

Fiscal Year Ended March 31, 2024
(April 1, 2023 to March 31, 2024)

Business Report





Brand Statement

For Crafting Tomorrow

The honor of supporting Japanese *monozukuri* (manufacturing)—the art of manufacturing and craftsmanship—has always been at the root of our company.

As a leading manufacturer of small-diameter carbide end mills, we strive to create valuable products that cater to the needs of our customers and the society.

We will introduce innovative solutions by continuously pushing the limits of our own technical standards, and present pioneering skills, quality and services to the future, and to the world.

NS TOOL will continue to explore the infinite possibilities and dreams in *monozukuri*.



Management Philosophy

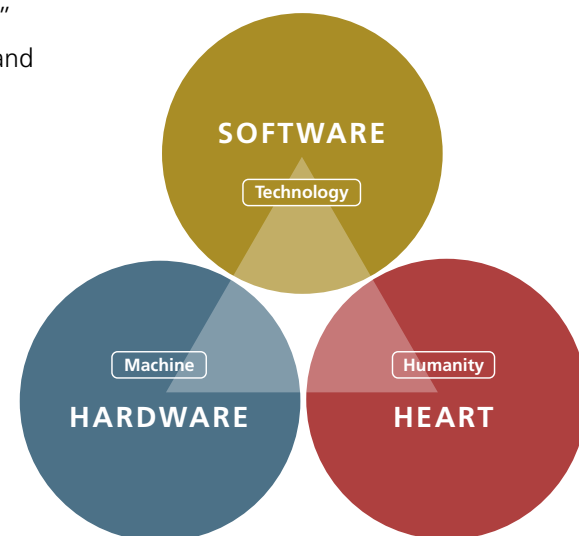
NS TOOL creates

“**Software** (technology),”

“**Hardware** (machine)” and

“**Heart** (humanity).”

We contribute to society by developing eco- and human-friendly products.



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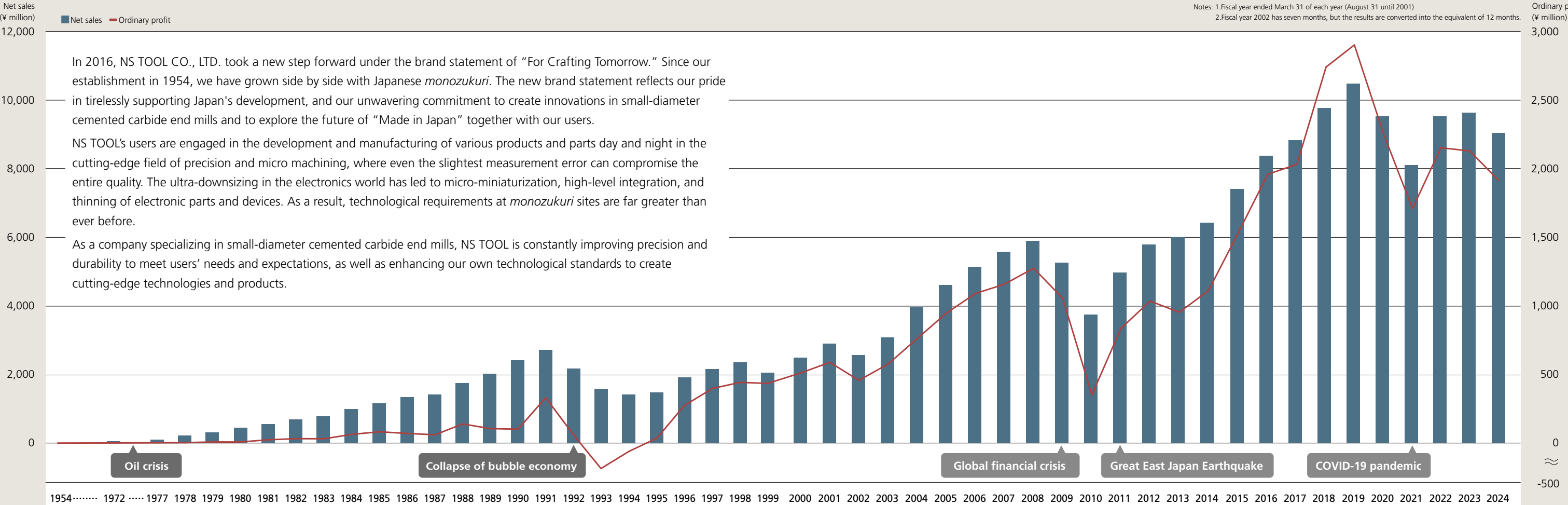
Disclaimer

Note regarding the Company’s estimates

This report contains forward-looking estimates including plans, strategies and financial performance. These estimates are based on the determination derived from information that is currently available. Please note that actual results can be affected by various risks and uncertainties and, as a result, can differ from these estimates.

Major Milestones of NS TOOL Group






"Monozukuri" means manufacturing in Japanese.



