

# Value Creation Process of DMG MORI

## Our Capital

### Sales and Service Capital

P.43

Global sales and services locations 116

Overseas direct sales and service network

### Development Capital

P.53

Globally distributed R&D organization led by Japan, Germany and the US

R&D expenses approx. 5% of sales

### Intellectual Capital

P.57

Accumulated know-how as the industry leader

Formation of Intellectual properties

Standardization of measuring methods, etc.

### Manufactured Capital

P.61

17 production locations worldwide

In-house production of key-components

### Human Capital

P.71

Diversity in 13,000 employees with 59 nationalities

Providing a well-rounded educational program

### Social and Relationship Capital

P.83

Globally recognized brand

Fostering with our partners

### Natural Capital

P.87

Solar power generation utilizing the roof top of our factories

Maintain the beautiful landscape around the major factories

### Financial Capital

P.91

Improvement in profitability

Investment for future growth

Management of the listed company in Germany

## Output

### Offering the optimized machining process

Starting businesses from the workpiece drawings



### A variety of product lineup

Replacement of dedicated machines with process integration machines



### Stabilized financial performance

Focus on high-value projects  
Breaking away from the low price / short delivery businesses



### Improvement of the surrounding scenery around factories

Utilizing the neighboring abandoned farmland



### Globally recognized brand

Establishing a "Global One" company in Japan, Germany and the US



### Stable production

Committed to the customers' medium- to long-term facility planning



### Safety in work environment

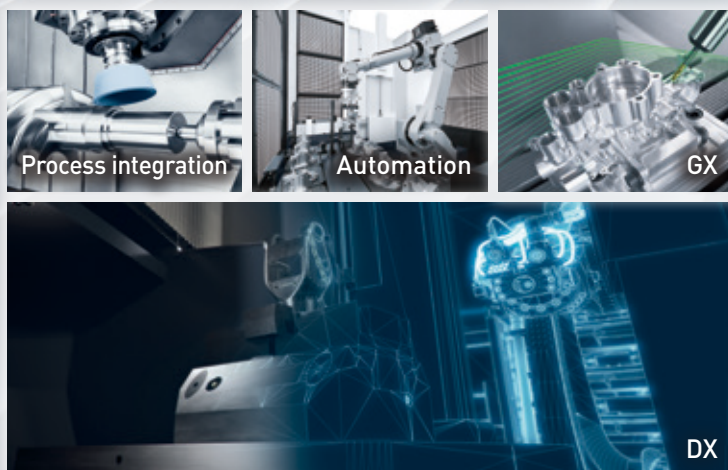
Realization of our motto, "Play Hard, Study Continuously, Work Together"



At DMG MORI, financial and non-financial capital is divided into eight categories. These are augmented by a virtuous cycle in which high value-added outputs are generated through the business model of promoting MX, which in turn become new management resources.

# MX

## MACHINING TRANSFORMATION



### Outcome / Growing Capital

#### Financial outcome



Improved profit margin  
Cash flow generation

#### Market share



Establishing a leading position in 5-axis machines and mill-turn centers

#### New markets



One-stop offering to investment by multinational companies to multiple location

#### Source of innovation



Cutting-edge technologies born from business negotiations with top notch companies in the various industries

#### Reduction of environmental footprint



Reducing work in progress parts, defective products, and power consumption by improving production efficiency

#### Capturing the customers' needs



Addressing the challenges of operator shortage by automation solution or operator's training

#### Production know-how



In-house production of key components with our own machines  
Stringent protection of trade secrets

#### Prosperity throughout the entire value chain



Promotion of sales of peripheral equipment from our partner companies

# | Sales and Service Capital

## AMERICAS

### For a stronger presence in the U.S., the center of research & innovation

#### Sales strategies to match changing investment trends

As the economy continues to recover from the pandemic, we observe that U.S. customers with continuous capital investments are steadily improving their performance. Meanwhile, those who do not invest struggle to secure new orders solely with their existing equipment and are increasingly being pulled into price competition. Against this backdrop, an increasing number of small and medium-sized manufacturers are being consolidated by investment funds (PE). This allows for new distributive structures of capital investment that enable customers to purchase expensive equipment such as 5-axis and mill-turn centers which they could not afford before.

Simultaneously, some production has been returning from China and Mexico to the U.S. but is met with a severe shortage of operators. This makes process integration and automation inevitable. With our unique sales strategy of providing insurances along with the products, we meet the needs of customers that are worried about equipment damage due to the increased operating complexity.

#### Innovation drives machine tool demand

Gigacast-type production technology has been attracting attention in EV-related industries, with special focus on the remarkable progress in material research that led to a new approach for casting shapes.

In the aerospace and medical industries, composites of different metals, CFRP (carbon fiber reinforced polymers), and medical plastics are widely used, and we ourselves have accumulated a lot of experience with processing them. Similar changes are occurring in the automotive industry. As new machining methods are developed through material innovation, we believe that our machines will continue to be in high demand regardless of the number of parts being reduced.

As for additive manufacturing (AM), we expect its utilization to expand from mere prototype lamination to surface treatment by coating as well. The entire industry is paying close attention to the possibilities of AM, and especially the U.S. shows interesting market trends and new inventions. However, AM does not offer the same degree of accuracy as conventional cutting, so cutting will continue to be necessary for finishing processes of

precise parts, thus increasing the need for cutting machines with the AM market penetrating.

#### A strong presence as a global company

As a major machine tool manufacturer, we have received strong inquiries for U.S. federal government procurement projects. These projects impose particularly high information security requirements, so we have established DMG MORI Federal Services (DMFS) to ensure security for U.S. government projects and keep them separate from our Japan and German businesses. Since the lead times and the price of government projects are different from those of private companies, there are advantages to having separate legal entities to handle not only information security, but also project management and sales support.

However, DMG MORI's presence is still small in the private market when looking at its full potential. Our mid-to-long-term goal is to expand our sales in the Americas to the billion-dollar level and to increase our significance in the U.S., meaning that we will have to attract more customers of U.S. origin in addition to Japan-affiliated companies.

Keiichi Ota

Managing Executive  
Officer  
Dr. Eng.

Americas and  
Global IT



## Customer Story | U.S.A.

## "In terms of precision, reliability, control technology, automation options, and customer support, DMG MORI has the optimal product range."

Keller Technology Corporation's (KTC) long history began in 1918, with the manufacture of polishing machines and the offer of manufacturing services. Approximately 200 employees are responsible for manufacturing complex precision components and turnkey technology solutions for customers in demanding sectors such as medical and semiconductor. KTC has been partnering with DMG MORI since 2001 to compete in the intense global marketplace.

The company's expansion into scientific research equipment, the medical sector and continued growth in the semiconductor industry required investment in new machining technology. DMG MORI has become a partner that would support KTC's growth in the long term with 5-axis machine tools. Machining the components on 3- or 4-axis machining centers would be far too time-consuming due to the necessity for multiple set-ups and reclampings. The 5-axis technology not only saves time but also reduces the opportunity for inaccuracies.

After the DMU 125 P, KTC has to date purchased two DMC 160 U duoBLOCKs, one DMC 125 U duoBLOCK, two DMC 210 Us and one DMC 210 FD system, all with pallet changers – so set-up and production can be performed simultaneously, providing maximum utilization. In addition, the two DMC 210 Us have a 5-position round pallet storage system (RPS 5) and the DMC 160 U duoBLOCK has a 6-position round pallet storage (RPS 6). This allows us to utilize the machines lights-out, unmanned overnight and during the weekend, so 24 / 7 operation is possible.

One of KTC's major projects is digitization throughout the manufacturing process. To implement the necessary digital and connectivity platforms, the company has partnered with TULIP. Additionally, system monitoring is carried out via DMG MORI Messenger. TULIP's array of applications helps interconnect the company's manufacturing processes – from receipt of order through to shipment to customer. In total, KTC achieves a spindle utilization rate of 85% on a 365 day 24 / 7 schedule.

A very trusting relationship has developed between KTC and DMG MORI as a result of the partnership that has grown over time. "Our local factory-direct sales representative stays close and knows our requirements very well. This assures us of the best manufacturing solutions and support," is how Mark Keller, Vice President Operations, assesses the cooperation. "In terms of precision, reliability, control technology, automation options, and customer support, DMG MORI was the ideal choice. It has positioned us well to remain competitive far into the future."



### KELLER TECHNOLOGY CORPORATION FACTS

- + Keller Technology Corporation (KTC) was founded in 1918 as the Duplex Buffing Machine Company in Buffalo NY
- + More than 200 employees for contract manufacturing of high-complexity electromechanical equipment, systems, and assemblies
- + Focus on complex semiconductor equipment, medical capital equipment, and hardware for science and energy research
- + Facilities in Buffalo – New York, Charlotte – North Carolina and affiliates in Daegu – South Korea



Keller Technology Corporation  
2320 Military Road  
Tonawanda, 14150 New York  
[www.kellertechnology.com](http://www.kellertechnology.com)



**Mark Keller** (rightmost)  
Vice President Operations  
Keller Technology Corporation

## JAPAN

## Transition to process integration in Japan

### Technology solutions to support investment

Looking back, we see that the Japanese industry used to separate production processes, especially for automotive production. Today, many manufacturers in Japan as well as overseas have recognized the necessity of process integration. This transformation is driven by an increase in diverse orders for different workpieces and small lot sizes. It is now leading to a growing demand for advanced solutions with 5-axis machines and mill-turn centers. Applications are varied, ranging from EV-related production up to research and development of innovative technologies, including the 'Flying Car' which will be on display at EXPO 2025 in Osaka, Japan.

In the new industrial landscape, those who have invested in cutting-edge and original technology first are the ones who realize business growth. Customers are thinking ahead, and the number of inquiries for short machine delivery times in reaction to just having received an order is declining. A decade ago, our primary sales focus was building customer relationships for repeat orders. Today, we prioritize providing high-value solutions including end-to-end process integration. Detailed explanations of new machining techniques through visual aids like photos and videos are becoming more important for assisting customers in their investment decisions.

### Digital transformation of service

The transition from standalone machines to advanced automation systems demands comprehensive service support to ensure uninterrupted production. Our service engineers are well-equipped to support this transformation with expertise in the field of machine tools, robotics, and peripheral equipment.

As service requirements grow in complexity, we use digital technology to provide tailored maintenance packages and facilitate service requests through our customer portal. *my DMG MORI* is our user-friendly platform that allows customers to submit requests and include detailed information, such as images, videos, and machining programs. Furthermore, our service engineers collaborate closely with our R&D department to diagnose problems and implement effective solutions that benefit all customers. This joint effort makes it possible to minimize machine downtime and maximize productivity.



**Tatsuya Ogaki**  
DMG MORI SALES AND SERVICE CO., LTD.  
Tokai Hokuriku Sales Department  
Area Sales Manager



**Yusuke Yutaka**  
DMG MORI SALES AND SERVICE CO., LTD.  
Chushikoku Kyusyu Sales Department  
Service Engineer

### Customer Story | JAPAN

Headquartered in Sakaki, Nagano Prefecture, TSUZUKI MANUFACTURING is mainly engaged in parts manufacturing for the automotive and construction machinery industries. The company has successfully combined high-volume and high-mix manufacture under one roof.

Having been searching for an efficient solution to automate high-mix production for construction machinery parts, the company introduced an automation system that consists of the self-driving robot WH-AMR 5 and 2 x NTX 1000 2<sup>nd</sup> Generation mill-turn centers. This system allows robots and operators to collaborate and work together, enabling flexible workpiece transfer between processes for safe and efficient production.



"I believe that DMG MORI's robot automation systems are one step ahead of other companies", says Kazuhumi Miyashita, the Director and General Manager of the Engineering Headquarters.

### TSUZUKI MANUFACTURING FACTS

- + Established in 1944
- + 504 employees
- + Manufacturing of automotive and construction machinery parts, hydraulic equipment, and parts for the aerospace industry
- + Manufactures very lightweight, hollow shafts with the in-house developed sequential forging method "Radial Forging"



TSUZUKI MANUFACTURING CO., LTD.  
6649-1 Sakaki, Sakaki-machi,  
Hanishina-gun, Nagano 389-0681, Japan  
[www.tsuzuki-mfg.co.jp](http://www.tsuzuki-mfg.co.jp)



**Kazuhumi Miyashita**  
Director & General Manager of  
Engineering HQ  
TSUZUKI MANUFACTURING CO., LTD.

## EUROPE

## Offering solutions for new demands in Europe

### 3 major trends:

#### automation, sustainability, and supply chain relocation

In Europe, we are witnessing 3 major trends that will generate new machine tool demand in the medium to long term. First, automation as a result of labor shortages that customers of any size and particularly SMEs are struggling with. This growing need for high-flexibility automation benefits us, DMG MORI, as we are capable of offering both simple applications as well as fully automated solutions from a single source. Second, as seen in the EU's Green Initiative, sustainability has become a core value of business, with many multinational companies putting increasing emphasis on the carbon footprint of their supply chain for investment and decision making. DMG MORI offers solutions for process integration to combine processes on one universal machine instead of splitting them across multiple special-purpose machines and to reduce the environmental impact of production. Third, customers are relocating their supply chains in response to geopolitical risks, which will lead to a sustainable expansion of the market for machine tools.

### Support through the entire product life cycle

DMG MORI has already established itself as a well-known brand in Europe for many years, and our MX strategy has been particularly well received. Being present in all of Europe, from large-scale markets to smaller markets, DMG MORI holds a unique position that no other competitor has. We will further enhance our presence in Europe through the delivery of cutting-edge products as well as the highest quality of customer service and support along the whole product lifecycle.



## Customer Story | GERMANY

Jonas & Redmann Automationstechnik GmbH in Berlin designs and manufactures automated production lines for the solar panel industry, medical engineering, car manufacturing and battery production. In order to be able to react quickly and flexibly, the company has built up its own machining department, which includes eight machine tools from DMG MORI including a DMF 200 | 8.

The new traveling column of this machine enables to machine over-long workpieces that extend beyond the working area. In addition, the innovative and unique tool changer behind the worktable allows the company to use the entire clamping surface for entire frameworks without the risk of collision. "We will gradually modernize our mechanical manufacturing with innovative solutions



similar to the DMF 200 | 8 to increase our capacity and particularly our productivity", says Yilmaz Öztürk, mechanical manufacturing manager.

### JONAS & REDMANN AUTOMATIONSTECHNIK FACTS

- + Established in Berlin in 1989
- + 450 employees
- + Design and manufacture of automated production lines for the solar panel industry, medical engineering, car manufacturing and battery production

**Jonas & Redmann**  
The Automation Company

Jonas & Redmann  
Automationstechnik GmbH  
Segelfliegerdamm 65  
12487 Berlin, Germany  
[www.jonas-redmann.com](http://www.jonas-redmann.com)



**Frank Polak** (left)  
Responsible for communication

**Yilmaz Öztürk** (right)  
Mechanical Manufacturing Manager

## CHINA

## Direct sales and close customer relations in China

### Operator training for customers

The Chinese market has great potential for future growth, and we believe its importance will increase over the medium to long term.

DMG MORI is recognized as an exceptionally high-end brand in China. However, first-time customers are not yet familiar with operating high-precision 5-axis and mill-turn centers; and while investment into new technology is needed to improve productivity, users of low-cost equipment find this decision to be daunting.

There is a striking similarity between machine tools and racing cars: they both can only realize their full potential in the hands of a human, may it be a first-class driver or a capable machine operator. DMG MORI takes on the responsibility of training customer operators to make use of the machine tool's full potential for process integration, automation, DX and GX.

In China, we present our newest solutions either at one of our showroom exhibitions in Shanghai and other cities or through a direct visit to our factories worldwide, such as Tianjin and Pinghu in China, Iga in Japan, and Pfronten in Germany. Once we enter detailed negotiations, our engineering department selects the best machine for the customer's needs from among

more than 150 models and 50 automation systems, and we carefully provide guidance on operation after installation.

DMG MORI also cooperates closely with educational institutions by offering our machines to technical high schools and vocational schools for hands-on training classes. Our direct sales and service network provides all in Chinese language.

### Excellent local employees are the strength of the organization

Our current sales company in China has more than 300 employees. While we have expatriates from Japan and Germany serving as bridges between the global headquarters and the local entity, we are able to handle much of our day-to-day operations, including important management roles, with our excellent local Chinese employees. This is our strength because many of our customers in China are not fluent in English, making it essential to communicate technical explanations accurately in Chinese.

Since 2015, we have been implementing a program in which young university graduates gain experience in various departments as trainees during their first three years. Currently about 10% of all employees have joined the company through this program. The trainees learn about machine tools and metalworking, and at the same time, acquire the "DNA of DMG MORI". This system has enabled us to achieve an overwhelmingly high employee retention rate compared to typical companies in China.



**Frank Beermann**

Executive Officer  
DMG MORI Sales and Service  
GmbH Managing Director

**Tina Shen**

DMG MORI Machine Tools  
Trading Co., Ltd.  
Operations Director

**Jian Gao**

DMG MORI Machine Tools  
Trading Co., Ltd.  
Managing Director & President

## ASIA

## Capturing the growth of the high-end market in Asia

### Advancing industries signal rapid market transformation in Asia

Outside of China, we expect significant growth in Asia in the medium to long term. We are receiving an increasing number of inquiries from our customers in Asia, who are very eager to implement process integration and take on more high-value-added tasks. 60% of our customers in Asia are local companies. Moreover, our Asian customers are highly interested in using digital technologies to enhance the efficiency of their entire production process, spanning from CAM-based machining program creation to production scheduling.

80% of the orders from Asia are for cutting-edge process integration machines. The Asian market is increasingly focusing on shifting to advanced and highly efficient production. This trend is on par, if not stronger, than what is observed in other advanced industrial nations.

Also, we can see a similar growing concern about labor shortages in Asia. Despite an overall population increase, the scarcity of young talents with a manufacturing background, particularly with an understanding of processing technology, is a shared challenge across all countries. As a result, there is a growing demand for production systems that can achieve high throughput in a stable and efficient manner, while also reducing the need for personnel through process integration and automation.

### Driving success with sales excellence, firsthand experience, and quality service

DMG MORI is witnessing steady growth of the high-end market in Asia. To effectively capture this demand, we focus on three strategies. First, it is crucial for us to train sales professionals who can articulate the benefits of introducing our products to customers, including the trends for the next 10 to 20 years.

Next, we strive to provide opportunities for customers to experience our products. In addition to our showroom events in each country, we actively invite companies to visit our factories in Japan and Germany, as well as the facilities of existing DMG MORI users. Experiencing our advanced products firsthand enables customers to envision their own future in manufacturing.

Another crucial aspect is enhancing service quality. We believe that high-quality after-sales service builds trust with customers and makes them feel confident in purchasing our machines. By dispatching our service engineers in Asia to our factories in Japan and Germany for training, we actively engage in talent development and skill refinement. DMG MORI's direct sales structure allows us to efficiently develop talent over the long term.

### Aiming to become a global business professional

Currently, I oversee 10 sales companies spanning various countries in Asia-Pacific, from Australia to India, managing approximately 500 employees. Leading such a large organization has provided me with valuable experiences in navigating diverse cultures and markets. I will continue to seek experience in different regions to become a business professional well-suited for the global stage.



