net profit\* Net profit margin



nlights Non-financial Highlights (Employee information)

### **Financial Highlights**



Free cash flows

### Capital expenditure



#### **Depreciation & amortization**



Shareholders' equity\*1 Return on Equity (ROE)\*2



\*1 Equivalent to equity attributable to owners of the parent company. \*2 Equivalent to return on equity attributable to owners of the parent company.





Net interest-bearing debt\*1 Shareholders' equity ratio\*2



Earnings per share (EPS)\*



\*The figures do not consider dilution from convertible bonds

#### Dividends per share



### **Non-financial Highlights** (Employee information)

### Average annual salary in 2022 (Japan-based employees)

		1.0%							
		Men			Women		Al	l employe	es
11	Average annual salary (JPY thousand)	average age	No. of employees	Average annual salary (JPY thousand)	average age	No. of employees	Average annual salary (JPY thousand)	average age	No. of employees
All	8,527	43.2	2,198	7,140	36.1	316	8,353	42.3	2,514
General manager level	14,549	49	104	13,479	43	4	14,509	48.9	108
Manager level	11,076	46	427	10,480	43	25	11,043	45.4	452
Staff	7,021	41	1,548	6,625	35	284	6,959	40.2	1,832

Includes base salary, qualification salary, position salary, bonus, child allowance, housing allowance, and overtime allowance.

Excludes dormitory / company housing, meal allowance, commuting allowance, employee stock ownership incentive, childcare expense support, travel expense support for family visits, medical checkup support, and other benefit related payments. The figures do not include part-time workers or fixed-term employees

Average annual salary, average age, and number of persons by position do not include those of associates, etc.

We have continuously worked to eliminate gender-based compensation disparities, for example by eliminating the necessity of being the "primary earner" in the household to receive childcare and housing allowance. Since the salary revision in July 2022, there are no longer any gender-based compensation disparities in the Company.

For couples who are both employees of the Company, child and housing allowances are provided to each of them.

### New hires and separations in 2022

	Japan-based employees	
Men	Women	All employees
64	12	76
19	4	23
45	8	53
106	26	132
81	21	102
16	0	16
9	5	14
3.9%	0.9%	4.8%
2.9%	0.8%	3.7%
0.6%	0.0%	0.6%
	Men 64 19 45 106 81 16 9 3.9% 2.9% 0.6%	Japan-based employees           Men         Women           64         12           19         4           45         8           106         26           81         21           16         0           9         5           3.9%         0.9%           2.9%         0.8%           0.6%         0.0%

Number of new hires by gender (Japan-based employees)







Average years of service (Japan-based employees)



Number of employees taking childcare leave (Japan-based employees)



## **Consolidated Financial Position**

	Exchange rate (CR) JPY 141.43 / EUR (*				
	Unit: JP	Y million	Unit: EUF	R million	
	Previous fiscal year December 31, 2021	Current fiscal year December 31, 2022	Previous fiscal year December 31, 2021	Current fiscal year December 31, 2022	
Assets					
Current assets					
Cash and cash equivalents	47,298	36,992	334	262	
Trade and other receivables	59,677	68,437	422	484	
Other financial assets	5,557	6,503	39	46	
Inventories	129,542	166,217	916	1,175	
Other current assets	12,616	15,834	89	112	
Total current assets	254,692	293,985	1,801	2,079	
Non-current assets					
Tangible fixed assets	138,076	162,965	976	1,152	
Right-of-use assets	22,099	19,874	156	141	
Goodwill	70,834	76,842	501	543	
Other intangible assets	74,514	86,193	527	609	
Other financial assets	21,989	26,122	155	185	
Investments accounted for using the equity method	5,704	5,917	40	42	
Deferred tax assets	5,132	4,509	36	32	
Other non-current assets	4,073	3,923	29	28	
Total non-current assets	342,425	386,349	2,421	2,732	
Total assets	597,117	680,334	4,222	4,810	

(\*) EUR amount is converted from JPY at the closing rate of Dec. 2022 (JPY 141.43 / EUR) for both previous and current fiscal year.

Please refer to the Security Report for the audited financial statements.