History of NS TOOL

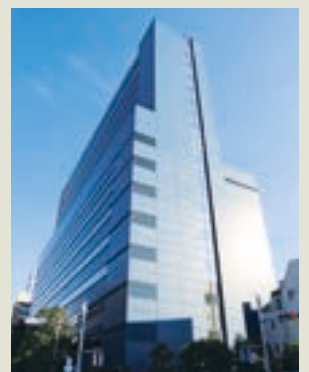
1954 Establishes Nisshin Kogu Seisakusho.	1977 Starts exporting products (to Taiwan).	1990 Establishes a consolidated subsidiary, G-Tech Co., Ltd.	1999 Invests in Sato Tool, Ltd. (Niigata Nisshin Co., Ltd.).	2004 Acquires ISO 14001 certification. Lists on the JASDAQ Stock Exchange.	2011 Makes Makino Industry Co., Ltd. a wholly owned subsidiary.	2017 After switching to the Second Section of the Tokyo Stock Exchange, NS TOOL was designated as a First Section stock.
1961 Establishes Nisshin Kogu Seisakusho L.C. in Shinagawa-ku, Tokyo.	1979 Changes the organization to Nisshin Kogu Seisakusho Co., Ltd.	1991 Changes the trade name to NS TOOL Co., Ltd.	2001 Acquires ISO 9001 certification.	2009 Establishes NS Engineering Co., Ltd.	2013 Establishes NS TOOL Hong Kong Ltd.	2018 Relocates Headquarters and Tokyo Office.
		1994 Declares specialization in small-diameter end mills.	2002 Makes G-Tech Co., Ltd. and Sato Tool, Ltd. (Niigata Nisshin Co., Ltd.) wholly owned subsidiaries.		2016 Reforms the corporate identity. NS Engineering Co., Ltd. takes over Niigata Nisshin Co., Ltd.	2021 Establishes NS TOOL USA, INC.
						2022 Transitions to the Prime Market of the Tokyo Stock Exchange.

History of development, production, and sales activities

1972 Launches the original "Power End Mill" with helix angle of 50 degrees.	1980 Makes a full-scale entry into the mold market with a cemented carbide solid end mill.	1993 Completes the first stage of construction of Sendai Factory.	1998 Completes the third stage of construction of Sendai Factory. Consolidates the Production Division and Development Division into Sendai Factory.	2006 Holds the first NS Private Show. Completes the first Tool Grinding Machine "TGM" developed by NS TOOL.	2009 Establishes new Manufacturing Center.	2016 Completes the fifth stage of construction of Sendai Factory.	2023 Holds the first "Seminar for 5-axis precision and micro machining."
	1989 Constructs new Fujisawa Factory and establishes operation of three production sites.		2001 Establishes R&D Center on the premises next to Sendai Factory.		2011 Sendai Factory recovers from Great East Japan Earthquake in one month.	2020 Holds the third NS TOOL Private Show 2020.	
		1994 Completes the second stage of construction of Sendai Factory. Introduces a CNC grinding machine made by Rollomatic SA (Switzerland) for the first time in Japan.	2003 Launches a project to develop an original Tool Grinding Machine (TGM). Launches CBN end mills.				
				2008 Holds the second NS Private Show.		NS Engineering Co., Ltd. starts manufacturing small-diameter end mills at its Niigata Factory.	

NS TOOL Group Network

a NS TOOL CO., LTD.
Headquarters
and Tokyo Office



Headquarters and Tokyo Office
6F, Sumitomo Fudosan Oimachi Ekimae Bldg., 1-28-1 Oi, Shinagawa-ku, Tokyo 140-0014, Japan
Tel: +81-3-3774-2459 Fax: +81-3-3774-2460
URL: <https://www.ns-tool.com/en>
Business lines
Sale of cutting tools, inventory center

b NS TOOL CO., LTD.
Sendai Factory and R&D Center



Sendai Factory R&D Center
2-11 Matsusakadaira, Taiwa-cho, Kurokawa-gun, Miyagi 981-3408, Japan
Tel: +81-22-344-2201 Fax: +81-22-344-2212
Business lines
Development and manufacture of cutting tools, inventory centers

g
Fukuoka Office
8F, Sankyo Fukuoka Bldg., 2-9-11 Hakataekiminami, Hakata-ku, Fukuoka-shi, Fukuoka 812-0016, Japan
Tel: +81-92-260-8550 Fax: +81-92-481-3378

f
Osaka Office
2F, Soryu Bldg., 2-9-3 Shinmachi, Nishi-ku, Osaka-shi, Osaka 550-0013, Japan
Tel: +81-6-6534-4621 Fax: +81-6-6534-4530

e
Nagoya Office
12F, Nagoya KS Bldg., 3-1-18 Taijo, Nakamura-ku, Nagoya-shi, Aichi 453-0801, Japan
Tel: +81-52-414-6110 Fax: +81-52-414-6120

d
Nagano Office
7F, Matsumoto Chuo Bldg., 1-17-16 Chuo, Matsumoto-shi, Nagano 390-0811, Japan
Tel: +81-263-88-2451 Fax: +81-263-88-2452

h NS Engineering Co., Ltd.
Headquarters and Main Factory



Headquarters and Main Factory
2-7-2 Matsusakadaira, Taiwa-cho, Kurokawa-gun, Miyagi 981-3408, Japan
Tel: +81-22-344-3805 Fax: +81-22-344-3105
URL: <https://www.ns-eg.com>
Business lines
Coating processing and re-grinding of cutting tools