**Satoshi Hashimoto**

DMG MORI Asia  
DMG MORI India  
Chief Operating Officer

## Digital Platform

## Our digital platform to support MX



### Digital technology to accelerate MX

DMG MORI launched the customer portal "my DMG MORI" to accelerate after-sales services with digital technology. In a first step, the platform offered central management for specification documents and manuals of customer machines; in a second step, we enabled customers to place requests for repair and recovery directly from their PCs and smartphones at any time. Now, our platform fully supports customers after machine delivery with a variety of services that also allow them to purchase spare parts and peripheral equipment, attend e-learning courses, book hands-on training, and more. More than 50,000 customers worldwide have signed up for my DMG MORI free of charge, and we expect a steady increase of users over the long term.

Selected peripherals with the DMQP (DMG MORI Qualified Products) label can also be purchased through my DMG MORI. With e-commerce for machine tools, we take it as our responsibility to introduce our customers to some of the world's best products they might not know yet. In addition, we are a direct supplier of production systems, and we believe it is important to respond directly to the needs of our customers even after machine delivery. In addition, DMG MORI offers a variety of IoT-related value propositions as well. When constructing a production

system together with customers, it is necessary to visualize the status quo, analyze cause-and-effect relationships, predict what will happen next, and respond to problems before they occur. But as a first step, a proper infrastructure for information acquisition and connectivity must be in place. With connectivity by DMG MORI, we can build networks of both newest and oldest machines, including competitor machines. Combined with our low-code application TULIP, we can acquire even more detailed data that allows in-depth analyses and process improvements to benefit a factory's overall productivity through digital technology.

### Spearheading solutions to social issues

DMG MORI has established TECHNIUM as a joint venture with Nomura Research Institute for sales and service of digital technology.

We believe that the greatest value of Machining Transformation (MX) lies not only in eliminating production waste through process integration and automation but also in reducing the need for management and natural resources, which we refer to as GX. As expectations for addressing social issues rise rapidly, companies that take the initiative in the digital realm will acquire valuable data and experience, positioning themselves as industry leaders. The appeal of working at DMG MORI is to be involved in the process of fundamentally shaping the manufacturing industry and bringing about a previously unimaginable world.



**Kentaro Blumenstengel**  
TECHNIUM CO., LTD.  
President

## Engineering

## Empowering customers as technology partners

### Crafting tailored solutions from workpiece drawings

Our Engineering Department collaborates closely with sales specialists around the world to propose the optimal production systems for our customers. After receiving workpiece drawings and samples, we conduct feasibility or time studies to confirm the theoretical machining conditions, before continuing with actual tests cuts on showroom machines anywhere in the world if requested by the customer. In short, all discussions start with the actual workpiece drawing.

Requirements vary depending on the customer, with some demands ranging from high-rigidity machines for hard-to-cut materials up to standard 5-axis machines with dedicated software to enable high-mix low-volume production of complex shapes.

Many customers are faced with severe operator shortages, which shows in a decline of requests for stand-alone machines. Operators are valuable assets and it would be inefficient to assign them for each individual task, such as machine setup, material transport and workpiece cleaning. Through process integration, automation, and DX, we directly address these challenges and enable customers to utilize their factory resources more efficiently, and therefore reduce environmental footprint as well – in other words: achieve Machining Transformation.

### Enhancing proposals through extensive customer experience

We place great importance on direct connections with our customers. For this reason, more and more customers see DMG MORI as a technology partner rather than just a machine tool supplier. We dedicate ourselves to making customers feel comfortable consulting with us, and we engage in open discussions to exchange knowledge with each other.

All of our accumulated experience within the company serves as the basis for offering better proposals. For example, if confronted with a certain Technology Cycle request by a customer, our engineers from the Wernau showroom can flexibly consult with our colleagues in Iga, Bielefeld or anywhere else. Also, resident engineers temporarily stationed at customer sites can deliver honest customer feedback to contribute to the development of next-generation machines. This organization-wide exchange enhances DMG MORI's value as an engineering company.

### Gaining trust through engineering skill

To provide better proposals, it is essential to maintain a keen focus on customers' precise needs and expectations, even when discussions become complex and involve multiple parties.

Due to my long history at DMG MORI, I occasionally receive direct inquiries from customers when they are considering new investments. Delivering good results and gaining our customers' trust directly translates into new business opportunities. As an engineer, I find it most rewarding to realize that ultimately, it is the human connection that makes the difference.



**Lorenzo La Rosa**  
DMG MORI EMEA GmbH  
Application Engineering  
Team Leader

## Marketing

## Enhancing brand power, providing stakeholders with unique experiences

### Strengthening relationships with various stakeholders

DMG MORI has many important stakeholders, including customers, employees, shareholders, partners, and local communities. We strive to strengthen and maintain our relationships with each of these stakeholders through a variety of channels, including our website, factory tours, seminars, internal and external events, catalogs and other publications, social media, as well as intranet solutions for internal communication among our employees. We want to share with our stakeholders the possibilities of machine tools and the ways in which DMG MORI contributes to society. This involves more than just showcasing our products and initiatives; we also enrich our content by featuring customer case studies and highlighting the entire product life cycle.

### MX: driving sustainable growth in the manufacturing industry

In recent years, there has been a growing expectation for the manufacturing industry to respond to the diversifying social needs and environmental challenges. In 2023, DMG MORI introduced and widely promoted the concept of Machining Transformation (MX), positioning it as a means to achieve Green Transformation (GX) through process integration and automation, along with the Digital Transformation (DX) of these processes. MX serves as a guiding principle for DMG MORI's business objectives and the role it should play. By advancing MX, we aim to enhance our customers' productivity and contribute to building a sustainable society. We have observed that MX has become more than just a slogan

for our customers, partners, and employees — it facilitates mutual understanding and serves as a driving force for our business.

### Building brand power through unwavering pursuit of customer satisfaction

We have dedicated time and effort to establish DMG MORI's brand image as a Global One Company. To achieve a unified global brand image, we have revised our corporate identity guidelines. These guidelines are applied across all channels, from exhibitions to the design and writing of each content, as well as the behavior of our employees, all of which contribute to enhancing DMG MORI's presence. The all-black DMG MORI logo serves as a powerful symbol of our brand, signaling the completion of our integration to external stakeholders and instilling a sense of pride among our employees.

In our ongoing efforts to shape our brand image, we have taken steps to make our communication more impactful and engaging. This involves delivering personalized content tailored to each customer's needs, using both real-world and digital platforms. For instance, our Technology Friday events, designed for small groups, offer firsthand experiences of DMG MORI's initiatives. Additionally, our Digital Twin Showroom, featuring fully computer-generated replicas of our Iga Global Solution Center and System Solution Plant, allows customers from afar to virtually explore our facilities. Our extensive web content, including a wealth of customer story videos, further supports customers in implementing the processes they desire. By leveraging our global network and working closely with customers on a daily basis, we continuously gather insights and knowledge to better understand and address their needs. Through ongoing communication efforts, we aim to further strengthen our relationships with customers and other stakeholders.



**Minako Okuyama**  
Public Relations /  
Marketing Department  
General Manager



**Katharina Loh**  
DMG MORI Global  
Marketing GmbH  
Marketing & Product  
Communication  
Group Manager

## Factory Tours and Exhibitions

### Inviting customers to worldwide factory tours



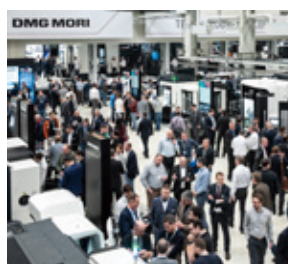
In order to effectively showcase our cutting-edge technology, we regularly organize customer tours and events at our factories and solution centers worldwide. In Japan, our "Technology Fridays" bring together small groups of customers every week, providing them with an up-close look at our innovations. We also arrange Japan tours for our overseas visitors to explore our Tokyo Global Headquarters and Iga Campus. At the same time, we also regularly host large-scale Open House events and tours at our Pfronten Factory in Germany and Chicago in the U.S. These regional events facilitate direct business discussions and enable us to gather valuable feedback from our customers, fostering seamless collaboration across our production and sales teams. This collaboration bridges the gap between us and our customers, allowing us to provide optimal solutions.



Technology Friday



Japan Tour from Germany



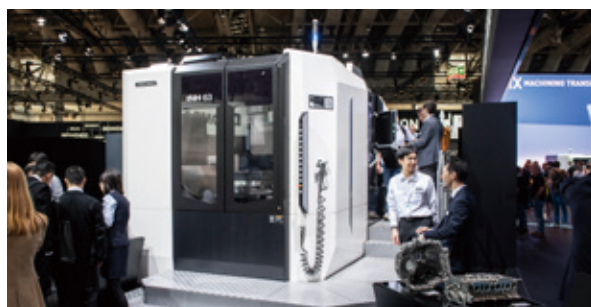
Open House Pfronten



Chicago Technology Days

### Participating the large exhibition

EMO Hannover 2023, the largest machine tool trade fair in Europe, took place in Hannover, Germany, from September 18 to 23, 2023. Our exhibition, themed as "The Home of Technology - DMG MORI CITY," had a special focus on Machining Transformation (MX) at a vast 9,000 m<sup>2</sup> booth, the largest among all exhibitors. We displayed a total of 39 machine tools, including the world premieres of the turn-mill center "CTX beta 450 TC" and the 5-axis horizontal machining center "INH 63." In addition, we also showcased 21 automation solutions, including the new "AMR 2000," an autonomous mobile robot capable of transporting workpieces, chips, and tools weighing up to 2,000 kg, with a wide range of potential applications. Customers had the opportunity to fully immerse themselves in our vibrant city concept and experience our technology firsthand.

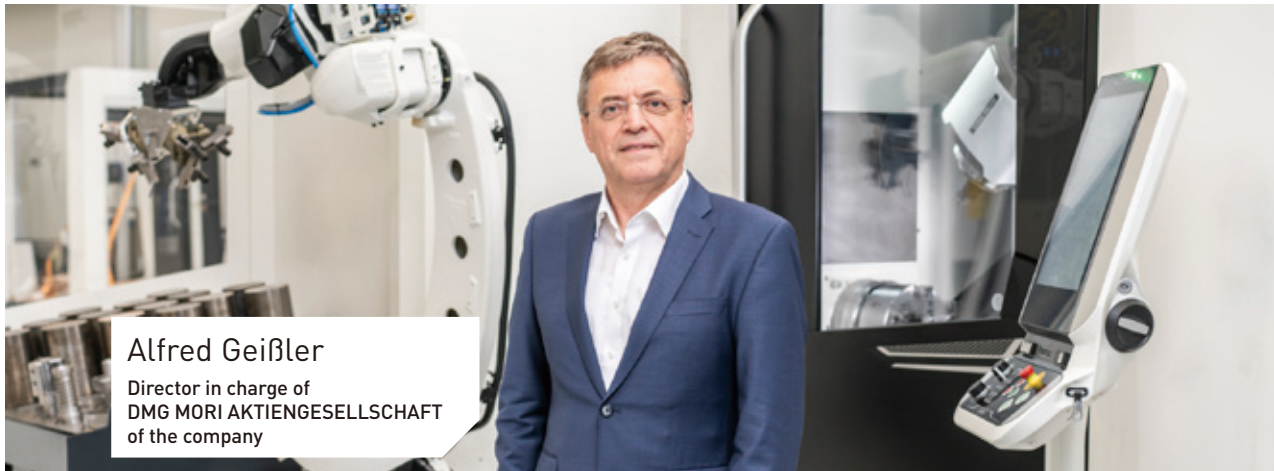


EMO Hannover 2023



# | Development Capital

## R&D Strategy in Mid- to Long-term



**Alfred Geißler**

Director in charge of  
DMG MORI AKTIENGESELLSCHAFT  
of the company

## Leading innovation in the manufacturing industry through MX strategy

### Driving MX with global organization

DMG MORI has major development bases in three regions: Japan, Europe, and the U.S. Within Europe, we operate seven major factories where our developers engage in product development tailored to each production lineup.

We choose not to centralize our development function in one location due to the extensive diversity within our product portfolio. Being close to our customers at various locations is essential to ensure their needs are effectively integrated into our products. As one of the most experienced R&D professionals in the Group, my role is to create a strong collaborative environment by integrating different cultures and building trust. To ensure that colleagues working from different locations can collaborate seamlessly and generate synergy without redundancy, it is crucial for everyone to share common values through active participation in both online and in-person meetings.

To align our global R&D efforts, we hold Joint Development Conferences (JDC) on a quarterly basis to review upcoming development plans as well as Global Development Summits (GDS) once a year to discuss medium- to long-term development goals. All R&D efforts are based on our common strategy of MX.

Machines capable of process integration such as 5-axis machines and mill-turn centers already account for more than 70% of our orders. Looking ahead to the medium and long term, the ongoing labor shortage will accelerate the importance of automation further, and we anticipate an increase in demand for unattended "Lights Out" factory

operation, especially in the fields of semiconductor production equipment and precision equipment. And automation can achieve more than simple operator-free machine operation; it involves maintaining 7,000 hours per year of value-adding spindle runtime and chip generation. But this requires streamlining setups, optimizing tool selection, minimizing maintenance-related interruptions, and improving workpiece transfer flexibility. To make such automation possible, many sensors and analysis technologies are needed, thus digital technology will play an increasingly important role as well. Finally, as workpiece types and lot sizes become more varied, production systems are required to deliver high-accuracy results right from the first piece.

### Embracing new technology early for shared growth with customers

Today, 5-axis machines are well-established and high-value products, of which we enjoy a large market share. This was not the case at all when I joined the Pfronten factory. Back in 1988, my initial project for a horizontal 5-axis machine faced numerous challenges, both in mechanical and software aspects. However, it is due to these early failures and our sincere commitment to meeting customer needs that we have accumulated our greatest asset: many years of experience. This has enabled us to develop a variety of 5-axis machines, from compact models to XXL models that are time-consuming to assemble but highly regarded by customers. The key to continuous growth lies in the courage to embrace innovation and in the practice of sending our developers into the field to actively listen to our customers' feedback.

## Advancement of AM Technology

# Additive Manufacturing entering practical use phases New opportunities in engineering design

### AM as a metal working technology

Additive Manufacturing (AM) is a new type of metal working technology that uses a laser to selectively melt metal powder into layers. AM enables new opportunities in engineering design – as long as the purpose of the parts to be created is clear and the materials are available, it is possible to design unprecedented geometries that differ significantly from conventional parts. This technology is giving users new approaches to solve problems that could not be achieved with machining alone.

The advancement of AM technology does not mean that conventional subtractive processes are no longer necessary, which is a common misunderstanding. Precision bores, high tolerance mating surfaces, extremely smooth surface finishes, for example, are clearly processes that require a wide range of cutting and grinding solutions. In reality both subtractive and additive technologies complement each other to enable DMG MORI to meet all kinds of metalworking needs by customer.

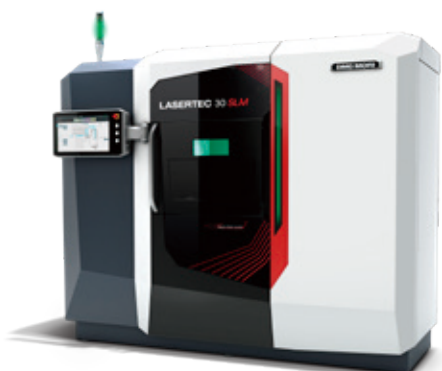
### AM in practical use for mass production

Until now, AM technology has been used mainly for research and prototyping, but recently we have been receiving an increasing number of inquiries for end use production components and practical use phases. In fact, at our own factory, we are using LASERTEC 30 SLM US to produce parts for spindle monitoring, and LASERTEC 3000 DED hybrid to coat hard materials on the surface of parts after cutting, replacing surface treatments such as hard chrome plating. In addition, Cost Per Part (CPP) is becoming a major concern for customers in the aerospace, medical, and EV industries. By using Adaptive Beam Control, which optimizes laser power and speed as well as dynamically changing the laser profile, just like changing cutting tools during machining process, we have achieved the highest level of productivity in the industry. Furthermore, assuring quality is

increasingly important during the mass production. In collaboration with Oak Ridge National Laboratory (the U.S.), we are conducting research to automate the detection of internal defects (e.g., porosity) using high resolution Computed Tomography (CT) scans, analyze them using the new AI-based algorithm, and provide feedback on processing conditions. There is a surging demand for large AM machines using SLM technology that is capable of processing large parts and has the ability to combine multiple materials; AM machines can run for days once processing starts, and after completion, hundreds of finished parts can be produced simultaneously. The larger the machine, the longer it is required to operate continuously. The challenge is how to develop automation technology that supports continuous operation of the laser.

### Play Hard, Study Continuously, Work Together

I am currently a Ph.D. candidate in Mechanical Engineering at Northwestern University in Chicago. My life between Davis, our U.S. manufacturing facility, and Chicago, where the university is located, is busy, but I am committed to both with enthusiasm and understand that the intersection of academic experience and professional expertise will help make a significant contribution to our product development. I collaborate globally as well with colleagues from Japan and Germany in the field of research and publish and present new research works to advance the overall industry. Most recently I was invited to present at CIRP 2023. It is my goal to embody our company's philosophy of "Play Hard + Be Dynamic, Study Continuously + Be Open, Work Together + Be Innovative".



Fred Carter

DMG MORI Additive Solutions  
Head of Research & Development

# | Pioneering Global Innovations

## World-class product development: uniting expertise from Japan, Europe, and the U.S.

### Expertise from Japan, Europe, and the U.S.

At DMG MORI, developers from all over the world collaborate to create innovative products by combining the unique innovation potential from Europe, the sense for customer-oriented product improvement from Japan, and our U.S. colleagues' proactive approach towards new technologies such as digital solutions and additive manufacturing (AM).

Once a year, all R&D members come together at the Global Development Summit (GDS) for development workshops and networking. The 2023 summit marked the 10th GDS, and as a participant since the beginning, I have noticed that discussions and exchanges have become more vivid with each passing year. This global cooperation is paying off, as seen in the new INH Series that premiered at the EMO Show in 2023. When we faced many conflicting challenges, such as fitting 5-axis capabilities into a 4-axis machine size while maintaining high rigidity, it was thanks to our colleagues in Pfronten, Germany, and their experience from the well-established DMU 5-axis machine series that we could come up with an innovative solution.

### The INH Series: optimal 5-axis machining center for mass production

The INH is a 5-axis machine based on a horizontal machining center. While vertical 5-axis machines suit the processing of complex parts one-by-one, for process integration and mass production, the machine structure must allow easy chip and coolant discharge. With the tool spindle mounted horizontally and the workpiece being tiltable, horizontal machining centers best fit this job.

And our customers experience the benefits. In one case, we could successfully replace a production line of 30 machines with just 6 advanced INH machines, reducing machining time by about 30%. Now, the INH is attracting interest from industries like shipbuilding, construction, and agricultural machinery, and I always take time to explain this new machine from a developer point of view when customers visit us in Iga, Japan.