	Unit: JP	Y million	Unit: EUR million		
	Previous fiscal year December 31, 2021	Current fiscal year December 31, 2022	Previous fiscal year December 31, 2021	Current fiscal year December 31, 2022	
Liabilities and equities					
Liabilities					
Current liabilities					
Trade and other payables	54,169	72,806	383	515	
Interest-bearing bonds and borrowings	10,259	51,241	73	362	
Contractual liabilities	65,707	92,935	465	657	
Other financial liabilities	74,677	7,304	528	52	
Accrued income tax payables	4,734	6,959	33	49	
Provisions	40,543	45,659	287	323	
Other current liabilities	4,316	4,424	31	31	
Total current liabilities	254,409	281,329	1,799	1,989	
Non-current liabilities					
Interest-bearing bonds and borrowings	85,133	39,852	602	282	
Other financial liabilities	22,406	87,305	158	617	
Liabilities related to retirement benefits	5,180	4,479	37	32	
Provisions	5,871	6,819	42	48	
Deferred tax liabilities	5,429	8,103	38	57	
Other non-current liabilities	1,407	2,069	10	15	
Total non-current liabilities	125,428	148,630	887	1,051	
Total liabilities	379,838	429,960	2,686	3,040	
Equities					
Issued capital	51,115	51,115	361	361	
Capital surplus	_	266		2	
Hybrid capital	118,753	118,753	840	840	
Treasury shares	△1,889	△906	△13	6	
Retained earnings	52,817	69,864	373	494	
Other components of equity	△7,657	6,803	△54	48	
Equity attributable to owners of the parent	213,139	245,897	1,507	1,739	
Non-controlling interests	4,139	4,477	29	32	
Total equity	217,279	250,374	1,536	1,770	
Total liabilities and equity	597,117	680,334	4,222	4,810	

### Exchange rate (CR) JPY 141.43 / EUR

### **Consolidated Statement of Profit or Loss**

	Exchange rate (CR) JPY 141.43 / EUR				
	Unit: JPY	million	Unit: EUF	? million	
	Previous fiscal year From January 1, 2021 To December 31, 2021	Current fiscal year From January 1, 2022 To December 31, 2022	Previous fiscal year From January 1, 2021 To December 31, 2021	Current fiscal year From January 1, 2022 To December 31, 2022	
Revenue					
Sales revenues	396,011	474,771	2,800	3,357	
Other revenues	6,103	8,595	43	61	
Total revenue	402,114	483,366	2,843	3,418	
Costs					
Increase or decrease in merchandise, products and work in progress inventories	7,148	△6,844	51	△48	
Costs of raw materials and consumables	170,917	203,948	1,208	1,442	
Personnel costs	119,327	138,882	844	982	
Depreciation and amortization	21,894	24,016	155	170	
Other costs	59,759	82,150	423	581	
Total costs	379,047	442,152	2,680	3,126	
Operating profit	23,067	41,213	163	291	
Finance income	429	633	3	4	
Finance costs	3,919	5,181	28	37	
Profit from investments under the equity method {△ indicates loss)	30	△137	0	△1	
Profit before income taxes	19,609	36,528	139	258	
Income taxes	6,377	10,728	45	76	
Net profit	13,231	25,800	94	182	
Net profit attributable to:					
Owners of the parent	13,460	25,406	95	180	
Non-controlling interests	△229	393	△2	3	
Net profit	13,231	25,800	94	182	

#### Exchange rate (CR) JPY 141.43 / EUR

	Unit:	JPY	Unit: EUR		
Earnings per share					
Basic earnings per share	91.75	188.62	0.65	1.33	
Earnings per share after diluted*	91.75	188.62	0.65	1.33	

(\*) EUR amount is converted from JPY at the closing rate of Dec. 2022 (JPY 141.43 / EUR) for both previous and current fiscal year. Please refer to the Security Report for the audited financial statements.

\* The figures do not consider dilution from convertible bonds.