i NS Engineering Co., Ltd.
Niigata Factory

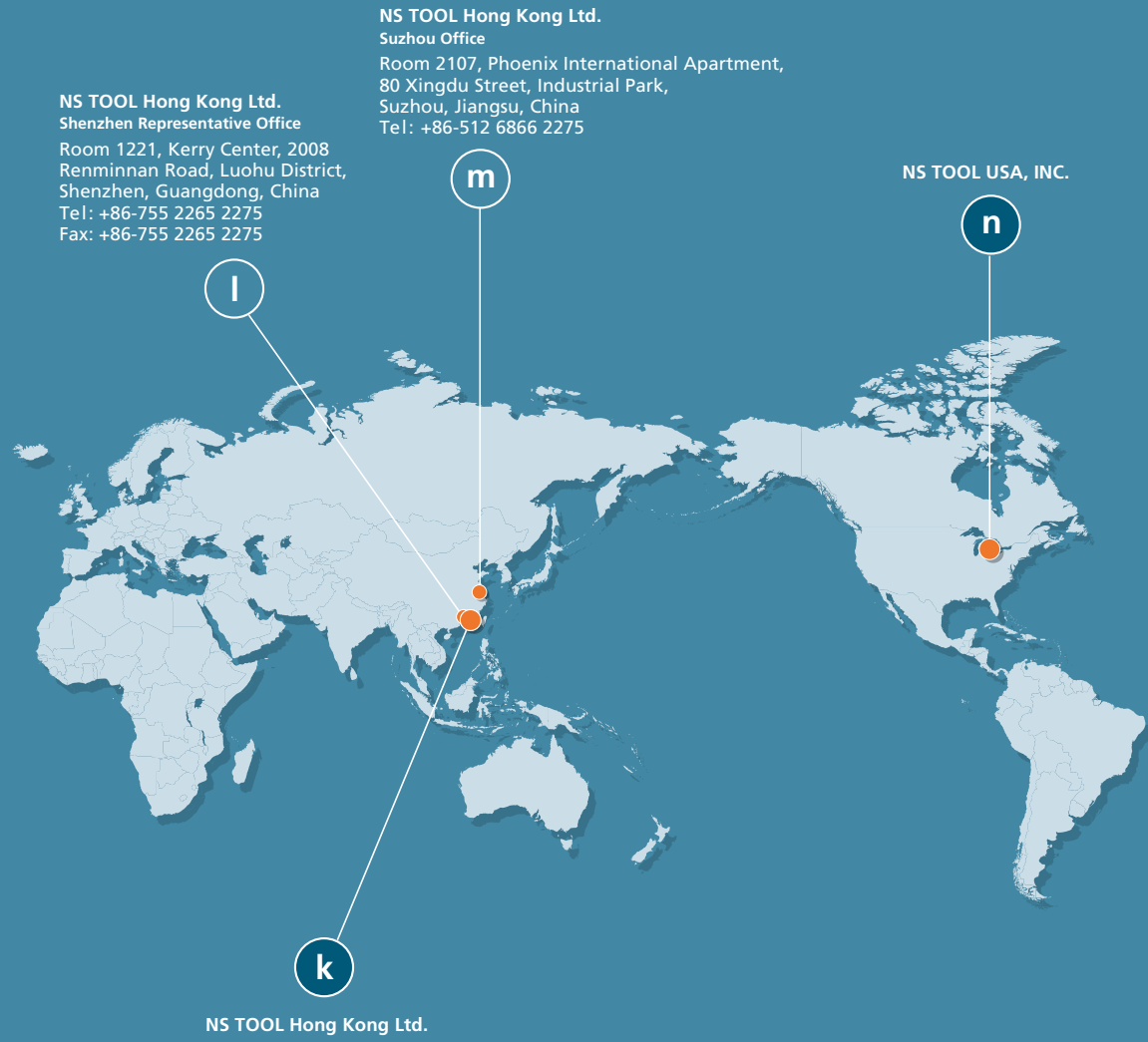


Niigata Factory
252 Yoshida, Uonuma-shi, Niigata 946-0075, Japan
Tel: +81-25-792-1927 Fax: +81-25-792-2414
Business lines
Manufacture of cutting tools

j Makino Industry Co., Ltd.



Headquarters and Main Factory
103-1 Tsurukoyama, Shirasaka, Shirakawa-shi, Fukushima 961-0835, Japan
Tel: +81-248-21-8971 Fax: +81-248-21-8972
URL: <https://makino-kg.co.jp>
Business lines
Development, manufacture and sale of plastic molded products, mainly tool cases



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Shenzhen Representative Office
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NS TOOL Hong Kong Ltd.
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Room 2107, Phoenix International Apartment, 80 Xingdu Street, Industrial Park, Suzhou, Jiangsu, China
Tel: +86-512 6866 2275

k NS TOOL Hong Kong Ltd.



Headquarters
Suite 1001-02, 10th Floor, Kowloon Centre, 33 Ashley Road, Tsim Sha Tsui, Kowloon, Hong Kong
Tel: +852 2736 8686 Fax: +852 2736 0070
URL: <https://www.ns-tool.com.cn>
Business lines
Sale of cutting tools, inventory center

n NS TOOL USA, INC.



Headquarters
2265 Star Ct., Building #3, Rochester Hills, Michigan 48309, USA
Tel: +1-248-829-1960
URL: <https://us.ns-tool.com/en>
Business lines
Sale of cutting tools, inventory center

Value Creation Process of NS TOOL Group

"Monozukuri" means manufacturing in Japanese.