### Leveraging the know-how of function experts

As our products are becoming increasingly complex and sophisticated, we have adopted a development structure based on function rather than model. The first model released under this new structure is the INH. Since the project began in 2019, our experts from diverse functions and departments have collaborated closely to incorporate the customer feedback collected from existing models. As the head of the development team, I am confident that the INH is the best 5-axis control horizontal machining center in

DMG MORI's history.

Another key element for successful development is our outstanding analysis and simulation technology, which has been refined over many years through the accumulation of customer case studies. This way, we can analyze dynamic machining processes under consideration of detailed factors such as chip accumulation. This analysis technology enables us to provide our customers with Digital Twin Test Cuts and contributes to the efficient development of higher precision and higher rigidity machines with fewer prototypes.

### Becoming an automation leader

I have been involved in the development of machining centers since I joined the company in 1997. Especially for horizontal machining centers in mass-production lines, any defect can be a fatal blow to our customers' business, so I find it very rewarding when I can increase the productivity of our customers through reliable process integration and automation.

I will continue to work on the development of innovative automation solutions to further reduce manual labor and enhance efficiency across all processes, from workpiece design to parts completion.



**Mitsuru Taga**

Executive Officer  
Next Generation  
Machining Center  
Development Department

INH 63 / 80

## High-end machine for cutting-edge speed & accuracy Supporting long operation with automation systems

### The pinnacle of 5-axis horizontal machining center

The new INH Series is equipped with twin ball screws on all axes that allow guiding and driving while keeping the center of gravity of moving elements in balance. Through further structural improvements for higher stability, we have successfully reduced the machine's column height to suppress torsion and vibration, thus clearing the biggest obstacles to high-speed, high-accuracy processing. This has resulted in improved machining accuracy, shorter machining time, and higher surface quality. In addition, the three-point support structure enables easy horizontal adjustment of the machine, greatly reducing installation time, and minimizing the effects of ground geometry and changes over time.

The INH Series comes standard with our innovative vertical coolant tank, *zero-sludgeCOOLANT pro*. Thanks to its vertical structure and large depth, the tank manages to effectively separate and collect both sludge (impurities including chips) and mixed oil to extend coolant life and drastically reduce tank cleaning frequency. In combination with our solutions AI Chip Removal and *zeroFOG* mist collector, the tank supports long operation hours of automated systems without any trouble caused by chips, coolant, and mist. <sup>(\*)</sup>

(\*) Cutting chips, coolant, and mist are considered as the three major obstacles to stable and continuous operation of a machine tool and the improvement of the factory environment.



AMR 2000

## Robots to enable holistic automation of the shop floor

### Flexible and reliable operation

DMG MORI's Autonomous Mobile Robots (AMR) are driverless transport systems that move independently on the shop floor in collaboration with humans.

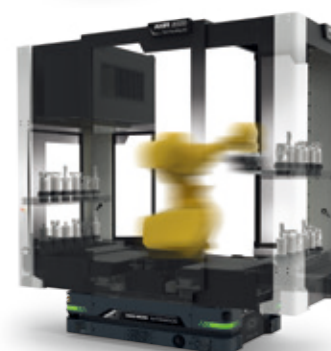
As a modular platform, the AMR 2000 allows the handling of material pallets, chip weighers, and tools.

In its basic version, AMR 2000 is designed to transport pallets measuring up to 1,200 x 800 mm. The loading weight is 2,000 kg. It moves at a top speed of 6 km / h and can move omnidirectionally without a turning circle.

It also enables automated chip removal by changing the chip trolley.

In the case of tool change and transport, an extension of the module is ready. AMR 2000 Tool Handling 30, offers space for a maximum of 24 tools with a length of up to 650 mm, a diameter of  $\varnothing$  280 mm and a maximum weight of 30 kg.

Sensors and scanners ensure that the entire automation solution operates in accordance with European safety standards. In the event of obstacles, they reduce the speed and, if necessary, initiate an immediate stop or a bypass of the obstacle.



# | Intellectual Capital

## Accelerating innovation through global intellectual property management

### Our strategy to protect our technology worldwide

Our intellectual property (IP) strategy is focused on providing comprehensive global protection for our products and technologies. As a total solution provider of machine tools, automation systems, and peripheral equipment, DMG MORI owns various advanced technologies, especially in the areas of process integration and automation. To protect our innovations effectively, we employ a combination of patent, trademark, design, and utility model rights. We are committed to providing our customers with our unique value that no other company can replicate.

We do not patent all our new inventions. Instead, we carefully evaluate each situation by weighing the information we want to disclose against the rights we want to protect. Various factors influence this decision, such as our ability to use the patent as a deterrent against potential competitors entering the same field and our capacity to provide evidence in case of unauthorized use of our technology. Ultimately, the choice to pursue a patent is made on a case-by-case basis. In some instances, we may intentionally keep inventions as trade secrets rather than seeking legal protection. However, for exceptionally vital inventions, we apply for multiple patents to cover not only the main innovation but also related technologies. This creates a more robust defense against potential infringements, making it challenging for others to find patent loopholes.

### Supporting innovation

At DMG MORI, intellectual property management starts from the development process. Since new technologies and

innovations do not come from coincidence, supporting engineers in their research and development activities is an important role of our IP Department.

To create awareness of the importance of intellectual property management among our development teams, we conduct regular training sessions. We believe that sharing best practices related to our patent registrations is the most effective way to support our employees. Many inventions of our R&D department hold substantial value to the company, even though their importance often goes unnoticed by those directly involved.

We also conduct comprehensive searches of patents from other companies to ensure our ideas do not infringe upon their intellectual property. In addition, our IP Department meticulously reviews the research conducted by our developers, often leading to the filing of new patent applications. We also provide extensive support throughout the entire application process. Furthermore, evaluating the intellectual assets held by potential partners is a crucial aspect of our role in joint research or M&A activities.

### Combining technological and legal knowledge

At the IP Department, our key task is bridging the realms of R&D and engineering with the legal domain, and thus providing support to legally protect and enhance the value of our intellectual capital. The importance of global intellectual property protection is on the rise, as exemplified by initiatives like the European unitary patent system that commenced in 2023. This underscores the growing need for closer collaboration between our R&D teams and IP departments in Japan, Europe, and the United States.

In 2023, DMG MORI achieved a significant milestone by ranking 34th in "the patent value growth ranking" of the Nikkei Business (Japanese economic magazine). Looking ahead, we aim to gain global recognition for the value of our intellectual capital beyond Japan.



**Yusuke Yamamoto**

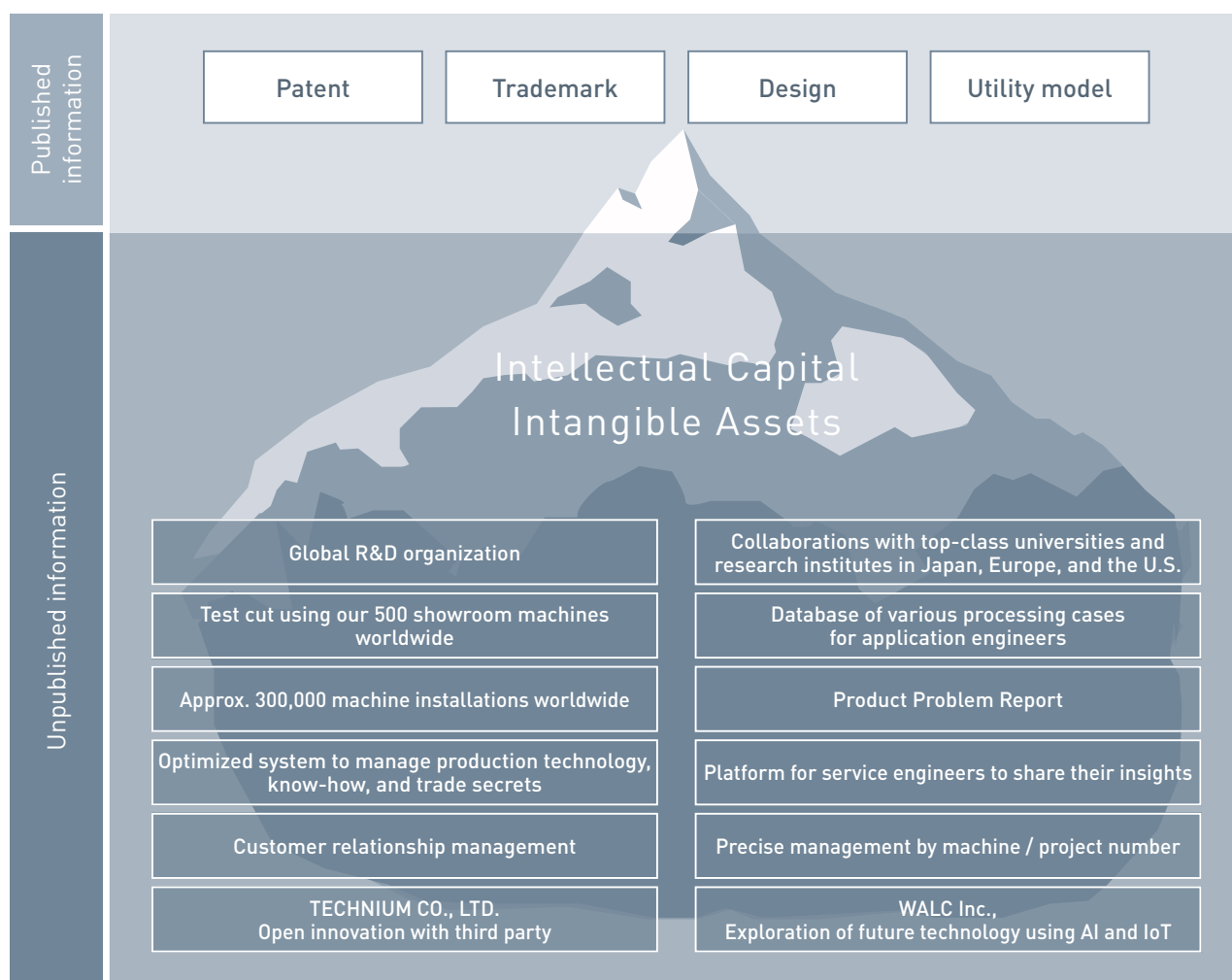
Intellectual Property / Product Safety /  
Industrial Standards Department  
General Manager



**Onur Bostan**

GILDEMEISTER Beteiligungen GmbH  
Central Development Coordination  
Manager

## Driving business with abundant intellectual capital



The patents and trademarks we apply for and publicly disclose represent just a small portion of our intellectual capital and intangible assets. As mentioned earlier, we make strategic decisions on whether to seek patent protection or maintain certain innovations as trade secrets. Regardless of the form, all our intellectual assets play a crucial role in supporting our business operations.

For example, we have established partnerships and collaborations with top-class universities and research institutes in Japan, Europe, and the U.S., and are actively engaged in joint research. Through open innovation, we accelerate development and create new value. We also manage and compile detailed repair and quality reports on sold machines by machine number. These reports serve as valuable references during the development of new machines, facilitating the creation of higher-quality products.

With approximately 500 test cut machines worldwide, our engineers make processing proposals for our customers

on a daily basis. Our extensive processing expertise is built on the careful management of customer data, and we have developed our own database to enable engineers to efficiently find similar processing cases.

Additionally, we have established a platform for engineers providing on-site services to share their insights and innovations. This system not only facilitates access to shared information but also allows users to post and respond to questions, thus enhancing the value of shared information and contributing to the delivery of swift and tailored services at customer sites.

In this way, DMG MORI not only owns intellectual property but also possesses and cultivates a rich pool of intellectual capital and intangible assets. This is accomplished by continuously accumulating know-how, building strong partnerships, enhancing our management structure, and refining our systems. All these elements serve as the cornerstone of our competitiveness and provide vital support for our business operations.

## Automation Solutions

## 14 product lines, 58 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.



LPS 4<sup>th</sup> Generation  
Control software for DMG  
MORI Automation Systems



## WORKPIECE HANDLING

## Gantry Loader

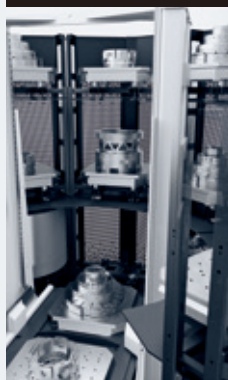


## Robot



## PALLET HANDLING

## Round Storage System



## Linear Storage System



## CENTRAL TOOL STORAGE

## CTS – Wheel Type



## CTS – Rack Type



## TURNING

## MILLING

## TURNING &amp; MILLING

## MILLING

WH-AMR  
for Workpiece HandlingAMR  
for Material HandlingAMR  
for Chip HandlingPH-AMR  
for Pallet HandlingAMR  
for Tool Handling

AMR – AUTONOMOUS MOBILE ROBOTS (WORKPIECE, MATERIAL, CHIP, PALLET & TOOL HANDLING)

## 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

#### Benefit 1

DMG MORI arranges equipment of superior quality, performance, and maintainability as a single source

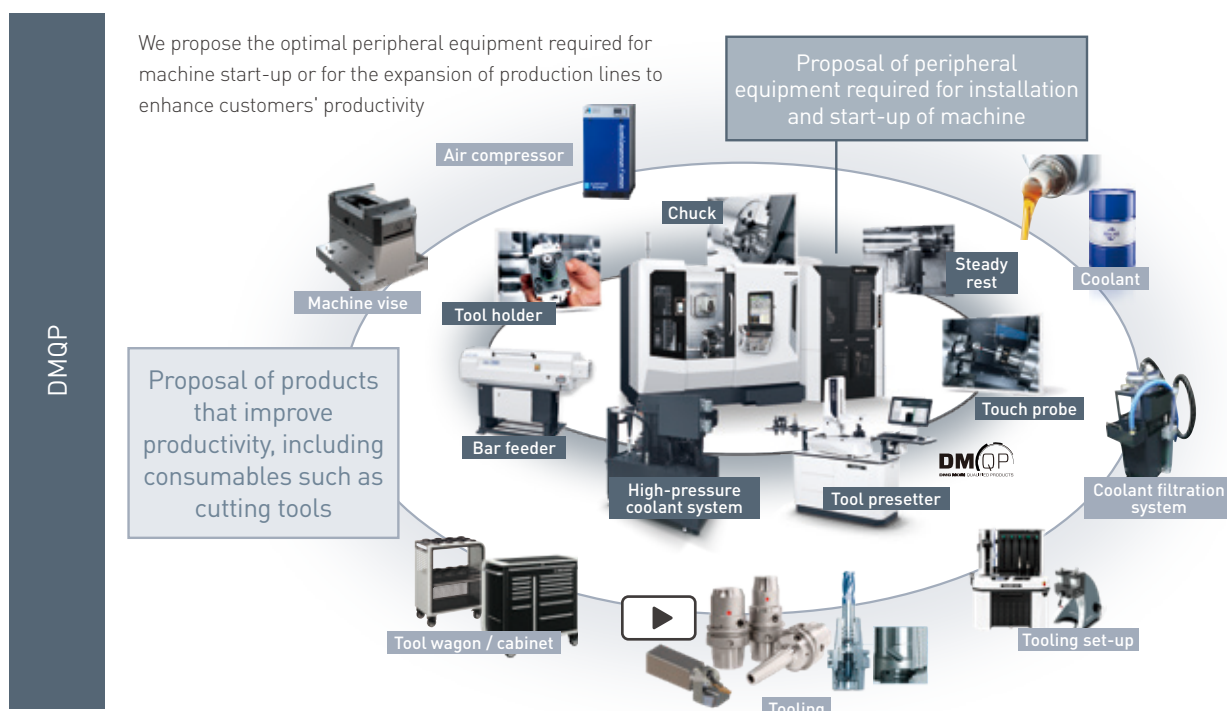
#### Benefit 2

Customers enjoy a 2-year warranty, in the same way as for machine bodies (This benefit is offered only in certain regions and does not cover consumables such as cutting tools)

#### Benefit 3

365-day toll-free maintenance service (offered in Japan only)

### Extensive product lineup of peripheral equipment



+

Peripherals and solutions made by DMG MORI

DMG MORI's unique solutions for the 3 most frequent machining troubles

chips	AI chip removal	coolant	zero-sludgeCOOLANT pro	mist	zeroFOG

# | Manufactured Capital

## Globally Distributed Production Sites

DMG MORI operates multiple production facilities all around the world, including Iga Campus in Japan, our Group's largest production site, and Pfronten Factory in Germany. Our strategy enables us to produce directly in the regions of high demand, improve transportation efficiency and respond quickly to diverse customer needs, while also strengthening our business continuity capacities in the face of geopolitical risks.



## Japan

### Iga Campus

One of the world's largest production sites for mill-turn machines, turning centers and machining centers



### Nara Campus

Among the world's largest production sites for system solutions in the world



## Group Companies (Japan)



Magnescale



TAIYO KOKI\*1



DMG MORI CASTECH



DMG MORI Precision Boring (KURAKI)\*2



Saki Corporation

## U.S.A.



Davis Factory

## China



Tianjin Factory



Pinghu Factory

\*1 Global brand: DMG MORI Precision Grinding \*2 Joined DMG MORI Group in January 2024

## Iga Campus

## In-house production distinct from competitors

### Sharing expertise and skills globally

#### Competitiveness through in-house production of key components

DMG MORI has put major emphasis on the in-house production of key components. By utilizing our own high-accuracy machine tools, we can achieve quality not possible with other machines and gain a distinct competitive edge. We can also greatly reduce lead times compared to multi-source procurement with

processes divided among multiple suppliers.

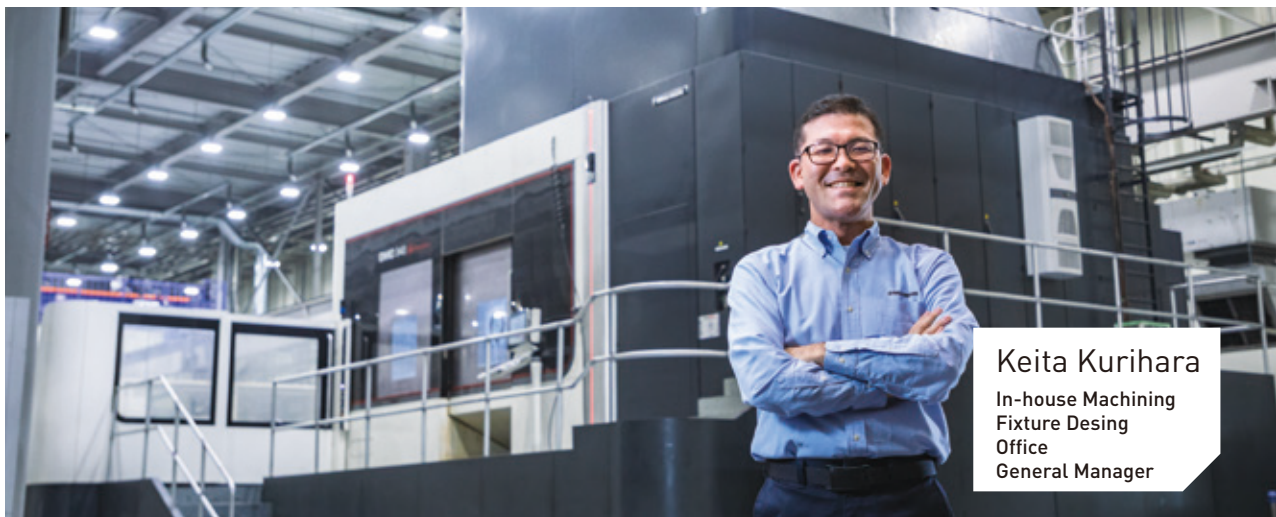
In addition, the expertise and skills acquired at Iga Campus are shared with our European factories to benefit the in-house production of their components as well. In Bergamo, Italy, we produce turrets on our own NMV8000 DCG machines, while in Bielefeld, Germany, we manufacture spindles. The result is a drastic improvement of group-wide productivity.