## Consolidated Statement of Comprehensive Income

	Unit: JP	Y million	Unit: EUR million		
	Previous fiscal year From January 1, 2021 To December 31, 2021	Current fiscal year From January 1, 2022 To December 31, 2022	Previous fiscal year From January 1, 2021 To December 31, 2021	Current fiscal year From January 1, 2022 To December 31, 2022	
Net profit	13,231	25,800	94	182	
Other comprehensive income					
Items that will not be reclassified to net profit or loss					
Remeasurements of defined benefit plans	380	826	3	6	
Change in fair value measurements of financial assets at fair value through other comprehensive income	10,826	767	77	5	
Subtotal of items that will not be reclassified to net profit or loss	11,207	1,594	79	11	
Items that may be reclassified to net profit or loss					
Exchange differences on translation of foreign operations	7,013	12,960	50	92	
Effective portion of changes in fair value of cash flow hedge	△473	434	△3	3	
Hyper-inflation adjustment	_	93	_	1	
Equity of other comprehensive income of affiliated companies accounted for by the equity method	6	350	0	2	
Subtotal of items that may be reclassified to net profit or loss in subsequent periods	6,546	13,838	46	98	
Total other comprehensive income	17,754	15,432	126	109	
Comprehensive income	30,985	41,233	219	292	
Comprehensive income attributable to:					
Owners of the parent	31,230	40,791	221	288	
Non-controlling interests	△244	441		3	
Comprehensive income	30,985	41,233	219	292	

Exchange rate (CR) JPY 141.43 / EUR

(\*) EUR amount is converted from JPY at the closing rate of Dec. 2022 (JPY 141.43 / EUR) for both previous and current fiscal year. Please refer to the Security Report for the audited financial statements.

## **Consolidated Statements of Changes in Equity**

Issued         capital         As of January 1, 2021         51,115         Total comprehensive income         Net profit         Other comprehensive income         Total comprehensive income         Total comprehensive income         Amount of transaction with owners	Equity at Capital surplus –	tributable to Hybrid capital 118,735	Uni o owners of Treasury shares riangle 3,735	t: JPY mill the paren Retained earnings	ion t company Other components of equity	Total	Non- controlling	Total	Unit: EUR million
Issued       capital       As of January 1, 2021       51,115       Total comprehensive income       Net profit       Other comprehensive income       Total comprehensive income       Total comprehensive income       Amount of transaction with owners	Equity at Capital surplus —	tributable to Hybrid capital 118,735	owners of Treasury shares △3,735	the paren Retained earnings	t company Other components of equity	Total	Non- controlling	Total	
Issued     capital       As of January 1, 2021     51,115       Total comprehensive income     0ther comprehensive income       Total comprehensive income     —       Amount of transaction with owners     —	Capital surplus —	Hybrid capital 118,735	Treasury shares △3,735	Retained earnings	Other components of equity	Total	Non- controlling	Total	_
As of January 1, 2021     51,115       Total comprehensive income     0       Net profit     0       Total comprehensive income     -       Total comprehensive income     -       Amount of transaction with owners     -		118,735	△3,735	/0 /52			interests	equity	Total equity
Total comprehensive income         Net profit         Other comprehensive income         Total comprehensive income         Amount of transaction with owners				40,4JZ	△21,148	185,420	4,475	189,895	1,343
Net profit         Other comprehensive income         Total comprehensive income         Amount of transaction with owners									
Other comprehensive income Total comprehensive income Amount of transaction with owners				13,460		13,460	△229	13,231	94
Total comprehensive income — Amount of transaction with owners	-				17,769	17,769	△15	17,754	126
Amount of transaction with owners		_	_	13,460	17,769	31,230	△244	30,985	219
Issuance of hybrid capital		30,000				30,000		30,000	212
Issuance cost of hybrid capital		△282				△282		△282	2
Repayments of hybrid capital	$\triangle 300$	△29,699				$\triangle$ 30,000		$\triangle$ 30,000	△212
Amount of payments to owners of hybrid capital				△2,123		△2,123		△2,123	△15
Acquisition of treasury shares			0			0		0	0
Disposal of treasury shares	△325		1,846		△132	1,388		1,388	10
Dividends				△2,488		△2,488	$\triangle 87$	△2,576	△18
Transfer from retained earnings to capital surplus	849			△849		-		_	
Share-based payments	58				△33	25	19	45	0
Issuance of convertible bonds with stock acquisition rights					253	253		253	2
Increase or decrease in ownership interests related to capital increase of consolidated subsidiaries	△71					△71	71		_
Increase or decrease in non-controlling ownership interests related to decrease in number of consolidated subsidiaries						_	△84	△84	∆1
acquisition of shares in consolidated subsidiaries	△226					△226	93	△133	∆1
Increase or decrease in ownership interests related to disposal of shares of consolidates subsidiaries	3					3	11	15	0
Transfer from other components of equity to retained earnings				4,365	△4,365	_			
Total transactions with owners of the parent company —	△11	18	1,845	△1,095	△4,278	△3,522	22	3,499	△25
Acquisition or disposals of non-controlling interests	11					11	△113	△102	△1
Total of changes in ownership interests in subsidiaries and	11	_	_	_	_	11	△113	△102	∆1
As of December 31, 2021 51,115	_	118 753	A 1 000						