— Unlock the dreams and possibilities of *monozukuri* —

In order to support the precision and micro-machining technologies essential for manufacturing electronic and precision parts, which Japanese *monozukuri* is best at, our Group challenges technologies, quality and services beyond other companies' reach and has been restlessly working to create new added value.

As a group specializing in small-diameter tools, we boast the top share in Japan in the field of small-diameter cemented carbide end mills, and maintain a high profit margin and a thorough debt-free management.

NS TOOL Group (Fiscal year ended March 31, 2024)

Specialized in small-diameter tools

Net sales **¥9.0 billion**
(Ratio of small-diameter tools: 79.1%)

Ordinary profit **¥1.9 billion**

Profit attributable to owners of parent **¥1.3 billion**

Solid financial base

Total assets **¥19.2 billion**

Shareholders' equity **¥17.5 billion**

Equity ratio **91.1 %**

Cash and deposits **¥8.8 billion**

Elite specialists in small-diameter tools

Employees **350**
Of which, 32 development personnel

Abundant and excellent products

Material × Type × Coating = Approx. **10,000** types

Intellectual property owned

Acquired patents, etc. **44**

Awards received

Ministry of Economy, Trade and Industry
Global Niche Top Companies Selection 100 (2020)

Monozukuri Nihon Conference, The Nikkan Kogyo Shimbun, Ltd.
Grand Award of Super MONOZUKURI Innovative Parts and Components Awards: (2011)(2012)(2014)(2015)(2016)(2019)(2020)(2021)(2022)(2023)
Received 10 times

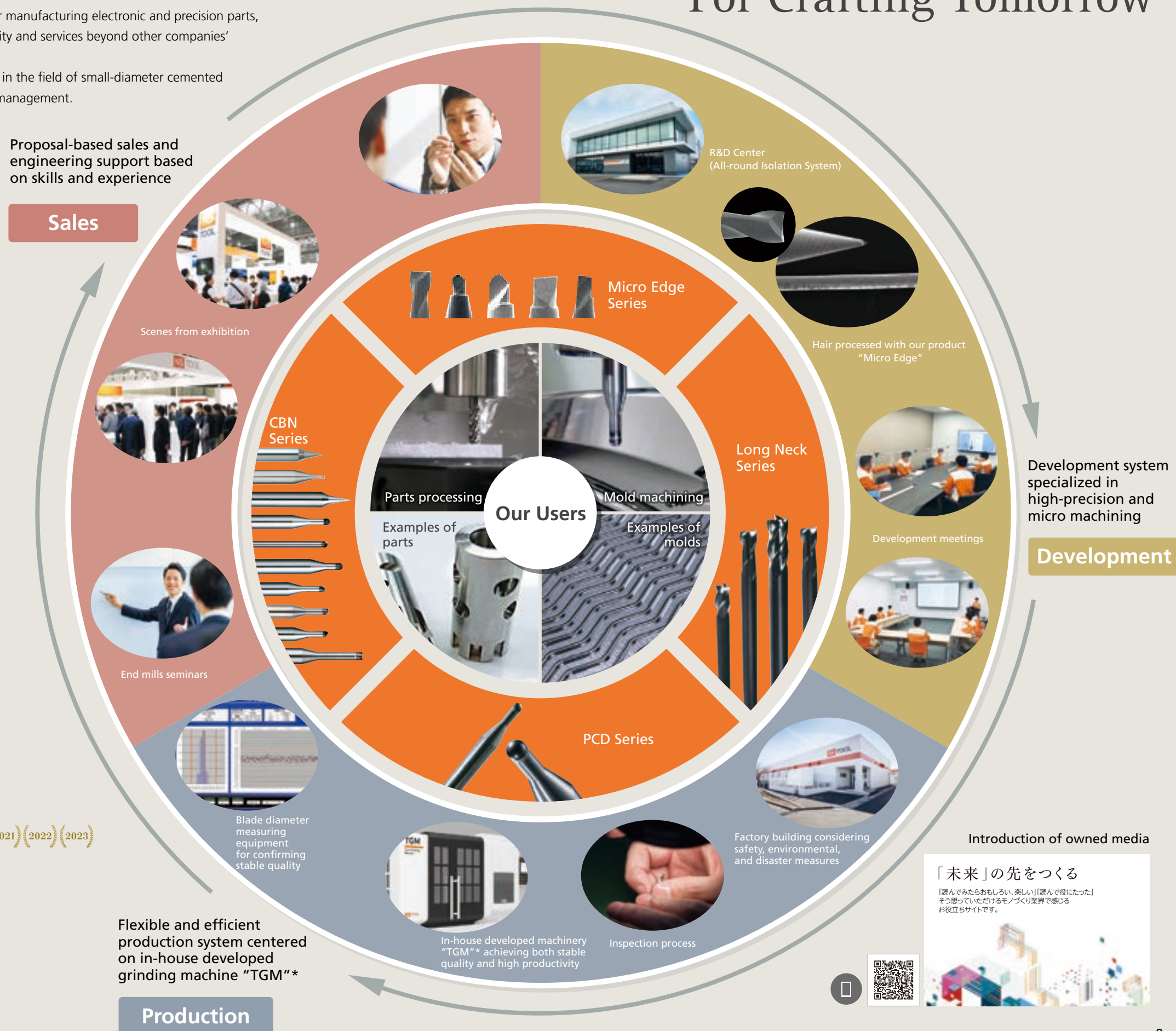
News Digest Publishing Co., Ltd.
ND Marketing Awards (2014)

Ministry of Economy, Trade and Industry, etc.
Monozukuri Japan Award: Received twice (2005)(2013)

Japan Cutting & Wear-resistant Tool Association
Environmental Special Award (2022)

Resources for creating added value

For Crafting Tomorrow



*TGM: Tool Grinding Machine

“Creating New” — End Mills that Contribute to Society’s

Development —

What are end mills?