#### Process Integration to boost productivity and customer transparency

DMG MORI is advancing process integration for our own production as well. For example, we have integrated the production processes for ball screws, shifting from 5 machines to a single NTX. This not only reduced the number of operators from 5 to 1, but also resulted in 24% shorter machining time.

Additionally, we host our small-scale, in-house exhibitions "Technology Fridays" and invite customers to experience the effectiveness of process integration and automation within our own production. By this, the entire Iga Campus transforms into a showroom for Machining Transformation (MX).



## Nara Campus

## Building one of the world's largest plants for system solutions

### One-stop approach for automation systems

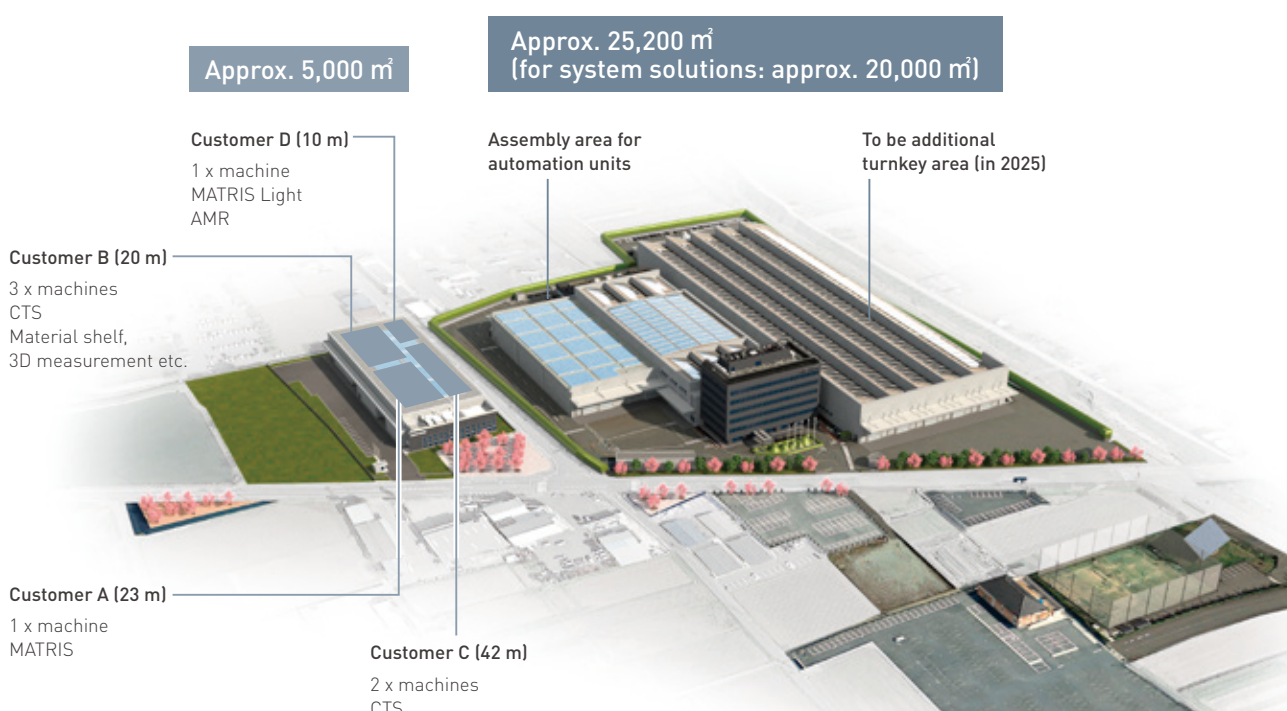
Nara campus specializes in system solutions, offering a range of configurations from simple setups consisting of one machine and one robot to complex multi-machine systems. Since our System Solution Plant started operations in January 2016, we have consistently met customer demands for such systems. In 2025, upon completion of renovations, our current 5,000 m<sup>2</sup> facility will be transformed into an over 25,000 m<sup>2</sup> system solutions plant, making it one of the largest in the industry.

At Nara campus, we bring together robots, loaders, and peripheral automation equipment with a variety of machine tools, mainly the NTX and NHX Series from Iga as well as the CMX and DMU Series from Europe. Additionally, a significant portion of automation units is manufactured at Nara Campus, specifically loaders, pallet handling equipment (CPP), workpiece handling system MATRIS Light, and the Autonomous Mobile Robots (AMR). All pieces of equipment from the machine tool to the robot and peripherals are controlled by the original controller manufactured in-house, enabling

unified operability for the customer.

Due to the high complexity of the automation systems, the customer system is first fully built up at Nara Campus, where we confirm the quality of machining accuracy and system operation together with the customer. After acceptance, the system is then shipped to the customer's factory and built up again. Finding problems at Nara Campus before shipment ensures minimum lead time compared to having the assembly at the customer's facility from scratch.

We offer complete automation systems without the need for external third-party integrators. This one-stop approach sets us apart from competitors. Moreover, we recognize that automation systems may require line readjustments to accommodate workpiece changes. To ensure ongoing smooth operation post-startup, we offer dedicated after-sales services, building trust with our customers.



## DMG MORI Pfronten

## Largest development & production base in Europe, specializing in simultaneous 5-axis machines and advanced machines

### DMG MORI Group's largest development & production base in Europe

Pfronten factory is located in a small rural town in southern Germany close to the Austrian border, a region known for many small, highly skilled manufacturing companies. The factory's roots date back to about 100 years ago when five engineers began building machine tools for processing their own high-precision parts. Their company, named MAHO, merged with DECKEL and then became a part of GILDEMEISTER in 1994. Now, it is the largest European base in the DMG MORI Group with 1,500 employees working on approximately 149,000 m<sup>2</sup>. Pfronten factory does no longer manufacture 3-axis or 4-axis machines, but solely focuses on 5-axis machines and machines with advanced laser technology. These product lines are met with high demand, particularly from growing industries such as aerospace, die and mold, medical, and semiconductor production equipment.

The monoBlock Series excels in compactness and versatility, and its production utilizes the innovative flow line system. During assembly, each machine unit is mounted on top of automated guided vehicles (AGVs) that move through the production line at 45 mm per minute through 34 separate assembly cycles. The movement is kept at a constant speed by remote control, thus stabilizing production and improving logistics efficiency. Similar systems are being deployed at other sites, including the Tortona factory in Italy.

### The growing need for XXL machines with little competition

XXL 5-axis machines make up a special portion of Pfronten's lineup. These machines are capable of processing XXL parts that range from 3.4 m for the Portal Series to more than 10 m for the Gantry series, and they account for about 10% of the factory's sales revenue. The main components of these XXL machines are manufactured in-house at other plants of the DMG MORI Group. At DMG MORI Poland factory, large-size 5-axis DMU 340 and other machines from Pfronten are used to manufacture machine beds and other components for our production. When the first XXL machines arrived at Poland, our engineers from Pfronten kept an open eye for any kind of learnings and improvements to make the setup at customer site even more efficient.

With a large axis stroke and high workpiece weight, XXL machines require the best technology to achieve the highest accuracy. Although their delivery may take more than a year, these giants face little competition from other companies' products, and order intake has been positive from customers who are actively planning long-term investments. The demand for XXL machines contributes to a stable sales revenue and profit structure that is less affected by macroeconomic factors.



**Cornelius Nöb**

Executive Officer  
DMG MORI Pfronten GmbH  
Managing Director

## DMG MORI Poland

## Critical base in central Europe for in-house production of components and machine assembly

### The most advanced and highly productive site in central Europe

Located in Pleszew, Poland, DMG MORI Poland is one of the most advanced and fastest-growing production sites within the Group, producing machine tools such as universal turning centers, 3-axis vertical and 5-axis universal machining centers as well as pallet automation systems. In addition, Poland serves as a strategic supplier of components such as machine bodies, assemblies and high-precision parts for other European factories of the DMG MORI Group. These components contribute to the production of over 50 different types of machine tools, which are delivered to customers worldwide.

The production site in Poland was formerly known as FAMOT, which was founded in 1877. It became a member of the DMG MORI Group in 1999. Thanks to capital investments of more than 100 million euros in the past years, the production capacity of key areas such as assembly and machining has significantly increased. All investments are made in alignment with the highest environmental standards, which contribute to a reduction of 8,214 tons CO<sub>2</sub> emissions per year.

Today, Poland factory produces around 2,000 machine tools, 3,500 components, and 3,000 spindle units per year. Our dedicated machining department operates with a capacity of 330,000 hours to process 25,000 tons of cast iron per year and is mainly equipped with advanced 5-axis machines from the DMC and DMU Series and automation systems made by DMG MORI. The majority of these machines operate on a 20-shift per week schedule and require only minimal human

intervention. Combining rich expertise, high-precision machines, and modern production halls with continuous temperature control, our factory achieves the highest accuracy for components of medium, large, and extra-large machine tool bodies up to 40 tons. In response to the growing demand from other DMG MORI production sites, Poland has opened a new production hall in October 2023 to expand its capacities for producing mechanical components, assembly parts, and electrical cabinets.

Our employees are the driving force behind our growth. As one of the largest employers in the area, we provide stable employment to more than 800 employees with equal opportunities for both office and shop floor positions regardless of gender. In addition, we place great importance on promoting education and work closely with local schools to provide educational opportunities for students at technical high schools and colleges. We are also dedicated to the continuous development of our employees through the DMG MORI Academy in Poland, where a dedicated team of specialists supports less experienced employees in enhancing their skills and knowledge.

In accordance with our Group strategy, Poland factory will continue to produce high-precision machine tools, automation systems, and components while optimizing machining processes through process integration and automation. Alongside data collection and analysis through Digital Transformation, we will not only ensure effective process management but also contribute to Green Transformation.



**Izabela Spizak**

Executive Officer  
DMG MORI Poland Sp. z o.o.  
Managing Director

## Davis Factory

## Delivering DMG MORI quality to the growing market of the U.S.



**Marlow Knabach**

Senior Executive Officer  
DMG MORI Manufacturing  
USA, Inc.  
President

### Success story of the first built factory outside of Japan, Davis CA

The Davis factory in California was established in 2012. Excluding the acquisition of DIXI in Switzerland, Davis was the very first Mori Seiki factory to be built outside of Japan, and has helped Mori Seiki's global growth.

Davis currently manufactures mainly NHX Series and recently has been preparing to launch the LASERTEC 30 SLM US, the first additive manufacturing machine developed in the U.S. for DMG MORI. While some materials are sourced locally or manufactured in-house, critical components like spindles are imported from our Japanese factories.

With our continuous expansion of engineering services and factory product support, Factory Acceptance runoffs can be completed for both machines made in Davis and those imported from Japan or Germany.

Currently, about 30% of DMG MORI machines installed in the U.S. have some form of automation. In the long-term, we plan to increase the number to over 80% by expanding our automation solutions to include more standard platforms such as MATRIS Light and Robo2Go.

Davis fully utilizes TULIP, a low-code application software, to improve productivity. More than 50% of the employees are directly engaged utilizing TULIP for collecting data used for analysis and reporting functions.

### The unique position in installing our best products and recruiting excellent engineers

Having a factory in the U.S. provides superior support to the vast geographic region. The Davis factory allows DMG MORI to be accessible to customers and enables direct communication with our engineers. In that sense, the factory is also an extension of our Sales and Service organization.

Factory location within the U.S. is also strategically located. California is on the west coast, with abundant access to Ports as well as the closest to Japan. Davis is known for excellent engineering education programs at the University of California Davis as well as the other California State Universities. Among the 160 employees working in Davis, many received their education and trainings in the California universities and local community colleges. Davis also offers internship and education programs to young people in the community. As a good corporate citizen, it has established a mutually beneficial relationship with the City of Davis.

### New industries and technologies support our medium- to long-term growth

The machine tool market in the U.S. has significant potential for growth with its diversified industry segments and emerging new technologies. Key industry segments such as aerospace, semiconductor production equipment as well as defense, all continue to evolve. With the growing concern, along with regulations, for information security specific with some technologies, especially with some government institutions, "Made in U.S." offers another opportunity for DMG MORI and servicing the needs of customers. In this context, Davis plays an important role for DMG MORI when doing businesses with the U.S. government.

### Customer success is the source of my motivation

I joined DMG MORI in 1990 as an application engineer and have spent the majority of my career supporting customers. There is great satisfaction and enrichment helping our customers succeed. Now as a factory manager, I have the opportunity to experience the pride and craftsmanship from our team that is inside every DMG MORI. Although not interacting with customers as much as in the past, each opportunity is another chance to learn and grow together.



## Tianjin Factory

## Close to 65% of customers place repeat orders within one year Good relationship with customers leading to better business

### Celebrating 10-year anniversary of Tianjin factory

Tianjin factory was established on October 18, 2013, in the Chinese coastal metropole of the same name with a population of more than 13 million. Spanning across a total area of over 90,000m<sup>2</sup>, the factory offers 27,000m<sup>2</sup> of production space for the horizontal machining center NHC Series, vertical machining center CMX Series, turning center ALC Series, and automation products.

Tianjin factory is constructed and operated with the same group-wide standards in terms of land, building, equipment, supply system, personnel and training. Since the start of operation, our commitment to deliver stable high-quality products has been well received by customers with close to 65% expressing their satisfaction and placing repeat orders for Tianjin-made products within one year.

Tianjin factory plays a strategic role for the DMG MORI Group in the development of the Chinese market. As we celebrate this anniversary and reflect on the past decade, we see that Tianjin factory has successfully expanded its product market to Europe and Asia, increased its workforce from 25 to 122 employees, and shipped approximately 2,400 machines to date.

All of these machines are equipped with a Relocated Machine Security (RMS) device to prevent unauthorized relocation. DMG MORI also manufactures products at its Tianjin factory in compliance with Japanese export control laws and regulations. Based on our stringent export control policies, we conduct comprehensive screening to confirm the civilian use by customers before selling any products.

With the NHC Series of horizontal machining centers gaining popularity in China, the demand for pallet handling automation systems is on the rise. We started the local production of LPP, CPP, and RPS pallet handling systems in 2019 and have since expanded our market, offering automation products not only in China but also across Asia and Europe.

### Factory upgrade for enhanced customer experiences and work environment

In 2022, we completed a range of factory projects. First, in 2021, we saw the construction of a new parts center and the expansion of the assembly area to achieve a maximum production capacity of 500 units. Additionally, in 2022, we introduced a new customer area and canteen to offer even greater hospitality to visitors as well as an improved working environment for our employees.

Based on our corporate philosophy of "Play Hard + Be Dynamic, Study Continuously + Be Open, Work Together + Be Innovative", our goal is to foster global talents. One key strategy is to support employee well-being by establishing five clubs such as for swimming, badminton, and outdoor activities. Furthermore, HR organizes annual lessons on career knowledge and TQM activities with external instructors, and we provide opportunities for employees training at Iga Campus, Japan. These initiatives convince our employees to stay with us, leading to a stable workforce.

Moving forward, Tianjin factory remains committed to delivering cutting-edge machines to customers worldwide.



**Xiaodong Tian**

Senior Executive Officer  
DMG MORI TIANJIN  
Manufacturing Co. Ltd. COO

# | Diversity at Production Sites

Employee Interview | Bielefeld Factory

## Turning knowledge into practical work Transforming factory culture: Advancing female careers on the manufacturing floor

**Q: What kind of work do you do?**

**Ms. Goliewski:** In Germany, young people who have completed a technical course become apprentices and undergo training at a company. I myself started working for DMG MORI after completing a 3.5-year apprenticeship at Bielefeld. For the first five years, I worked mainly in assembly and quality inspection. Then, seven years ago, I became a trainer myself to pass on my experience to the younger generation. It is my job to mentor the young people during their 3 to 4-year apprenticeship and help them pass the certification exams after they complete the program.

**Ms. Goralzik:** I completed my mechatronics apprenticeship in February 2023, but I am now starting a second apprenticeship for production management to gain additional experience instead of working as an assembly worker. By completing both programs, I aim to gain a comprehensive understanding of both aspects of production, which I can then apply in my job.

**Q: How many women work in manufacturing?**

**Ms. Goliewski:** Unfortunately, the number of women working in production is still lower compared to administrative positions, but it is not zero. At Bielefeld, three out of about 40 apprentices are women. We also have about seven female employees who have completed their training and are now working in our machine assembly. Women may hesitate to pursue their dream job if they have to join a "males-only" team. Therefore, I hope to see the number of female employees in production gradually increase, creating a more inclusive workplace for everyone. At our factory, we prioritize health and safety to ensure a secure working environment for all employees, regardless of gender. In addition, the factory is kept neat and tidy which is partly thanks to the increasing use of digital technology and the reduction of paper documents.

**Ms. Goralzik:** Although the number of female employees is still small, I feel that we are building a strong cooperative network within the company. Thanks to knowing each other across different departments, we can create a workplace of mutual support in times of need.

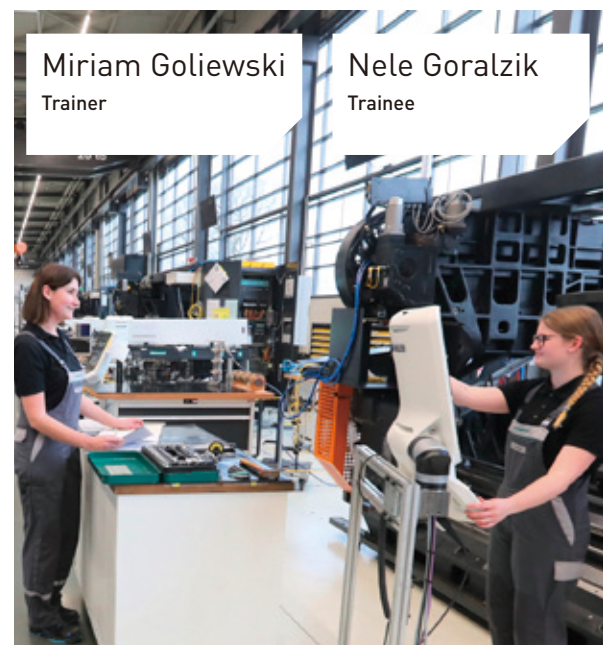
**Q: What is crucial for creating manufacturing sites with more women?**

**Ms. Goliewski:** I think it is crucial to increase opportunities for younger generations to experience technical workplaces. In Germany, female students can explore technical career paths through the annual career information day (so-called "Girls' Day"), partnerships with school MINT programs (Mathematics, Informatics, Natural Science, Technology courses), and internships. School-driven initiatives like the MINT program and partnerships with local university laboratories are especially important and contribute to broadening the base of female students with interest in technical careers.