Balance as of the beginning of the period	51,115	-	118,753	△1,889	52,817	△7,657	213,139	4,139	217,279	1,536
Total comprehensive income										
Net profit					25,406		25,406	393	25,800	182
Other comprehensive income						15,385	15,385	47	15,432	109
Total comprehensive income	-	-	-	-	25,406	15,385	40,791	441	41,233	292
Amount of payments to owners of hybrid capital					△1,764		△1,764		△1,764	△12
Acquisition of treasury shares				△1			△1		△1	0
Disposal of treasury shares		△119		984			864		864	6
Dividends					△7,519		△7,519	riangle 100	△7,619	△54
Share-based payments		290					290	125	416	3
Increase or decrease in ownership interests related to acquisition of shares in consolidated subsidiaries		111					111	△158	∆46	0
Transfer from other components of equity to retained earnings					924	<b>△924</b>	-		-	-
Total of contribution by owners and distribution to owners	-	282	-	982	△8,359	<b>△924</b>	△8,017	△132	△8,150	△58
Acquisition or disposal of non-controlling interests		△16					△16	29	12	0
Total changes in ownership interests in subsidiaries and others	-	△16	_	_	_	_	△16	29	12	0
Balance as of December 31, 2022	51,115	266	118,753	△906	69,864	6,803	245,897	4,477	250,374	1,770

(\*) EUR amount is converted from JPY at the closing rate of Dec. 2022 (JPY 141.43 / EUR) for both previous and current fiscal year. Please refer to the Security Report for the audited financial statements.

# **Consolidated Statements of Cash Flows**

Exchange rate (CR) JPY 141.43 / EUR

	Unit: JP	Y million	Unit: EUR million		
	Previous fiscal year From January 1, 2021 To December 31, 2021	Current fiscal year From January 1, 2022 To December 31, 2022	Previous fiscal year From January 1, 2021 To December 31, 2021	Current fiscal year From January 1, 2022 To December 31, 2022	
Cash flows from operating activities					
Profit before income taxes	19,609	36,528	139	258	
Depreciation and amortization	21,894	24,016	155	170	
Profit or loss from disposal of fixed tangible assets $[\triangle$ indicates profit]	230	306	2	2	
Finance income and costs	3,489	4,548	25	32	
Profit or loss from investments under the equity method (△ indicates profit)	△30	137	0	1	
Profit or loss from other non-cash transaction (△ indicates profit)	△817	△1,915	△6	△14	
Amount of increase or decrease in inventories $(\triangle$ indicates increase)	△4,130	△26,311	△29	△186	
Amount of increase or decrease in trade and other receivables $(\triangle$ indicates increase)	△15,479	577	△109	4	
Amount of increase or decrease in trade and other payables ( $\triangle$ indicates decrease)	△406	16,524	△3	117	
Amount of increase or decrease in contractual liabilities (	30,599	21,498	216	152	
Amount of increase or decrease in provisions (△ indicates decrease)	5,937	3,508	42	25	
Others	△2,451	△2,730	△17	△19	
(Subtotal)	58,444	76,687	413	542	
Interests received	354	502	3	4	
Dividends received	84	111	1	1	
Interests paid	△3,464	△3,821	24	△27	
Income tax paid	△5,685	△3,731		<u>26</u>	
Cash flows from operating activities	49,733	69,749	352	493	
Cash flows from investment activities					
Payments into term deposits	_				
Purchase of tangible fixed assets	△12,645			△185	
Proceeds from sale of tangible fixed assets	1,210	120	9	1	
Purchase of intangible assets	△10,606	△14,909	△75	△105	
Expenses due to disposal of shares of subsidiaries resulting in change in scope of consolidation	△399	-	∆3	-	
Acquisition of shares of affiliated companies	△276	63		0	
Purchase of investment securities	△1,518	△2,286		△16	
Proceeds from disposal of investment securities	5,440	8	38	0	
Others	△580	△318	4	△2	
Net cash flows from investment activities	△19,376	△44,874	△137	△317	
Cash flows from financing activities					
Net increase or decrease in current borrowings	△21,730	4,868	△154	34	
Proceeds from long-term borrowings	5,000	-	35	-	
Repayment of long-term borrowings	△20,882	<b>△1,748</b>	△148	△12	
Proceeds from issuance of convertible bonds with stock acquisition rights	39,887	-	282	-	
Expenses due to redemption of bonds	△10,000	riangle 10,000		△71	
Proceeds from issuance of hybrid capital	29,717	-	210	-	
Repayment of hybrid capital	△30,000	-		-	
Repayments of debt instruments	-				
Payment of lease liabilities	△6,035	<u> </u>		<u> </u>	
Dividends paid to equity holders of the parent	△2,496	△7,525			
Acquisition of treasury shares	U		0	0 ^ 20	
Amount of nourcents to suppose of hubrid conitol			U		
Acquisition of shares of subsidiaries not resulting in change in scope of	△2,123	<u> </u>	<u></u>	0	
Proceeds from disposal of shares of subsidiaries not resulting in change	15	-	0	-	
Others	820	2 014		14	
Cash flows from financing activities	△18 270	$\triangle 38,978$	△129	△276	
Net foreign exchange difference	1 459	3 797	10	270	
Increase or decrease in cash and cash equivalents	12 5//	<u>∧10.205</u>	07	<u>∧ 72</u>	
[	13,344		70		
Cash and cash equivalents at the beginning of period	33,754	47,298	239	334	
Casn and cash equivalents at the end of period	47,298	36,992	334	262	