End mills are cutting tools attached to a machining center for cutting and processing metals such as steel, stainless steel and aluminum. End mills are capable of a wide variety of millings, such as holes, grooves, planes and three-dimensional curved surfaces. End mills are used for processing molds and parts.

Small-diameter end mills with a diameter of 6mm or less, the flagship products of NS TOOL, are most suitable for precision and micro machining. Small-diameter end mills are used by over 5,000 companies, ranging from major manufacturers to small and medium-sized ones.



End mills



Machining center



Milling process



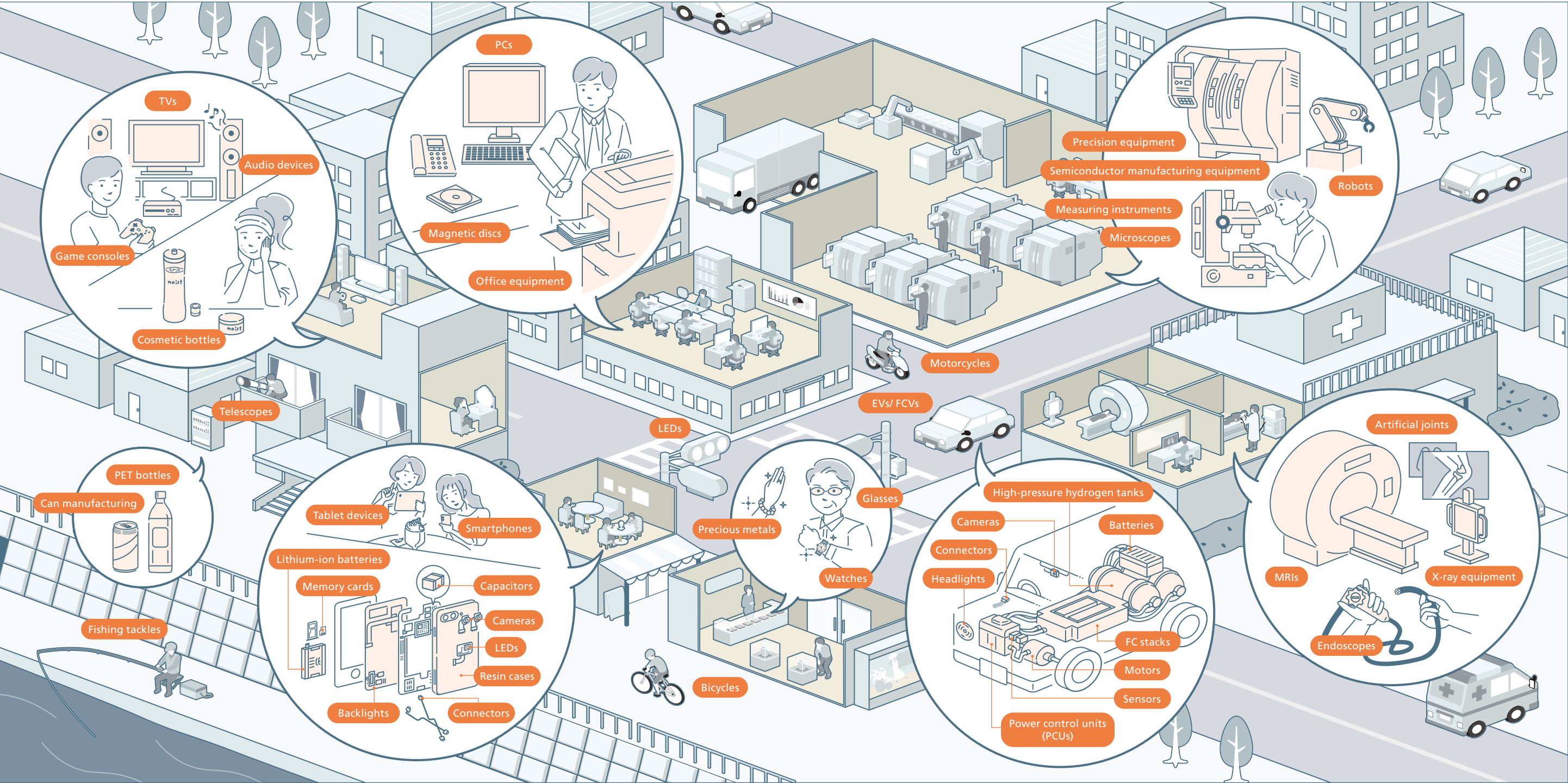
Mold machining



Parts processing

End mills are attached to a machining center and milling materials.