**Q: What are your goals for the future?**

**Ms. Goliewski:** I want to learn about cutting-edge concepts and technologies such as Artificial Intelligence and Industry 4.0. These topics not only affect me in my job as a trainer but are also becoming increasingly relevant in my personal life as they gain momentum.

**Ms. Goralzik:** My top priority is successfully completing my second training. Afterward, I aim to apply the skills I've learned in my job and contribute to our progress.



Miriam Goliewski  
Trainer

Nele Goralzik  
Trainee

## Employee Interview | Davis Factory

## Hands-on jobs for any gender

### How knowledge and experience add value to the profession

**Working on the manufacturing floor**

I work in assembly at the DMG MORI Davis factory. My main job is plumping and wiring of cables and hoses inside machines, with some shipment related tasks now and then. The work varies depending on the machine model and specifications, so I enjoy having a different experience every day.

Influenced by a family member who worked in the construction industry, I knew from an early age that I wanted a hands-on job and went to community college to learn welding. Subsequently, when I joined DMG MORI five years ago, my first job was welding as well. The welding class was taken mostly by men, and many of the factory workers are also men. In reality, however, both men and women can handle these jobs, and workers are evaluated based on knowledge and experience rather than gender. At Davis, my five-year experience in various processes is a valuable asset, and I feel that I am respected as a professional regardless of my gender. While I am fine with working in an environment of mostly men, an all-male workplace can lead to the misconception that work is limited to a certain gender. Communicating the presence of female workers is

important to expand the future possibilities for young women.

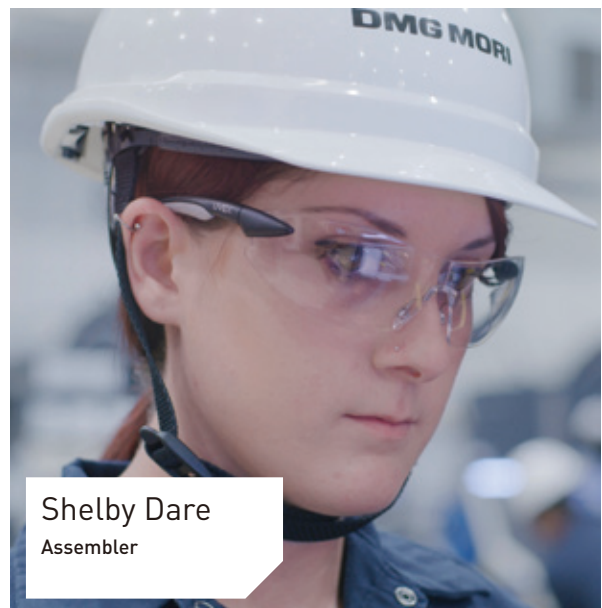
Just look at my picture, I am assembling a small box that anyone can lift!

Also, many manufacturing sites in the U.S. are struggling with labor shortages, so skilled operators have no trouble finding employment. I hope more young people will consider this as an example of a "hands-on" way of life.

**Message to young people**

I would like to advise young people who are considering a technical career to "try what you want to do." You will never know if you are suited for something until you give it a try, so don't be afraid. There is no such thing as a man's job or a woman's job.

I am currently attending college after work, studying for a degree in engineering. My associate's degree in welding was the first step in starting a professional career in a highly demanded field. I believe that my new challenges in college will allow me to further expand my job opportunities. Moreover, I do know that I would like to continue to work on-site with my hands rather than in an office.



**Shelby Dare**  
Assembler

# | Human Capital

## Human Resources Strategy

### Diversity at DMG MORI

DMG MORI stands for Deckel, Maho, Gildemeister, and Mori Seiki. Over the years, these four companies and numerous other machine tool manufacturers collaborated. Today, we are a global company with more than 13,000 employees. Japanese nationals account for only about one-third of the entire group. Even within Japan, we actively recruit talent from diverse career backgrounds, so only a small fraction of our employees are so-called new graduates.

Catering to all facets of our industry, we excel in trading, engineering, and manufacturing. Moreover, our sales and service organization is significantly larger compared to other machine tool manufacturers. Therefore, we offer a wide range of job responsibilities to our employees.

### Uniting a Diverse Workforce through Shared Values

To unite our large and diverse organization and adapt quickly to the changing business environment, it is essential that all employees share DMG MORI's core values. Therefore, we are actively promoting our values through our policies and strategies to harness the full potential of our workforce.

Machining Transformation (MX) – our strategy to advance more efficient production and Green Transformation (GX) through process integration, automation, and digitization, is one example how we boost our productivity. Our MX strategy drives not only our manufacturing sites but also

our entire global workforce towards a common objective. Our local middle management plays an important role in communicating our company-wide values and objectives. Simply relaying instructions from our Japanese or German headquarters is not sufficient to reach a common understanding. Since individual English proficiency levels may vary, we have implemented global training programs to develop managers who can understand top management's messages and convey them effectively in their local languages. The training programs are also designed to instill our newly defined management priorities, which are 1) developing new talents, 2) leadership, 3) team management. After completing these programs, our managers take on the role of trainers to share what they have learned with the next generation.

### Promoting Diverse Working Styles

In addition to fostering a workforce with various backgrounds, our Human Resources Department actively promotes diverse working styles to accommodate individual preferences and needs.

Our motto, "Play Hard + Be Dynamic, Study Continuously + Be Open, Work Together + Be Innovative," encourages a diverse and balanced work life. Every month, we award employees who successfully practice this motto in each of the three categories. Additionally, in our efforts to support professional development, we invite talented employees from around the world to leadership and management trainings and support their pursuit of Ph.D. degrees.



**Stella-Marie Bach**  
Interpretation Office

**Natsune Takano**  
Senior Executive Officer  
Global Human Resources

## Gender Diversity

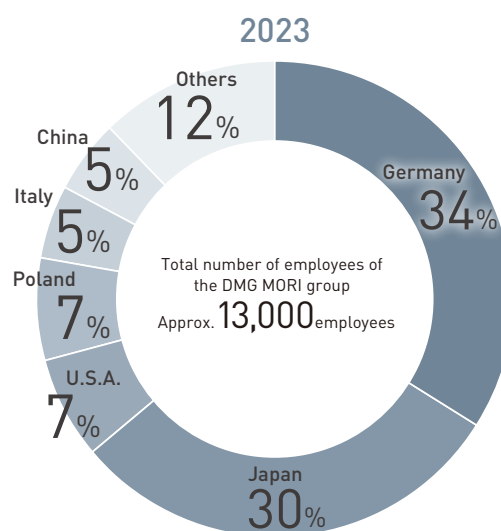
### Encouraging Proactive Career Development of all Employees

Among our employees, we still observe disparities in job roles and responsibilities based on gender. This can result in different average salary levels depending on job types, particularly in Germany and the U. S. where recruitment by job type is common. For example, positions such as sales and service engineers typically receive higher compensation compared to administrative back-office roles. However, it is important to note that for comparable positions, compensation differences based on gender are already minimal in our organization. Besides achieving a higher gender balance across job roles, we are also actively working on increasing the representation of women in senior and management positions. (see P. 74)

The machine tool industry is still largely dominated by men. To encourage female talents to play an active role in our industry, we actively share our female role models. However, we also strive to avoid excessive emphasis on being "female-friendly" to prevent gender-based task assignments and promote diversity in our workforce and work styles.

Additionally, providing consistent support to employees managing both home and work responsibilities is essential to ensure they can pursue their careers without concerns. Apart from childcare, employees of all genders may face a variety of challenges, including caring for elderly family members or coping with personal health issues. To foster an inclusive culture, we actively address unconscious bias and microaggressions (acts of unconscious discrimination). We also support flexible and proactive career development that adapts to life events and aim to create a workplace where all employees can work with a high level of professionalism.

In Japan, we are implementing seminars in collaboration with our external director, Ms. Eriko Kawai, to enhance our global communication and build employee networks. These seminars feature discussions where non-Japanese employees share their experiences in Japan and executives recount their career journeys. These initiatives help our Japanese employees to recognize the diversity within our domestic teams, fostering mutual respect among colleagues.



The external director, Ms. Kawai (rightmost)



Rie Yamaguchi  
Interpretation Office /  
R&D HR Department  
General Manager

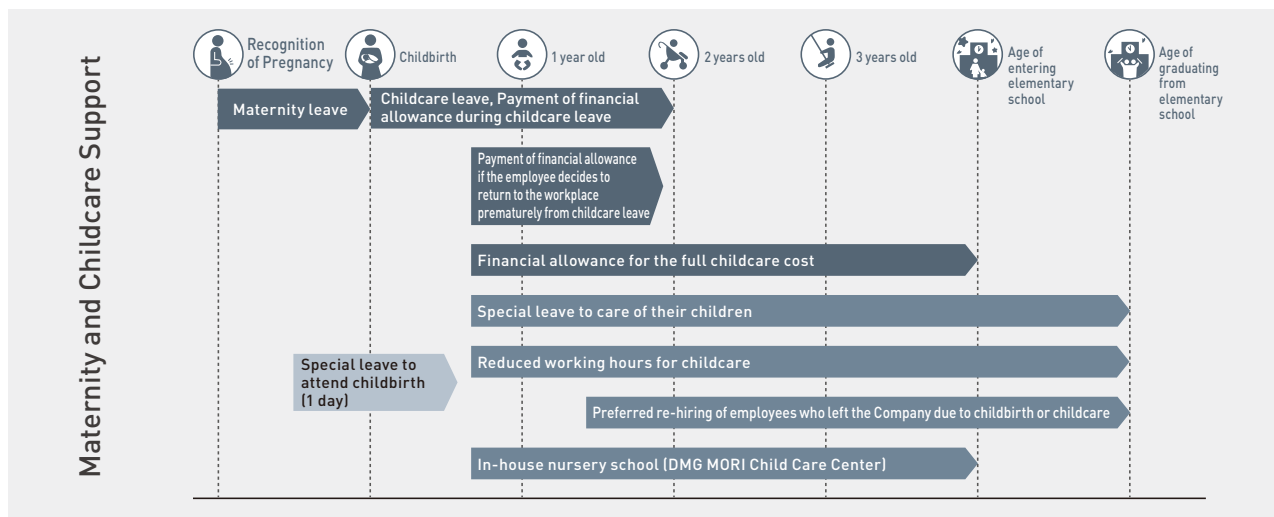
# Fostering Supportive Work Environments

## Maternity and Childcare Support

We have established permanent nursery schools at both our Iga and Nara Campuses to accommodate a total of 100 preschool children. Our nurseries are practically free of charge due to company childcare subsidies and operate on national holidays in accordance with our company's work calendar. In addition, employees with children up to the age of 12 (until elementary school graduation) are entitled to paid nursing leave. It can be used not only to care for a sick child but also for attending school events and fulfilling other family obligations. Employees have the flexibility to use this leave on an hourly basis, allowing for flexible work schedules. We will continue to listen to our employees' needs and foster a supportive work environment.



DMG MORI Child Care Center (Iga Campus)



## Encouraging Childcare Leave for Male Employees

To support our employees in their childcare responsibilities, we started offering full payment for the first 20 days of childcare leave in January 2020. Initially, this was only applicable to those who took leave for a continuous period of 20 days or more. However, as of 2022, it is possible to split the 20-day payment into two separate leaves of 10 days or more each, offering increased flexibility for employees with children.

In order to ensure a comfortable environment for employees of all genders, we actively encourage male employees to take childcare leave as part of our effort to change the organizational mindset. By educating managers and establishing a support system, we have successfully increased the number of male employees taking childcare leave from 16 in 2021 (17.4%) to 76 in 2022 (102.7%), and 76 in 2023 (90.5%), consistently achieving high percentage. In some cases, childcare leave has brought about positive changes in the way employees interact with their coworkers and approach their work.

### Ratio of childcare leave taken by male employees



Calculation is based on the Childcare and Caregiver Leave Act.

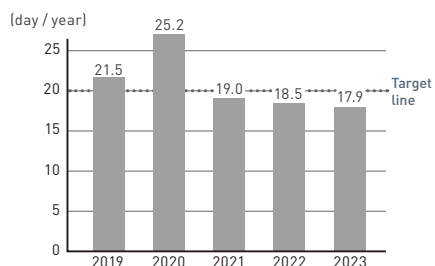
Number of male employees who started childcare leave during the fiscal year / Number of employees whose spouses gave birth to a child during the fiscal year

\* Japan-based employees

## Employee-related Figures at Major Locations

## Japan

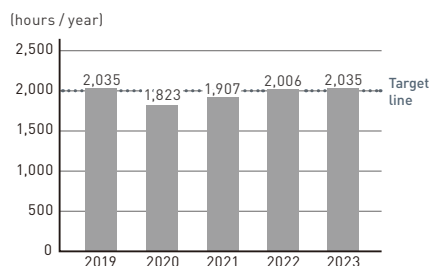
Average number of days of paid leave taken per person per year



\* Japan-based permanent or fixed-term employees who worked full-time throughout the reporting year  
Number of paid leave days is converted to 20 days granted.

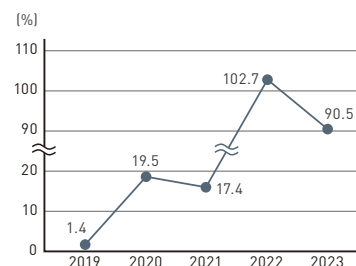
Average total working hours per person

\* Aggregation based on internal standards



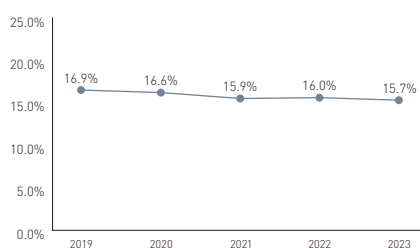
\* Japan-based permanent or fixed-term employees who worked full-time throughout the reporting year

Ratio of childcare leave taken by male employees



\* Calculation is based on the Childcare and Caregiver Leave Act.

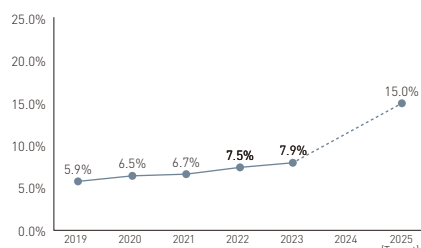
Percentage of female employees



\* Japan-based employees

Percentage of female employee in management positions

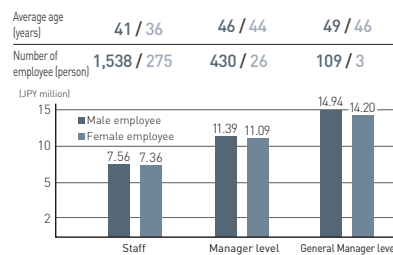
\* Aggregation based on internal standards



\* Japan-based employees

Average annual salary by gender (FY2023)

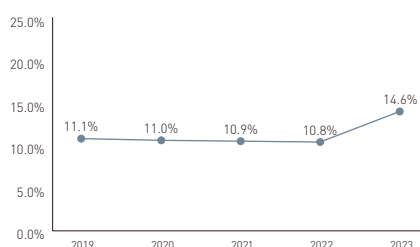
\* Aggregation by title based on internal standards



\* Japan-based employees

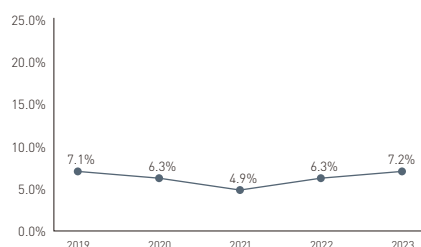
## Germany

Percentage of female employees



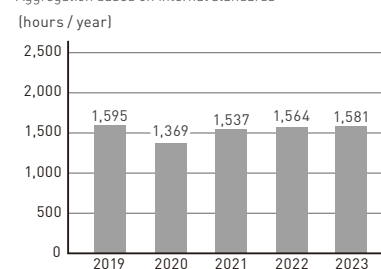
Percentage of female employee in management positions

\* Aggregation based on internal standards



Average total working hours per person

\* Aggregation based on internal standards

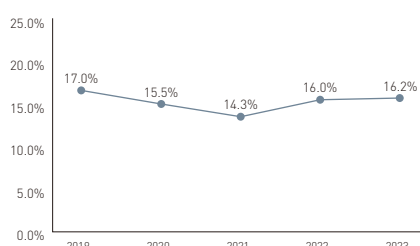


\* Based on the contractual obligation (overtime not reflected)

\* Working hours decreased in the production departments in 2020 due to the lockdowns during the pandemic

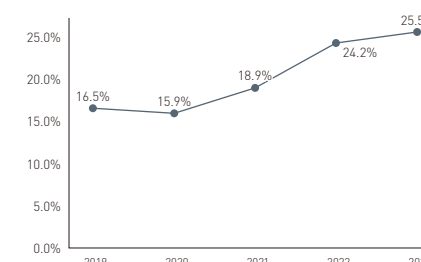
## U.S.A.

Percentage of female employees



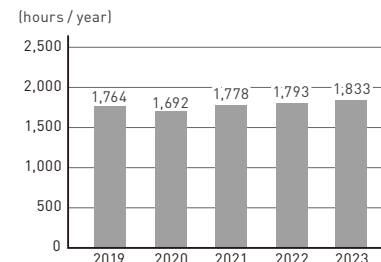
Percentage of female employee in management positions

\* Aggregation based on internal standards



Average total working hours per person

\* Aggregation based on internal standards



# Dialogue with DMG MORI's Female Leaders



**Q:** When was the first time you were promoted to a manager's position? How did you feel?

**Ms. Hirono:** I experienced my first management position at my previous company. I thought it was a legitimate promotion because I had successfully completed an overseas project with a major automobile manufacturer. However, since I was promoted two years earlier than usual, which was unprecedented in my office, some people objected to my promotion. When I joined DMG MORI, I was positively surprised by the difference in the corporate culture.

**Ms. Hagimori:** Thanks to Ms. Hirono's recommendation, I was promoted to a Group Manager last year. In addition to the workload and greater responsibility, my biggest concern was how my balanced relationship with my colleagues would change. Fortunately, this has never been a problem because DMG MORI's promotion is not based on seniority and the employees do not mind having younger supervisors.



**Ms. Mao:** I was also worried about that at first, but all my subordinates were incredibly supportive and cooperative, saying, "Congratulations! You are the right person for the job."

**Ms. Hirono:** Ms. Hagimori has many years of experience in customer relations and has hosted a number of visitor tours around the Iga Campus and European factories. She left a strong impression on me with her excellent communication skills when dealing with customers. She is also always eager to learn about unfamiliar areas of technology and has a talent for organizing and bringing new ideas to life. In the rapidly evolving field of additive manufacturing (AM), it's crucial to have a comprehensive understanding of the entire value chain rather than focusing solely on one specific area of expertise. Ms. Hagimori well deserves her promotion, and her gender and age do not matter.