(\*) EUR amount is converted from JPY at the closing rate of Dec. 2022 [JPY 141.43 / EUR] for both previous and current fiscal year. Please refer to the Security Report for the audited financial statements.

### **Company Profile** as of December 31, 2022

#### General information about the Company

Company Name	DMG MORI CO., LTD.
Subscribed Capital	JPY 51,115 million
Established	October, 1948
Registered Head Office	106, Kitakoriyama-cho, Yamato-Koriyama City, Nara 639-1160, Japan Phone: +81-743-53-1125
Global Headquarters	2-3-23 Shiomi, Koto-ku, Tokyo, 135-0052, Japan (Tokyo Global Headquarters) Phone: +81-3-6758-5900
Second Headquarters	2-1 Sanjohonmachi, Nara City, Nara, 630-8122, Japan (Nara Product Development Center)
Scope of Business	Provide total solutions consisting of machine tools (machining centers, turning centers, mill-turn centers, 5-axis machines, etc.), software (user interface, Technology Cycles, embedded software, etc.), measurement equipment, service support, applications, and engineering
Number of employees	12,626 (consolidated)
Website	https://www.dmgmori.co.jp

#### Share information

Number of authorized shares	300,000,000
Total number of shares already issued	125,574,371 shares (treasury shares of 379,312 shares excluded)
Shares constituting one unit of stock	100 shares
Number of shareholders as of the end of the fiscal year	37,349

#### Major shareholders

Name	Number of shares held (1,000 shares)	Shareholding ratio (%)
The Master Trust Bank of Japan, Ltd. (trust account)	18,464	14.70
Custody Bank of Japan, Ltd. (trust account)	9,523	7.58
THE BANK OF NEW YORK MELLON 140051	6,426	5.12
DMG MORI Employee Shareholders Association	4,635	3.69
Masahiko Mori	3,591	2.86
Custody Bank of Japan, Ltd. (Mori Manufacturing Research and Technology Foundation account)	3,500	2.79
BBH FOR UMB BK, NATL ASSOCIATION-GLOBAL ALPHA INTL SMALL CAP FUND LP	2,396	1.91
The Nomura Trust and Banking Co., Ltd. (investment trust account)	2,289	1.82
RBC IST 15 PCT NON LENDING ACCOUNT — CLIENT ACCOUNT	1,943	1.55
DMG MORI Business Partner Shareholders Association	1,901	1.51
(Note) 1. Acquisition or disposal of treasury shares in FY 2022		

Acquisition Acquisition of shares less than one unit of stock 617 shares

379

32

1

63

2. The shareholding ratio is calculated excluding the treasury shares.





	Number of shares (1,000 shares)	Number of shareholders (person)
1,000,000 shares or more	62,625	16
500,000 shares or more	13,563	20
100,000 shares or more	17,608	75
50,000 shares or more	3,293	47
10,000 shares or more	7,879	437
■ 5,000 shares or more	3,566	583
1,000 shares or more	10,774	6,433
500 shares or more	2,629	4,430
Up to 500 shares	4,012	25,308

Treasury shares

Foreign corporate bodies, etc. (individuals)

### Glossary

Below are definitions of the terminologies used in this Integrated Report.