Machining with small-diameter end mills helps produce many products



Message from the President

By developing human resources
“For Crafting Tomorrow,”
we will demonstrate our distinction
from competitors and lead the field in
precision and micro machining.



Hiroji Goto
President

Review of business activities in
FY3/24

In Japan, economic activity has returned to normal as restrictions on activities related to COVID-19 have been lifted. However, the economic recovery has been slow due to factors such as high prices for raw materials and energy, ongoing geopolitical issues that include the protracted situation in Ukraine and the situation in the Middle East, and the slowdown in the Chinese economy. In this environment, according to the statistics from the Ministry of Economy, Trade and Industry, the production of cemented carbide tools, the core field of the business of the Company group (the “Group”), amounted to ¥291.7 billion in 2023, a decrease of 4.5% year on year and cemented carbide end mills accounted for ¥52.0 billion, a decrease of 3.2%.

As for the situation of the major consumers for the products of the Group, production volumes picked up in the automotive industry due to the resolution of shortages of semiconductors and parts, but there was no significant improvement in demand for tools for molds. In addition, industries related to semiconductor and electronic components and devices remained sluggish overall as demand for smartphones, PCs and similar products continued to decline. In overseas markets, the impact of the global economic slowdown and the U.S.–China conflict led to a significant decline in sales, to Greater China in particular.

When we announced our second-quarter financial results, we had to revise our consolidated financial forecasts

downward, causing concern to our shareholders and other stakeholders. Reasons for the lower-than-expected financial performance included changes in the demand structure in the automotive market due to the acceleration of the global shift to EVs as well as the fact that the recovery in demand for tools, which was factored into our initial forecasts, was delayed more than expected due to the certification fraud issue by a major Japanese automaker that was uncovered toward the end of 2023.

In this business environment, the Group actively participated in various exhibitions, both large and small, and also held our own original technical seminars, among other activities. In addition, in May 2023 we launched owned media site “For Crafting ‘FUTURE’” as an entry point to develop new users and introduce people who are new to our products, and began delivering a variety of informative columns written by people who are passionate about manufacturing. In addition to our owned media, we are also updating and expanding our corporate website, and are strengthening our communication platform to provide more useful information to users who come into contact with the Group through various entry points.

- For details about our exhibits, seminars, owned media, etc., please see the following:
- P. 19–20: Introduction to “Seminar for 5-Axis Precision and Micro Machining”
 - P. 24: Exhibits at EMO (Germany) and MECT (Nagoya)
 - P. 45: Introduction to Web Contents

In anticipation of a full recovery in demand for tools, we have accelerated new product development in FY3/24.

New

CBN Micro 2-Flute Ball End Mill
SMB200 *New*
Size: R0.01 ~ R0.25 Total 7 sizes
Ultra micro end mill with high accuracy specification.

MUGEN COATING PREMIUM
High Efficiency Lens Form 3-Flute End Mill
MLFH330 *New*
Size: $\phi 1 \times R1$ ~ $\phi 6 \times R8$ Total 7 Sizes
Realizes large pick feed even with small size diameter. Specialized lens form 3-flute end mill improves productivity compared to ball end mills.

High Efficient 3-Flute Corner Radius End Mill for Aluminium L/D=3
AL3D-345R *New*
Size: $\phi 2 \times R0.2$ ~ $\phi 12 \times R2$ Total 39 Sizes
Realize no chattering and high efficiency even with high feed rates.

MUGEN COATING PREMIUM
2-Flute Long Neck Ball End Mill for Hardened Steel
MRBH230 *Lineup Expansion*
Size: R0.05 ~ R3 Total 334 Sizes
Support machining from prehardened steel to hardened steel (~ 65HRC). Abundant size variations with total 334 sizes.

MUGEN COATING PREMIUM Plus
2-Flute Long Neck Ball End Mill with Short Shank for Hardened Steel and High accuracy cutting
MRBSH230SF *Lineup Expansion*
Size: R0.05 ~ R3
High precision and long tool life even for hardened steel up to 70HRC.

MUGEN COATING PREMIUM
4-Flute Long Neck Corner Radius End Mill
MHRH430R *Lineup Expansion*
Size: $\phi 0.1 \times R0.01$ ~ $\phi 6 \times R1$ Total 450 Sizes
Support machining from prehardened steel to hardened steel (~ 65HRC). Abundant size variations with total 450 sizes.

Mugen Coating Premium Plus
4-Flute Square End Mill for Hardened Steel
MHDSH445 *Lineup Expansion*
Size $\phi 1$ ~ $\phi 4.5$ Total 22 sizes
High rigidity tool design suppresses deflection and realizes long tool life on machining 70HRC hardened steel.

Mugen Coating Premium Plus
6-Flute Square End Mill for Hardened Steel
MHDSH645 *Lineup Expansion*
Size $\phi 5$ ~ $\phi 6$ Total 8 sizes
High rigidity tool design suppresses deflection and realizes long tool life on machining 70HRC hardened steel.

PCD Ball End Mill
PCDRB *Lineup Expansion*
Size: R0.05 ~ R3 Total 15 Sizes
Size expansion R0.15, R0.25. Capable to machine nano level surface roughness, and minor finishing.