**Ms. Dewaki:** While some women become managers in their 20s, I had worked at DMG MORI for more than 16 years when I was promoted. It was four years after

returning from childcare leave for my second child. Having been a staff member for so long, I was not sure if I could handle a manager's position. In the end, I took the opportunity for my personal growth.

**Ms. Mao:** I think the corporate culture has changed a lot over the years. I am originally from China, and after graduating from university, I worked for a Chinese subsidiary of a Japanese company. I first came to Japan to study, and later got married and started working for the Nagoya headquarters of Mori Seiki Co., Ltd. in 2005. In 2006, I was promoted to "leader" and had two or three subordinates for the first time. However, when I returned from childcare leave, my career achievements had been reset. Perhaps it was out of consideration for female employees with children, but it was a little discouraging. I don't think this would be the case today.

**Q: Now that diverse working styles are commonplace, DMG MORI's employees can develop their careers at their own pace. Whether they aim for early promotion, prefer excelling as field players rather than managers or need to adjust their workload to accommodate life events, options are available. As a manager, what do you enjoy the most, and what do you keep in mind?**

**Ms. Hagimori:** Even before women were promoted to management positions, DMG MORI was already a diverse organization in terms of educational backgrounds. In large Japanese companies, general managers of technical departments are often required to have a bachelor's, master's, or doctoral degrees in technology-related fields. Here at DMG MORI, however, among general managers in charge of technical sales and services are also graduates of technical high schools and technical colleges. There is also a senior manager with a liberal arts background who is now overseeing sales of machines and software. Even if you don't have senior employees with exactly the same background as yours, there are many role models who you can partially relate to and learn from.



**Ms. Mao:** When you are in a management position, you are constantly thinking about how to optimize the entire

organization. When I was a staff member, I could not see anything other than my own duties. But once I became a manager, I started to receive a wider range of information. Now that I have a broader perspective, I enjoy having a deeper understanding of senior management's direction and thinking about how to make the whole department better.

**Ms. Hirono:** I feel that my perspective has broadened even further when I transitioned from a Group Manager to a General Manager. Now, I find great satisfaction in effectively assigning tasks according to my team members' experiences and personalities, which not only maximizes our department's productivity but also supports their professional development.

**Ms. Dewaki:** Rather than imposing my own values on my subordinates, I try to embrace diverse work styles and help them pursue their desired career paths. They often do not know how they want to build their career, and it is impossible to figure that out in a single interview. Therefore, having communication on a daily basis and building mutual trust is essential, although this is easier said than done. In order to increase the number of female leaders, it is equally important to change the mindset of men. If we only pay attention to women who manage the full workload of a full-time job and that of a family at the same time all on their own, it will not help women's empowerment in the workplace.

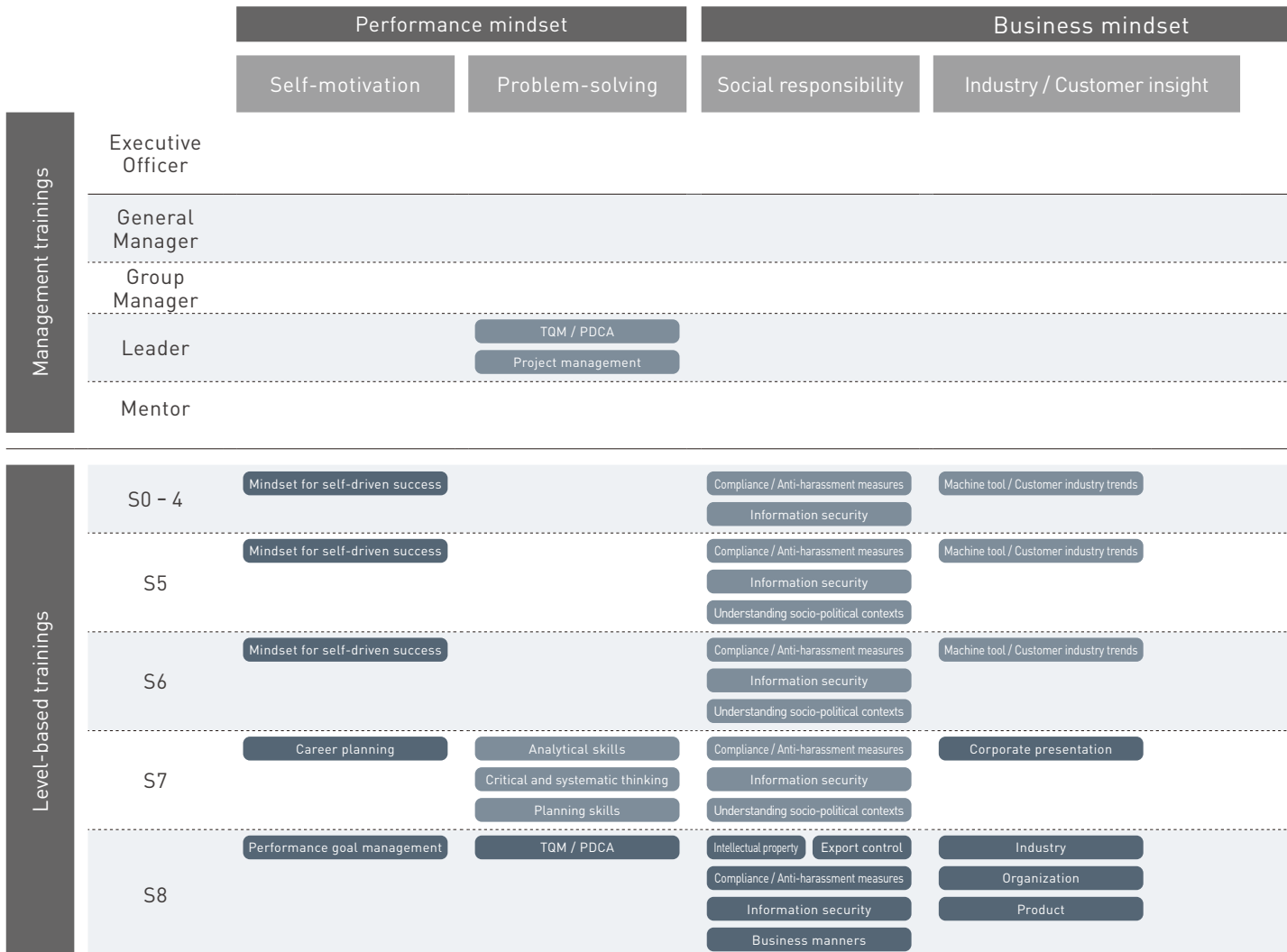


**Ms. Hirono:** Men's attitudes appear to be evolving, particularly among the younger generations. Many of our male employees are now taking childcare leave. Strangely enough, after taking the leave, many of my subordinates become more reliable. Perhaps this is because they improved their management skills through cooperating with other family members and managing household chores.

**DMG MORI's work styles seem to be continuously diversifying and evolving. Thank you very much for sharing your valuable insights.**

## Employee Skill Development

## Training programs to



## DMG MORI ACADEMY: Fostering Engineering Skills

## DMG MORI ACADEMY

Our DMG MORI ACADEMY develops and provides training programs for our employees and customers, aimed at enhancing their skills, management capabilities, and safety awareness. In addition to Iga Campus, our largest production site, we have established academies in Tokyo, Nagoya, Hamamatsu, Kanazawa, and Sendai, with plans to open more in Okayama and Fukuoka. Overseas, we operate academies

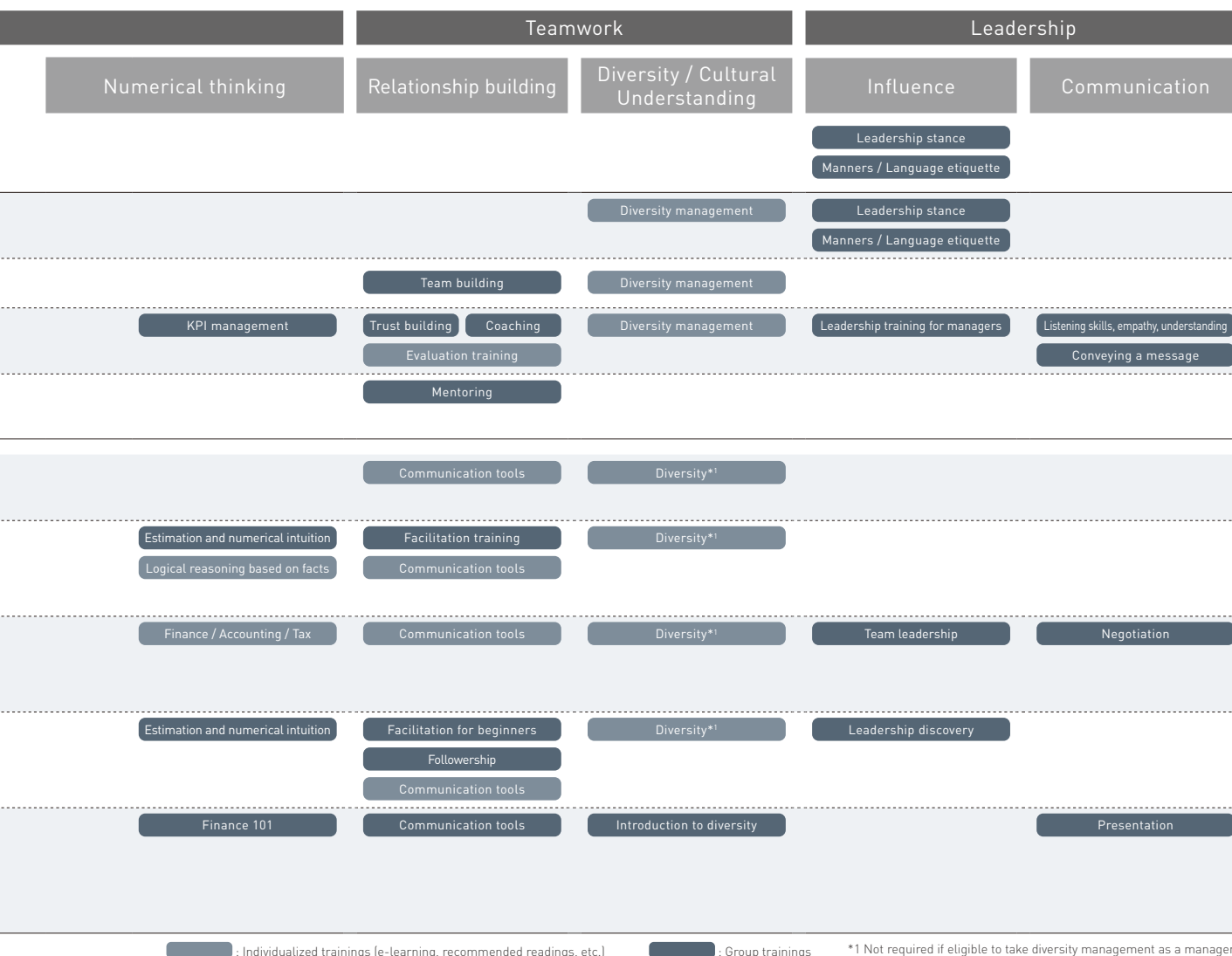


in the U.S., Germany, and Italy to support the continuous skill improvement of our service and application engineers.

## DMG MORI ACADEMY trainings for employees

- Safety training
- Machining training for new employees (Machining / Measurement basic course)
- Machining / Measurement technology training
- Service engineer training (Japan, Overseas)
- Sales training (Overseas)
- Application engineer training (Japan, Overseas)
- Technical skill development training
- Digital education (e-learning website production and operation)
- New technology certifications (5-axis Machining Technology Certificate)
- Supplier and partner seminars
- Management training
- Special trainings (industrial robots, handling of low-voltage electricity, replacing grinding wheels, etc.)

## enhance talent management - engineering skills - workplace health and safety



### Global Talent Development

#### DMG MORI Global Leadership Program

We have established a one-year leadership program for selected employees from our global offices, with the aim of cultivating future leaders capable of working on a global scale. In addition to technical expertise, these leaders are expected to navigate complex challenges, communicate effectively, and foster collaboration among diverse teams. Since its inception in 2018, our leadership program has welcomed 161 participants from 18 countries, with 24 completing the program in 2023. The comprehensive program includes around 100 hours of facilitated learning, complemented by hands-on workshops held at our global locations four times a year. Through this program, participants not only enhance their technical skills but also develop essential soft skills, including emotional intelligence, adaptability, and effective communication. The collaborative learning environment also fosters strong bonds among employees across our global locations.

#### Number of Participants by Region (2018-2023)

<b>Asia</b>	Japan, India, Indonesia, Malaysia, China, Philippines	19
<b>Americas</b>	USA, Canada, Mexico, Brazil	113
<b>Europe</b>	Germany, Italy, UK, France, Turkey, Netherlands, Finland, Denmark	29



# Industry-Wide Operator Development

## Developing Female Engineers through Education

Together with Nara Women's University, the first Japanese women's university to establish an engineering faculty, DMG MORI is supporting the development of future engineers. We have concluded a comprehensive agreement with the university to organize training for female engineers and revitalize the Nara region together.

Starting from October 2022, we have provided lectures for the mandatory course, "Introduction to Advanced Design and Manufacturing Engineering." This course aims to offer practical learning experiences in real-world product development, manufacturing, and cutting-edge technologies that go beyond the scope of academic subjects and research activities. Since 2023, we also invite students to our Nara Product Development Center and offer practical training using our advanced mill-turn center NTX 500 and automation system WH-AMR.

Additionally, we have initiated various collaborations to encourage young women's interest in engineering, including the Women Engineers Program (WE Program) at the Nara Product Development Center for female junior and senior high school students from across Japan, as well as practical lectures by our experienced engineers at Nara Women's University Secondary School.

### (Feedback from students)

- Engineering has been my first career choice, but the hands-on training with DMG MORI gave me an even better insight into the field. It will be helpful for my future career development. (WE Program)
- I enjoyed experiencing the whole engineering cycle of identifying a problem, conducting an experiment, and examining and summarizing the results. (Nara Women's University)



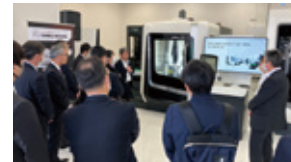
## Assisting Customers with Operator Training

### Establishing DMG MORI Academies Nationwide

To support inexperienced operators nationwide and facilitate the installation and setup of new machine tools, our DMG MORI Academies in Tokyo, Iga (Mie Prefecture), and Nagoya (Aichi Prefecture) offer machining training.

To encourage more customers and students throughout Japan to join our training, we are opening new academies in various locations. We have opened three in Kanazawa, Sendai, and Hamamatsu in 2023, and plan to open two more in Okayama and Fukuoka in the future.

At our academies, the participants can learn machining techniques on our advanced 5-axis machines and mill-turn centers, with the curriculum carefully designed by experienced DMG MORI experts according to the customer's skill level. In combination with our "DMG MORI Digital Academy," we also provide hands-on training together with e-learning courses to maximize the learning efficiency and allow customers to attend lessons on a flexible schedule.



NEW Kanazawa



Okayama (2024 Spring)

Fukuoka (plan)



NEW Sendai



NEW Hamamatsu

● New academies in various locations



## Mori Manufacturing Research and Technology Foundation

### Investment in R&D and Human Resources

Since 2019, we provide 3-year scholarships to engineering graduate students at Kyoto University and the University of Tokyo. After completing their Ph.D. programs, the scholarship recipients actively pursue careers in their respective fields, including employment at private companies and continuing their research activities at universities. One student of the 2nd cohort has joined DMG MORI. Since April 2023, the program has been expanded to graduate students in the humanities and social sciences at Kyoto University. We held the first joint session of humanities / social sciences and engineering scholars at the Nara Product Development Center in August 2023 and had lively discussions that transcended the boundaries of universities and majors. Starting in April 2024, we will offer scholarships to 8 engineering and 5 humanities / social sciences students for their Ph.D. programs, as well as to master's students at the Graduate School of Advanced Integrated Studies in Human Survivability, Kyoto University ("Shishu-Kan"). Thanks to the end of the COVID-19 crisis, many of the students have been proactively engaged in research activities both in Japan and abroad. We will continue to support graduate students and develop global leaders with expertise in their respective fields.



**Mori Manufacturing Research and Technology Foundation**  
(General Incorporated Foundation)

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

#### 2023 Scholarship per person (maximum)

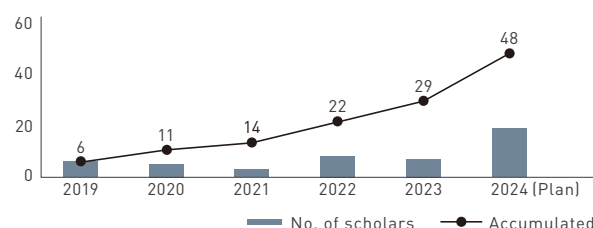
Master's degree	Ph.D. degree	
JPY 3.0 million	Engineering	Social science
	JPY 3.4 million	JPY 3.0 million

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

		2019	2020	2021	2022	2023	2024 (Plan)
Ph.D. degree	Engineering	6	5	3	8*1	2	8
	Social science	—	—	—	—	4	5
Master's degree*2		—	—	—	—	1	6

\*1 Incl. one admitted in the fall of 2021

\*2 Incl. 1st and 2nd year students of the 5-year integrated doctoral program

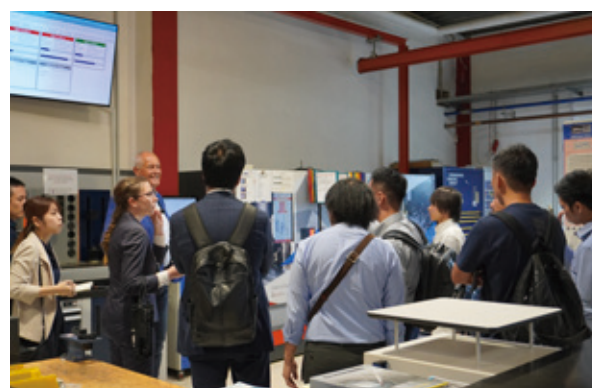


## Promoting 5-axis and Automation Solutions

DMG MORI founded the 5-Axis Machining Association in 2021 to expand business opportunities and raise the technological skill of new 5-axis machine users. Currently, the association boasts a network comprising 144 member companies and organizations from across Japan. At the general assembly held twice a year, we invite industry leaders in the automotive, aircraft, semiconductor, and other sectors to share their valuable insights on advancing business strategies, market dynamics, technological innovations, and the latest trends. The network continues to grow with each general assembly, actively fostering mutual give-and-take relationships.

Since 2023, we have also introduced study tours to Germany. At the 4 tours held in 2023, a total of 27 members had the opportunity to visit German 5-axis machine users, learn about their production and operator development, and see for themselves how automation and DX enhance productivity. In addition, we also provide training sessions to foster CAM skills, which are essential for 5-axis machining. Our three-day practical program, tailored for beginners, intermediate, and advanced participants, is designed to enhance skills at each proficiency level, fostering the development of highly skilled professionals in the field. In the future, we plan to further promote the collaboration among members, facilitating the integration of technologies for joint production projects, and assisting in the expansion of business opportunities to overseas markets. The 5-axis Machining Association will continue to support customers in securing and training of operators, provide a forum for member companies and organizations to interact and exchange information, and thereby generate new business opportunities and stable operations.