Terminologies in the Integrated Report	Explanations
DMG MORI DMG MORI Group	The entire DMG MORI Group consisting of DMG MORI CO., LTD, DMG MORI AKTIENGESELLSCHAFT, and other group companies
DMG MORI CO CO	DMG MORI CO., LTD.
DMG MORI AG AG	DMG MORI AKTIENGESELLSCHAFT

### Financial Calendar (Schedule)

DMG MORI CO., LTD.

March 28, 2023	75th Annual General Shareholders Meeting
May 10, 2023	Announcement of 1st Quarter 2023 results
August 3, 2023	Announcement of 1st Half 2023 results
November 7, 2023	Announcement of 3rd Quarter 2023 results

### **Reporting term**

### January 2022 – December 2022

(\*) Some contents include subjects that occurred outside of this term.

### Disclaimer

This Integrated Report contains targets, plans, etc. concerning the future of DMG MORI. All predictions concerning the future are judgments and assumptions based on information available to DMG MORI at the time of writing.

There is a possibility that the actual future results may differ significantly from remarks and forecasts stated herein and described plans may not be implemented, due to factors which contain elements of uncertainty or the possibility of fluctuation for a variety of reasons.

This Integrated Report was prepared in Japanese and translated into English. In the event of any discrepancy or conflicts between the two versions, the Japanese version shall prevail.

### DMG MORI CO., LTD.

Tokyo Global Headquarters 2-3-23 Shiomi Koto-ku, Tokyo, 135-0052, Japan Phone :+81-3-6758-5900 www.dmgmori.co.jp/en/



DMG MORI CO., LTD. 2-3-23 Shiomi, Koto-ku, Tokyo 135-0052, Japan Tel.: +81-(0)3-6758-5900

March 9th 2023

### DMG MORI ranks among Top 500 in Japan for excellent health & productivity management

DMG MORI CO., LTD. (hereafter referred to as "DMG MORI") was certified as "White 500", one of the top 500 large enterprises in 2023 for excellent "Health and Productivity Management" by the Japanese Ministry of Economy, Trade and Industry, and Nippon Kenko Kaigi. The certification for "Health and Productivity Management" was introduced on the initiative of Nippon Kenko Kaigi to recognize Japanese companies with outstanding efforts for employee well-being.



The mental and physical well-being of employees is crucial for stable business operations and sustainable growth. DMG MORI actively promotes employee health and has taken various actions in recent years, including the introduction of mandatory 12-hour intervals between working hours in 2018, company-wide medical checkups in 2019 and smoke-free offices in 2020.

The "DMG MORI Health Management Declaration" published in January 2021 embodies our commitment to promoting employees' well-being through multifaceted and systematic initiatives. The Health Management Promotion Center, established in 2020, is taking a wide range of actions to further improve the mental and physical well-being of our employees by following the Mission Statement and DMG MORI Health Management Declaration. Such actions include offering healthy meals at the company's cafeterias or training programs with professional physiotherapists.

As stated in the Mission Statement, DMG MORI encourages its employees to "Play Hard + Be Dynamic," "Study Continuously + Be Open" and "Work Together + Be Innovative." Health management helps employees to unfold their full potential. DMG MORI will further strengthen its initiatives for employees' well-being.

▼Further information on "DMG MORI Health and Productivity Management" (Japanese only) <u>https://www.dmgmori.co.jp/sp/health/</u>

▼DMG MORI Health Management Declaration (Press release from January 28, 2021) https://www.dmgmori.co.jp/corporate/en/news/pdf/20210128 kenkou e.pdf

\*"Health & Productivity Management" is a registered trademark of the non-profit organization Kenkokeiei.