Message from the President

In terms of products, we launched a new product, “SMB200” CBN Micro 2-Flute Ball End Mill, which has a significantly improved tool life compared to conventional products because of its 2-flute design. This product received an Encouragement Award at the 20th/2023 Super MONOZUKURI Innovative Parts and Components Awards sponsored by the MONOZUKURI Nihon Conference and The Nikkan Kogyo Shimbun, Ltd. In anticipation of a recovery in tool demand, we made efforts to further strengthen and enhance our product lineup. In addition to new products that adopt 3 flute for improved machining efficiency, such as “MLFH330” High Efficiency Lens Form 3-Flute End Mill and “AL3D-345R” High Efficiency 3-Flute Corner Radius End Mill for Aluminum L/D=3, we also added over 270 sizes in a major expansion of our existing flagship products, including “MRBH230” and “MRBSH230SF” 2-Flute Long Neck Ball End Mills, “MHRH430R” 4-Flute Long Neck Corner Radius End Mill, “MHDSH445” 4-Flute Square End Mill, “MHDSH645” 6-Flute Square End Mill, and “PCDRB” PCD Ball End Mill for mirror surface machining.

In terms of production, to counter rising costs of raw materials and electricity, the Group continued to work on improving production efficiency and reducing costs through “Orange FC Activities” (QC activities conducted in small groups) centered on Sendai Factory. Furthermore, in line with the promotion of improved production efficiency, we have expanded our wide range of inventory through proper-quantity production of various types of products.

As a result, consolidated net sales decreased by 6.4% year on year to ¥9.04 billion, and consolidated ordinary profit decreased by 10.5% to ¥1.90 billion (ordinary profit margin: 21.1%).

Business environment outlook for FY3/25 onward

In the fiscal year ending March 31, 2025, we expect that the recovery in production in the automotive industry, which is a key industry in Japan, will spill over to demand for tools for molds, leading to an increase in demand for the Group’s products. In the fiscal year ended March 31, 2024, we suggested that our distributors increase their inventory strategically, since we recognize that inventory levels in the market as a whole are low. For this reason, we expect that there will be a temporary supply shortage when demand for tools fully recovers. The Group believes that avoiding loss of sales opportunities is extremely important in the next demand cycle, and will continue to focus even more on thoroughly securing inventory and improving the product supply system.

In addition to the shift to electric vehicles (EVs), hybrid vehicles (HVs) and fuel cell vehicles (FCVs) and advanced driver assistance systems (ADAS), it is expected that miniaturization will continue in manufacturing processes for sensors, IoT, electronic components for smartphones, and in the medical and defense equipment fields. In these fields, focusing on supporting users who aim to develop products that meet new needs will lead to the creation and expansion of the precision and micro-machining market, which will ultimately lead to an expansion of the market for our products. In addition to supplying tools, we will participate in the product development of our users from an early stage. Along with promoting our products, those activities will further strengthen our efforts to develop new products with high added value.

Looking ahead to the fiscal year ending March 31, 2025, I have reaffirmed to the entire Group the vision and goals that we are all striving to achieve. Specifically, we will contribute to Japanese *monozukuri* by supporting precision and micro machining through cutting with small-diameter tools. To put this into practice, we have reorganized our management policies into the following three points: (1) Specializing in small-diameter tools, refining how we develop and manufacture them, and selling them; (2) Growing in line with the expansion of the market; and (3) Focusing on and pursuing our “distinction” from competitors rather than scale. In particular, “distinction” is at the core of our business strategy. By building up “distinction,” we will strive to establish a compelling presence in the market.

Taking these factors into account, consolidated net sales in the fiscal year ending March 31, 2025 are expected to rise 4.3% year on year to ¥9.43 billion. Factoring in the ongoing rise in material prices, electricity costs and wages consolidated ordinary profit is expected to decrease 8.8% to ¥1.74 billion (ordinary profit margin: 18.5%).

Promoting sustainable business through human resources development

Over the past few years, the Group’s business activities have been significantly affected by a series of unexpected events, including not only COVID-19 but also the shift to EVs, soaring prices of raw materials and energy, and supply chain disruptions. However, even under these circumstances, the Group has remained committed to maintaining employment and not cutting its workforce. To the contrary, the Group has been focusing on developing and strengthening its education system to support sustainable growth by developing human resources “For Crafting Tomorrow.”

We have developed a training program, the Ishikawa training school (the name is derived from the person in charge of education), for on-site education in manufacturing, at which we educate human resources according to our own in-house training curriculum. New employees attend the intensive training program at the Ishikawa training school for the six months after joining the Company, enabling them to immediately contribute to the work site to which they are assigned. The Ishikawa training school was started out of concern that the conventional one-on-one learning format, where you learn on the job from more senior workers, could lead to various gaps in knowledge and insight, which could in turn lead to stagnation in productivity across the Company. The success of the Ishikawa training school has inspired the Sales Division to pursue a similar organizational initiative to develop human

resources at its own unique training program for six months after joining the Company. Technical training for mid-level sales employees was also launched in 2023.

The Group has not changed its view that the precision and micro-machining market is on a growth trend over the medium to long term. In 2024, the economy is expected to pick up steam, particularly in the automotive industry. The Group, which has been striving to develop and strengthen its human resources during difficult times, is ready to respond more quickly and effectively than ever, including the rapid ramp-up of production once the economy recovers. In the fiscal year ending March 31, 2025, we intend to seize this major turning point in the market and work together throughout the Group to drive business growth.