**5X** 5軸加工研究会  
**5AXIS MACHINING ASSOCIATION**



# Health and Productivity Management

## DMG MORI Health and Productivity Management: Promoting Mental and Physical Well-being

DMG MORI  
Health and Productivity  
Management Special Website ▶



### What is Health and Productivity Management?

The Ministry of Economy, Trade and Industry (METI) defines "Health and Productivity Management" as strategically managing employee health from a business standpoint, with the aim of enhancing overall productivity and corporate value.

As a first step toward health and productivity management, we announced the "DMG MORI Health and Productivity Management Declaration" in 2021. (Access QR code for more information)

### Certified as "White 500" for the 2nd consecutive year Selected for "Health & Productivity Stock Selection"

METI has established the "Certified Health & Productivity Management Outstanding Organizations Recognition Program" to acknowledge organizations that excel in health and productivity management based on five

assessment criteria. Within the large organization category, the top 500 are certified as the "White 500." Among more than 3,500 entries, DMG MORI was highly rated and certified as "White 500" for two years in a row. Additionally, in 2024, METI and the Tokyo Stock Exchange selected us as one out of top 50 companies in their "Health & Productivity Stock Selection," ranking us at the top of the industrial category based on survey results and management indicators.

### Continuously Advancing Employees' Physical and Mental Well-being

We are committed to advancing our health initiatives in a proactive, systematic, and comprehensive manner, aiming to further enhance the physical and mental well-being of our employees. At the same time, we will strive to be certified as "White 500" and selected for the "Health & Productivity Stock Selection" every year.

### METI's Health and Productivity Certification Program

#### Health and Productivity Stock Selection



Source: "Promotion of Health and Productivity Management" by Healthcare Industries Division, Commerce and Information Policy Bureau, METI (partially revised) [kenkokeiei\\_gaiyo.pdf](https://kenkokeiei_gaiyo.pdf) ([meti.go.jp](https://meti.go.jp))

### DMG MORI's Initiatives for Health and Productivity Management

- [A] Encouraging a healthy balance between professional and personal lives
- [B] Continuously offering an annual comprehensive medical examination
- [C] Enhancing post-examination support
- [D] Providing medical guidance from company physicians and nurses
- [E] Supporting lifestyle improvements
- [F] Supporting employees with mental issues
- [G] Securing and managing venues for exercise
- [H] Enhancing the company canteens
- [I] Promoting measures against COVID-19 or other diseases
- [J] Operating recreational facilities



**Eiji Matsuda**

Health Insurance Association  
General Manager  
Member of Health and Productivity  
Management Promotion Committee

**Minami Sasaki**

Production Human Resources Department  
Staff  
Member of Health Management and Productivity  
Promotion Committee

**Norio Kurumatani**

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

## Health Management Measures Established Over the Past Three Years

### Annual Health Report

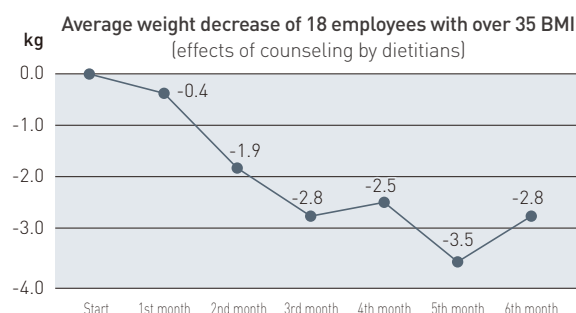
Annually, we gather and analyze health-related data, resulting in the recent release of our Health Report's third edition. This visualization of our health trends is a vital resource for advancing our health management initiatives, and we are committed to its ongoing publication as we strive to promote employee well-being.

### Improving Health Literacy

On our internal website "Health Information Homepage," we offer diverse and timely health information and e-learning materials. Additionally, we have conducted manager training on how to support the well-being of team members and ensure a healthy work environment.

### Encouraging Healthy Habits

We encourage healthy habits by offering private sessions with company physicians and nurses, exercise classes at our in-house gym, and nutritional counseling by external experts. These classes and sessions are continuously held with varying contents each year.



## New Initiatives

### Survey about Women's Health and Work-Life Balance

Achieving a balance between personal and professional lives is important, not only for each individual but also for the company as a whole. DMG MORI has formed a special team to conduct a survey of all female employees, collect basic data, and identify underlying issues.

### Providing Healthy Low-Salt Meals

After a series of tasting sessions, we started a monthly "Low Salt Day" at our in-house restaurants located at Iga Campus. On this day, we exclusively provide meals with less than 3 grams of salt to promote awareness of blood pressure control and encourage healthier eating habits. We are currently planning to expand the frequency of this initiative and introduce low-salt cuisine at our other locations as well.

### Safety and Health Center

Ensuring workplace safety and assessing risks are essential to health management. Therefore, in January 2023, we established a new in-house Safety and Health Center with centralized control and operation.



"Low Salt Day" at Iga Campus  
Providing meals with less than 3 grams of salt once a month

### Nutritious Lunches at All Locations

DMG MORI is committed to employees' health not only in Japan but all around the world.

We make it our mission to provide every employee with nutritious and balanced meals.



Davis (U.S.A.)



Pfronten (Germany)  
Source: Markus Röck



Tianjin (China)

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

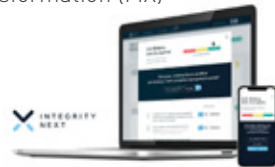
# | Social and Relationship Capital

## Collaborating with partners to address societal challenges through a sustainability lens

### Building a Robust Supply Chain through a Unified Platform

In recent years, a new dimension has emerged alongside the traditional benchmarks of price, quality, and delivery time in evaluating supply chains – sustainability. Notably, the enactment of the Supply Chain Due Diligence Act in Germany highlights the growing importance of environmental and human rights risk management for companies. At DMG MORI, we utilize the supply chain monitoring platform by Germany's INTEGRITY NEXT GmbH as a valuable tool to assess legal, financial, and operational risks within our supply chain, ensuring a consistent global standard in our due diligence efforts.

Clearly defining and addressing sustainability issues, whether related to climate change or the health and safety of workers, is crucial for ensuring the seamless continuation of our production. Collaborating with our partner companies on a shared platform allows us to align our values on environmental and human rights matters, thus enabling us to have a greater impact on societal challenges. Moreover, these collaborative efforts serve as a source of innovation, fostering the advancement of Machining Transformation (MX) through initiatives like DMQP (DMG MORI Qualified Products).



### Criteria and priorities

Priority level	Criteria topics
1. Relevant to the Supply Chain Due Diligence Act	<ul style="list-style-type: none"> <li>• Anti-Bribery &amp; Anti-Corruption</li> <li>• Environmental Protection</li> <li>• Human Rights &amp; Labor</li> <li>• Health &amp; Safety</li> <li>• Supply Chain Responsibility</li> </ul>
2. Compliance / Sustainability	<ul style="list-style-type: none"> <li>• Conflict of interest</li> <li>• Energy management</li> <li>• General Data Protection Regulation (GDPR) etc.</li> </ul>
3. Critical Product Substances	<ul style="list-style-type: none"> <li>• RoHS</li> <li>• REACH</li> <li>• PBT5</li> </ul>
4. Others	<ul style="list-style-type: none"> <li>• Quality Management</li> <li>• COVID-19</li> </ul>



**Rahim El Baraka**  
DMG MORI  
AKTIENGESELLSCHAFT  
Corporate Purchasing Strategy  
Manager

### Fostering Win-Win Relationships with All Our Partners

In line with our mission statement, we are committed to prosper together with our partners and have built strong, long-term relationships throughout our supply chain, especially in Japan and Europe.

To enhance our joint sustainability efforts, we have introduced INTEGRITY NEXT—a pioneering supply chain monitoring platform. This platform allows our partners to assess risks, exchange company profiles, and share sustainability data. It empowers them to proactively manage risks, improve long-term sustainability, and expand their sales channels without added expenses. In addition, INTEGRITY NEXT offers free trainings, and we host direct briefings to keep our partners updated on the latest laws, regulations, and best practices. Among the comprehensive range of criteria used to assess sustainability within the Integrity Next platform, we specifically focus on the five areas regulated by the Supply Chain Due Diligence Act: anti-bribery and anti-corruption, environmental protection, human and labor rights, health and safety, and supply chain responsibility. Based on the assessment results, we are closely working together with each partner company to facilitate improvements in these key areas.

We remain dedicated to establishing a sustainable supply system as an industry leader, with the goal of fostering mutual growth and success throughout our entire supply chain.

### Survey results as of December 31, 2023\*<sup>1</sup>

Number of companies by evaluation	CO (Japan) * Introduced in January 2022	AG (mainly German companies) * Introduced in July 2019
■ Sustainable	137	351
■ Compliant	33	317
■ Critical	41	0
<b>Number of suppliers in the scope</b>	<b>211</b>	<b>668</b>

\*<sup>1</sup> Aggregated for 5 areas related to the German Supply Chain Due Diligence Act



**Hiroshi Yuki**  
Sustainability Promotion  
Department  
General Manager

## Advancing Technology and Collaboration Across the Machining Industry

Cutting Dream Contest special site ▶



# The 18th Cutting Dream Contest

Since 2004, we have been hosting the Cutting Dream Contest for companies, schools, and research institutes in Japan's machining industry. This contest is open to participants utilizing cutting-edge machining equipment such as cutting-type machine tools, additive manufacturing, and laser cutting machines. Through the friendly competition, we aim to enhance technical skills, knowledge, and promote collaboration within the industry.

In the 18th edition of the contest in 2023, we were honored to have a panel of six judges, including Professor Atsushi Matsubara from Kyoto University, who chaired the jury. Following a rigorous evaluation process, the jury selected 21 winners out of 69 submissions across five different categories: production parts machining, prototype and test cut machining, artistic form machining, advanced machining, and academic research. The winning pieces were showcased at our booth during MECHATRONICS TECHNOLOGY JAPAN (MECT) 2023 in October, accompanied by a movie featuring all the submitted works.

Furthermore, the 18th Cutting Dream Contest and its winners were featured in newspapers, offering substantial promotional benefits to the outstanding technology of the participants.

### Production Parts Machining Gold Prize

**Giant & Ultra-Thin Ring**  
IG EVEARTH CO., LTD.



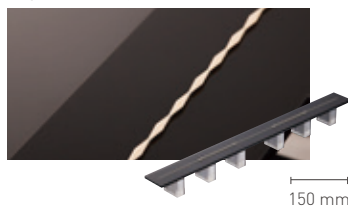
**Silver prize: Aspherical Honeycomb Lens Array**  
(for Image Inspection Devices)  
Circle & Square Co., Ltd.

**Bronze prize: Resin Volute Springs 10°**  
Koga Denki Corporation

**Technique prize: Waveguide**  
ShonanAutoCut Inds. Ltd.

### Prototype & Test Cut Machining Gold Prize

**Ultra-Thin & Long Part**  
Koga Denki Corporation



**Silver prize: Screw-Spring**  
KYOCERA Corporation

**Bronze prize: Ultra-Thin Capsule with Ultra-Fine Holes**  
IG EVEARTH CO., LTD.

**Mini Kettle (No Boiling!)**  
Askk Co., Ltd.

**Technique prize: Sea Anemone Micro Nozzle**  
Akitsu Industry Co., Ltd.  
**Turbine Blade Ammonite**  
CASTEM CO., Ltd.

### Artistic Form Machining Gold Prize

**Paper**  
Seibu Co., Ltd.



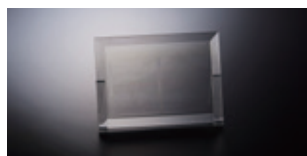
**Silver prize: Helicopter**  
Noda Plastic Seikou Co., Ltd.

**Bronze prize: Oxalis**  
Circle & Square Co., Ltd.  
**Lucanus Maculifemoratus**  
YAMAMOTO SEIKI CO., LTD.

**Technique prize: Two-Face Cup with Latent Images**  
IG EVEARTH CO., LTD.  
**Petit Paris**  
ASAHI YUKIZAI CORPORATION

### Advanced Machining Gold Prize

**Transparent Picture Frame (Umezawa Hamlet-Fields)**  
INAC Co., Ltd.



100 mm

### Academic Research Gold Prize

**Slit Lenticular Puzzle**  
Kobe Advanced Institute of Technology



100 mm

**Silver prize: Fans Made of Recycled Bottle Caps**  
Kindai University Technical College

**Bronze prize: Rose and Beetle**  
(Interior Plastered)  
Chugoku Polytechnic college  
**Oloids**  
Hyogo Prefectural Monodzukuri  
Institute

# Fostering Culture, Art, and Science

## Cultivating music culture



In 2018, we started supporting the world-class pianist Mr. Kyohei Sorita. Building upon our successful partnership, we jointly founded the Japan National Orchestra (JNO) in May 2021. Comprising Mr. Sorita and a dynamic ensemble of 19 talented young soloists, JNO has been contributing to culture and the creation of new art through classical music. The orchestra is headquartered in Nara, DMG MORI's birthplace, and is actively performing in Japan and on the global stage. In September 2023, JNO went on its second international tour, holding concerts in four Italian cities, including a performance at a local music festival. In October, JNO gave an outdoor concert in front of 2,000 people in commemoration of the 1,250th anniversary of the death of the priest Ryoben, founder of Todaiji Temple.



## DMG MORI SAILING TEAM

In October 2018, we established the DMG MORI SAILING TEAM and welcomed the maritime adventurer, Mr. Kojiro Shiraishi, as our skipper. In the solo, no-port, no-supply round-the-world yacht race "Vendée Globe 2020-2021" which commenced in August 2020, he came in 16th out of 33 participants (94 day, 21 hours, 32 minutes, and 56 seconds) and was the first Asian sailor to complete the race. What a great accomplishment! The monohull sailing yacht "DMG MORI Global One" was built with several parts which were machined on our own simultaneous 5-axis machines and machining centers.

In order to empower young talents to work in offshore sailing, we later established the DMG MORI SAILING ACADEMY in June 2021. The first opportunity for new trainees to show their skills is in the Mini Transat 6.50 class. Out of our four trainees, Federico Sampei and Laure Galley took part in the transatlantic race "Mini Transat 2023." The other two are aiming to compete in this race in 2025, after going through the qualifier races in 2024.



Thomas DEREKNIEAUX\_QAPTUR/DMG MORI

## Supporting international academic conferences

The Mori Manufacturing Research and Technology Foundation actively supports international academic conferences such as CIRP (College International pour la Recherche en Productique: International Academy for Production Engineering) In the CIRP 2023 General Assembly held in Dublin, we were proud to participate as a Diamond Partner and contributed with several scientific presentations. Our topics included high precision machining with a contactless on-machine measurement system, digital twin-based accuracy compensation for thermal displacement, and the principle of defect detection during additive manufacturing (SLM processes) using X-ray imaging. We will continue to advance research and development in the field of production technology in collaboration with fellow participants.



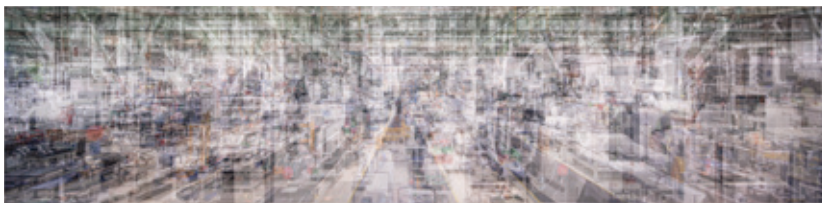
## Supporting young artists

Ever since 2020, we have been promoting leading artists in Japan and abroad and are supporters of the ARTISTS' FAIR KYOTO, an exhibition of up-and-coming artists in their 20s and 30s. In cooperation with the exhibition's director, Professor Noboru Tsubaki of Kyoto University of the Arts, we display selected works of art at our offices and facilities. All in all, we show more than 150 works of art, ranging from palm-sized objects to large-scale works up to 10 meters in length. We hope that not only our visitors will enjoy them, but that they will also spark the imagination of employees and lead to the development of better products.

DMG MORI ART GALLERY ▶



Ryo Shinagawa, "Peach Blossom"



Kenryou Gu, "DMG MORI IGA Campus – Assembly Plant"



Mina Katsuki, "1:29:14"

## Girls' Day

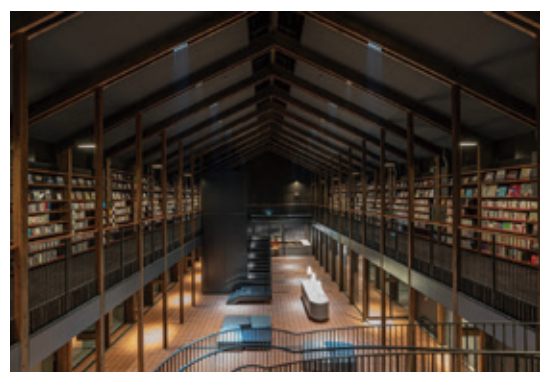
In Germany, "Girls' Day" is a work experience project held every April to encourage female students to become interested in the fields of science, particularly engineering. During Girls' Day in April 2023, DMG MORI welcomed a total of 31 young women at our locations in Pfronten, Seebach, and Bielefeld where they were introduced to our machine tools. They not only learnt about our company and products but there were also several opportunities where they could experience and try out the technology for themselves. Assembling small parts, calibrating the pneumatic controls, and soldering electronic cubes are only a few examples of the activities. A joint lunch also provided the opportunity to discuss newfound interests and share our appreciation for science and engineering.



## SHINDO YARDS

We are actively engaged in initiatives to enhance the landscape around our Iga Campus. In November, we opened "SHINDO YARDS," a complex of educational, cultural, and administrative facilities, situated in front of Shindo Station on the JR Kansai Main Line - the closest station to Iga Campus.

One of the facilities is the library "BOOKMARK STORAGE," which is jointly operated by DMG MORI and Iga City. Its core concept revolves around fostering "enjoyable encounters with books" and its extensive catalog boasts over 20,000 items, including not only general topics but also genres specific to DMG MORI's initiatives, such as art, wine, music, marine, sports, and engineering. The library serves as a welcoming space for local residents to enjoy a good book while awaiting their train or simply take a moment to relax.



# | Natural Capital



## Preserving Our Environment While Manufacturing First-class Machines

**MAHOROBA**  
DMG MORI VINEYARDS

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

At DMG MORI, we not only keep our production sites and offices clean and orderly, but also actively work on improving the surrounding scenery. Transforming landscapes cannot be accomplished overnight and requires cooperation with urban planning and local residents. As a responsible corporate citizen, we recognize that the environments where we operate play a significant role in our customers' evaluation of our products.

Our international customers, arriving from Narita or Osaka airports, make their way to our Iga Campus via the Meihan Expressway. In recent years, the abandoned farmland along the roadside in Iga has become more and more noticeable. In contrast, our German factories are surrounded by a beautiful countryside scenery with vineyards. This is something our employees take pride in and it strengthens their motivation to aim for higher goals, resulting in an overall improvement of our product quality. Therefore, as part of our 70th-anniversary celebrations in 2018, we established Mahoroba Farm to enhance the landscape in Iga through the cultivation of grapes and winemaking. The wine is now served in our

guesthouse, where it sparks lively conversations about future business possibilities with our visitors.

There are currently 6,000 growing seedlings, and we plan to produce around 20,000 bottles of wine in five years once all our grapevines mature. At present, the harvests are brought to a commissioned winery, but we plan to build our own winery near Iga Campus around 2025. The local community has already voiced their support and high expectations for the project.

When we began the vineyard operation, it took some effort to gain the local support. However, the steady efforts by our employees are bearing fruit. Nearby companies have shown interest in supporting our initiatives and have reached out to us for potential collaborations. We feel that our commitment to preserving the local environment is steadily broadening its reach.

DMG MORI is working on enhancing the landscape not only through grape cultivation. We engage in other projects such as painting guardrails or maintaining streetlights along school routes of local children. We are committed to all activities which make Iga safer, more livable, and more culturally enriched.



**Yumi Nakamori**

Iga Midai / Shindo Area Project  
Office

**Mitsuru Nishiyama**

General Manager  
Iga Midai / Shindo Area Project Office  
Director  
Mahoroba Farm CO., LTD.

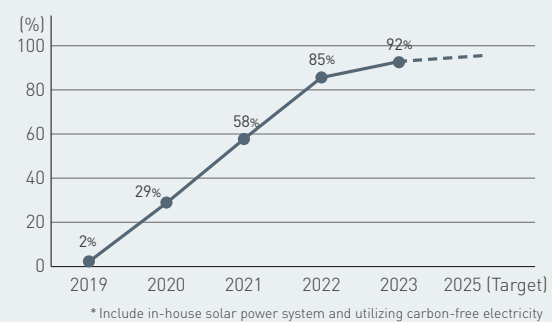
## Powering Our Operations with Renewable Energy

We are promoting the introduction of renewable energy at our locations worldwide. In 2023, we installed solar panels not only at Iga Campus but also at our factory in Davis. In the same year, our casting supplier, DMG MORI CASTECH (Shimane Prefecture), replaced its conventional coke oven with an electric furnace. This transition is mainly powered by their in-house solar power system, with the option of utilizing carbon-free electricity when needed. In 2024, we plan to start solar power generation at Nara Campus, increase the number of solar panels in Iga, and install storage batteries at both locations. The batteries are part of our Business Continuity Plan and will be used as an initial power source for air conditioning and lighting in the event of a power outage, with a priority on the disaster response rooms.

Furthermore, we launched a heat and power cogeneration system by GLOCK at our Iga Campus in 2022. It employs unused thinned wood from nearby areas, which contributes to forest management and conservation efforts. This system uses heat from the power generation process to dry

wood chips and regulate the temperature of the cleaning solution in the adjacent coating plant, thereby reducing waste and increasing energy efficiency. In the future, we also plan to make effective use of the incinerated ash in our vineyards as biochar and fertilizer.

Renewable energy ratio of electricity (consolidated)



### column

#### Gaining experience at external wineries for future success

Mahoroba Farm is currently preparing to build its own winemaking facility. To excel as grape farmers and winemakers in the future, we actively participate in trainings at various wineries. In a year, I dedicate six months to cultivating grapes in Iga, and after the harvest, I spent the remaining six months at wineries in the prefectures Nagano and Yamagata. These consignment wineries, which process harvests from grape farmers without winemaking facilities, offer the unique opportunity to acquire around five times the winemaking experience in one year compared to a typical winery. In between, I also attend wine school and pursue a sommelier certification.

In 2023, Mahoroba Farm achieved a grape harvest of 7,400 kg, double the amount compared to the previous year. Iga's climate is characterized by frequent rainfall and intense sunlight, making grape cultivation more challenging. However, this climate gives us the opportunity to harvest grapes earlier than in other regions, resulting in wines with tropical and deep flavors. Today, Iga Campus is surrounded by a beautiful landscape of grapevines, and we will open winemaking and bottling facilities in the near future. We hope this can be both an attraction for our national and international visitors at Iga Campus as well as a beloved place within the local community.



Mai Yoshimoto  
Mahoroba Farm CO., LTD.



# Measures Against Climate Change



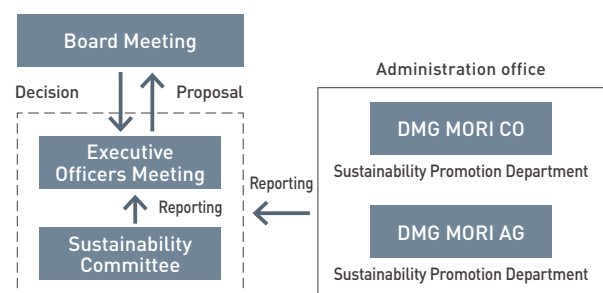
We are proactively disclosing climate change-related risks and opportunities in accordance with the recommendations of the TCFD (Task Force on Climate-related Financial Disclosures) and are implementing the following initiatives.

## Governance

### Our Dedicated Department Ensures Effective Climate Action

We established the "Sustainability Promotion Department" with the function to evaluate the risks and opportunities of climate change and to plan, implement, and monitor appropriate measures. The department calculates DMG MORI's carbon footprint, reports to the Board of Directors, and seeks approval for the carbon emissions reduction plan and related investments.

#### Climate-related Governance Structure at DMG MORI



## Strategy

### Contributing to Climate Action Through Machining Transformation (MX)

The key pillars for our machining transformation are process integration, automation, and digital transformation (DX). They increase our customer's productivity and free up management resources which in turn leads to a reduction in carbon emissions. Therefore, we believe the advancement of MX contributes to achieving a green transformation (GX) of the

manufacturing industry. By enhancing our machine tool business, we are actively contributing to addressing the global challenge of climate change. In addition, we are engaging in initiatives such as utilizing solar power generation at our plants and implementing circular business practices, all aimed at reducing CO<sub>2</sub> emissions across Scope 1, 2, and 3.

## Risk Management

The Sustainability Promotion Department regularly identifies and assesses risks related to climate change, providing monthly reports to our internal directors. Our Board of

Directors discusses climate change-related matters and passes resolutions once per quarter or whenever there may be a potential major impact on our business operations.

## Metrics and Targets

### Accredited by SBTi<sup>\*1</sup>

To enhance our response to climate change, we have established greenhouse gas reduction targets for 2030 and obtained certification from the international environmental organization "SBT Initiative"<sup>\*1</sup> in

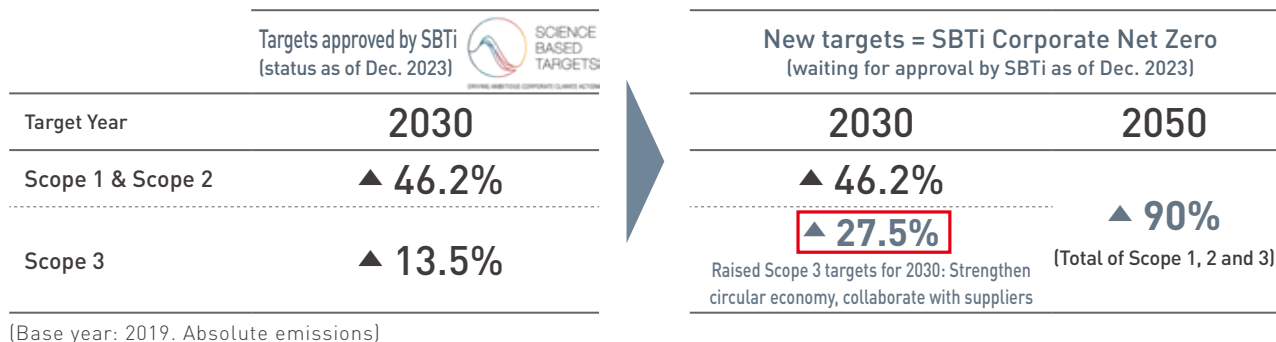
November 2021. Our SBT-certified targets aim for a 46.2% reduction in Scope 1 and Scope 2 emissions, and a 27.5% (applying to SBT) reduction in Scope 3 emissions by 2030 compared to the levels in 2019.

<sup>\*1</sup> SBT = "Science Based Targets": Reduction targets in line with Paris Agreement goals and aiming to limit global temperature rise to 1.5-2 °C above pre-industrial levels. These targets are set and measured against the greenhouse gas emissions in 2019.

## Our Reduction Targets for Greenhouse Gas (CO<sub>2</sub>) Emissions

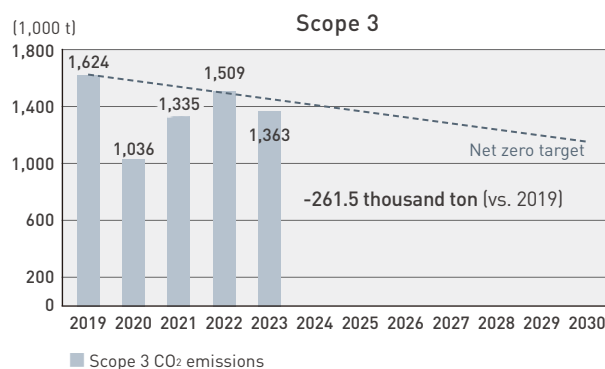
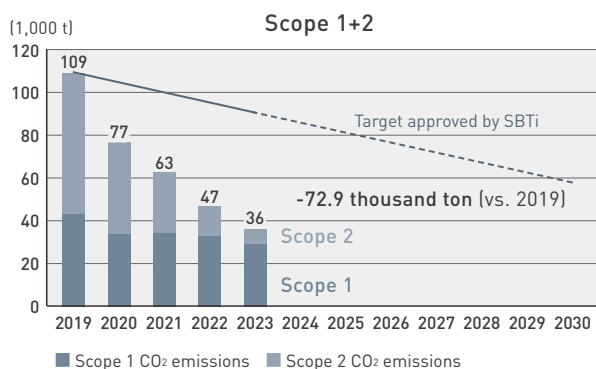
We are setting higher targets than the current SBT certification and will work towards net zero emissions by 2050, in line with the 1.5 °C target level.

Our definition of "net zero" is consistent with the SBT initiative. Through carbon removal, we neutralize residual emissions and strive to reduce the emissions to meet the 1.5 °C target.



### Carbon footprint record (compared to carbon footprint reduction targets accredited by SBTi)

\* 2023 data not verified yet by third party



DMG MORI received an A- score in the "Climate Change" and "Water Security" categories in the CDP 2023 assessment.

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

Period: January 1 to December 31

Scope	Emission Category	Source of emissions	2022 (consolidated)		2023 (consolidated)	
			Ton	Share of total emissions	Ton	Share of total emissions
Scope 1		Direct emissions from the Company	33,147	2.1%	28,583	2.0%
Scope 2		Purchased energy (electricity)	13,884	0.9%	7,318	0.5%
Scope 3	Category 1:	Purchased goods and services	692,776	44.5%	549,155	39.3%
	Category 3:	Fuel and energy related activities not included in Scope 1, 2	17,593	1.1%	16,301	1.2%
	Category 4:	Upstream transportation & distribution	36,456	2.3%	28,898	2.1%
	Category 5:	Waste generated in operations	535	0.0%	662	0.0%
	Category 6:	Business travel	12,505	0.8%	17,366	1.2%
	Category 7:	Employee commuting	15,079	1.0%	16,171	1.2%
	Category 9:	Downstream transportation & distribution	11,957	0.8%	12,433	0.9%
	Category 11:	Use of sold products	686,594	44.1%	685,981	49.0%
	Category 12:	End-of-life treatment of sold products	35,002	2.2%	35,554	2.5%
	Category 15:	Investments	150	0.0%	227	0.0%
Scope 1+2+3			1,555,678	100.0%	1,398,648	100.0%

\* 2023 data not verified yet by third party

# | Financial Capital



**Namgu Kang**

Group Manager  
Business Performance Control  
Department  
Sales Company Controlling Group

**Minami Nakamura**

Group Manager  
Accounting Department  
Consolidated Financial  
Settlement Group

**Hiroshi Gotoh**

Executive Officer  
Finance

## MX Strategy for Stable Cash Flow and Shareholders Returns

The DMG MORI Group has steadily developed a robust revenue structure that remains relatively unaffected by changes in the demand environment, ensuring a consistent operating cash flow. Based on this foundation, we are aiming to eliminate the interest-bearing debt accrued during the integration of DMG MORI Aktiengesellschaft within the next 2-3 years. Subsequently, we are diligently laying the groundwork for substantial growth investments in the foreseeable future.

In this context, our Accounting & Finance Division holds more than just a traditional back-office role. As the accounting and finance arm of our global corporation, we are capable of formulating proposals and acting beyond mere administration. Our daily efforts are dedicated to evolving into an organization equipped with the capacity to craft diverse strategies aimed at maximizing our overall business performance.

Efficient proposal making requires sufficient time for analyzing financial information. To streamline our processes and minimize routine tasks, our division has actively pursued standardization and automation. Initiatives such as the implementation of digital invoicing to reduce document processing and Total Quality Management (TQM) in our financial closing procedures have accelerated financial reporting. This, in turn, allows us to allocate additional resources towards analysis and proposal activities.

Furthermore, to ensure the timely and accurate collection of information, we are actively enhancing the transparency

and precision of our financial data through strengthened governance across the entire Group. Our efforts include standardizing accounting policies among all global group companies, optimizing cash allocation through comprehensive cash flow analysis, as well as establishing and publicly disclosing the DMG MORI Global Tax Policy. These measures reflect our commitment to enhancing governance company-wide.

We have also enhanced the management of the machine sales process by closely monitoring each unit. This enables us to minimize inventory assets, accelerate the collection of accounts receivable, and make sure to secure down payments for a fast cash conversion cycle. We will further boost our profitability by providing essential information for R&D and sales strategies through sales analyses based on machine types and regions. With the planned implementation of a new ERP system in fiscal year 2024, we anticipate even more precise analytic potential to pave the way toward further profitability.

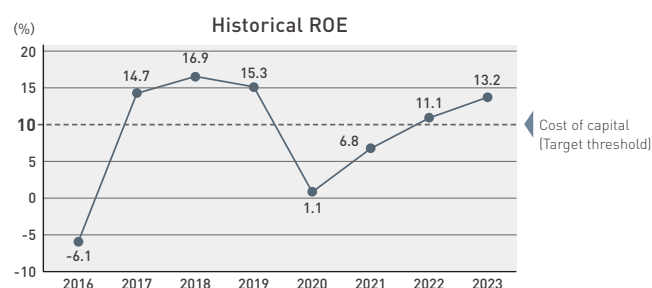
By diligently implementing these strategies, we will strengthen our business structure to adeptly navigate changing market dynamics while ensuring a healthy financial foundation and optimizing capital efficiency. Our goal is to become an organization renowned for its resource-efficient proposals. As part of the DMG MORI Group, the Accounting & Finance Division remains dedicated to collaborating with all stakeholders, including customers and shareholders, to foster prosperity.

## Cost of Capital

DMG MORI is working to reduce its cost of capital while improving its return on equity (ROE).

The cost of capital is majorly influenced by business risks (volatility) and financial risks. Since the machine tool industry is susceptible to demand and order fluctuations, both business and financial risks are often perceived as high. As a result, a machine tool manufacturer's equity cost tends to be assessed as high, leading to lower valuations. DMG MORI has been implementing unique initiatives to reduce business and financial risks. First, we have diversified our regional and industrial customer base to minimize order fluctuations. Through our Machining Transformation (MX) strategy, we have successfully increased the price per order and compensated for the decreased number of units. In addition, the growing demand from global medium- to large-sized companies and their long-term projects also contributed to our financial stability. Strong orders and sales revenue also came from our high-margin service and spare parts business, which now accounts for more than 20% of our total business. With these measures, we have been able to secure continuous growth, while achieving a record-high profit for two consecutive years and increasing dividends. We will continue to pursue sustainable sale revenue growth, higher profitability, and a lower cost of capital by efficiently communicating our risk-mitigation measures to the capital markets.

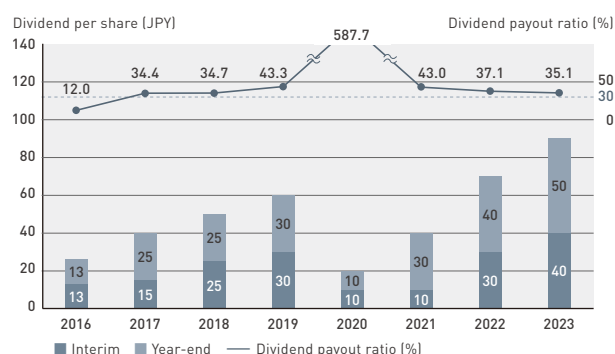
When considering business expansion and assessing the profitability of existing businesses, deciding whether to introduce new products or transaction methods, or evaluating potential mergers and acquisitions, the cost of capital is also used as a target threshold. As the target threshold, we are aiming for 10% for our cost of capital. This means our return on equity (ROE) should be consistently above 10% to further increase shareholder value. As shown below, with the exception of the global COVID-19 recession in 2020 and 2021, we have successfully maintained above 10% and achieved 13.2% in 2023. The ROE target for 2025, the final year of the Medium-term Business Plan, is currently 12%, but we will strive to further raise the ROE level by improving profit margins.



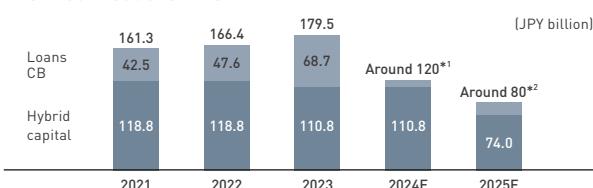
## Shareholder Returns and Balance Sheet Optimization

When distributing free cash flows, we need to strike a balance between increasing shareholder return and reducing interest-bearing debt. The interest-bearing debt has increased in the process of making DMG MORI AKTIENGESELLSCHAFT a controlled group company through a Domination Profit and Loss Transfer Agreement (DPLTA) in 2016. We are targeting a payout ratio (ratio of dividend to net profit) of approximately 30%, but we also take into consideration the business environment and free cash flows when determining the dividend amount. In FY2023, we had initially planned JPY 80 per share, but later raised it to JPY 90 per share based on the upward revised business forecast. In our Medium-term Business Plan 2025, we set the annual dividend target for FY2025 at JPY 100 per share, and we plan to achieve this one year ahead in FY2024.

Net interest-bearing debt (including hybrid capital) totaled at JPY 179.5 billion as of December 31, 2023. We were not able to reduce the amount as planned in 2023, as we made major investments to meet increased demand for automation and operator training, and the disrupted supply chain has led to high inventories. However, from 2024 onward, we plan to significantly improve free cash flows by increasing profits, reducing capital expenditures, and optimizing working capital through inventory management. Our target for 2025 is to reduce the interest-bearing debt to JPY 80 billion, as committed in the Medium-term Business Plan.



## Net Debt Reduction Plan



\*1 Conversion of CB (Jul. 2024) \*2 Hybrid capital JPY 37.0 billion Optional redemption (Jul. 2025)