Alongside human resources development, promoting sustainable business is another important management theme for the Group. We specialize in small-diameter tools and strive to develop high value-added products with high-precision, long tool life and multifunctionality—in other words, eco- and human-friendly products, produced by minimal resources and energy. I believe, up to the present and from now on, that our Group’s business itself contributes to an eco- and human-friendly production system and that is the very origin of our social contribution.

Going forward, by developing human resources “For Crafting Tomorrow,” the Group will continue to build up “distinction” to expand our users’ markets, and ultimately to contribute to Japanese-style manufacturing. I would like to ask all of our stakeholders for their continued support for our Group, which aims to achieve sustainable growth “For Crafting Tomorrow.”

Summary of financial results for FY3/24 and financial forecast for FY3/25

Unit: ¥ million	FY3/23 Actual	FY3/24 Actual	YoY Changes	FY3/25 Forecast/Plan	YoY Changes
Net sales	9,656	9,040	-6.4%	9,430	+4.3%
Operating profit	2,108	1,867	-11.4%	1,730	-7.4%
Ordinary profit	2,131	1,908	-10.5%	1,740	-8.8%
Profit attributable to owners of parent	1,475	1,320	-10.5%	1,190	-9.9%
R&D expenses	422	409	-3.1%	—	—
Capital investment	686	563	-18.0%	454	-19.3%
Depreciation	669	627	-6.3%	691	+10.2%
EPS	¥59.16	¥53.03	-10.4%	¥47.89	-9.7%
DPS	¥22.50	¥27.50	22.2%	¥30.00	+9.1%
Dividend payout ratio	38.0%	51.9%	—	62.6%	—



Takashi Goto
Senior Executive Vice President, in charge of production/development

We will continue to encourage employees to take on challenges without fear of failure in pursuit of manufacturing “For Crafting Tomorrow.”

Creating spare capacity and using it to generate the next “distinction”

As production volume in the fiscal year ended March 31, 2024 fell short of expectations, we made efforts to improve efficiency by streamlining and reorganizing production lines utilizing the spare capacity of our production facilities. At Sendai Factory, we frequently change the factory layout, moving the machinery ourselves when necessary, in pursuit of optimization of the production equipment to match production volume in every process. At the moment, we have deliberately put some machines in rest, and are trying to improve efficiency by making the best use of the remaining machines, which has led to new discoveries on how to eliminate waste. Once production volume increases, the machines in rest can be put into service immediately, enabling a rapid ramp-up of production. Our strength lies in the fact that we have in-house capabilities covering everything from maintenance to overhaul, as well as a wealth of knowledge about troubleshooting, which enables us to build a flexible and smooth production system according to the circumstances at any given time.

We are very focused on pursuing our “distinction” from competitors. This “distinction” refers to those things that our competitors do not have and that we can use to compete against them. Competing with other companies using the same methods and products is not “distinction,” it is merely “difference.” We are currently working on creating

the next “distinction” that will be generated by utilizing the spare capacity of our facilities. One example is our cost reduction initiative that sets numerical targets for the production cost per tool. This is a challenge aimed at further precision improvement while shortening setup and processing times to reduce person-hours. We take on this challenge through “Orange FC Activities” (our Group’s QC activities in small groups), and provide a forum where each group at the production site can give a presentation of their findings and share information among participants.

Initiatives toward the ultimate manufacturing

I am proud to say that our commitment to “Provide high-performance products that are stable and uniform!” as clearly stated in our Manufacturing Action Guidelines has evolved to a highly advanced level. As we move on to the next step, I strongly feel that we are approaching a stage where our true strength will be put to the test. That’s why I wonder every day how to create an environment where employees at our manufacturing sites can take on challenges without fear of failure.

The section 2 of our Manufacturing Action Guidelines says, “2. Challenge the ultimate manufacturing!” In accordance with this section, we aim for “zero tolerance,”

and manufacture products with greater accuracy than what is specified on the drawing. Our quality control is extremely strict. To ensure stable, uniform high quality, even tolerances that are acceptable under normal use are considered “defective” according to our in-house standards. Naturally, the pressure on our manufacturing sites is considerably high. However, relaxing these standards would mean that our manufacturing philosophy would no longer be “Challenge the ultimate manufacturing!” Even if a product is deemed “defective” according to our internal standards, rather than placing blame, we aim to build a system that values pursuing and sharing the cause, which should lead to improvement and continuous evolution.

As part of that effort, we have been actively working on the development of automated measurement machines. We independently developed Tool Grinding Machine (TGM), which is our main production machine for small-diameter tools, and are continuously working on further improvements. We also make our own modifications to most of the equipment we procure from other companies. By incorporating measuring machines developed in-house and automating the manufacturing process, we hope to further evolve our manufacturing while reducing the burden on our manufacturing sites.

An unexpected by-product of the Ishikawa training school

Our training program for on-site education, the Ishikawa training school (the name is derived from the person in charge of education), educates human resources according to our own in-house training curriculum. New employees attend the intensive training program at the Ishikawa training school for six months after joining the Company. They are then assigned to the manufacturing site. Thanks to this program, they play active roles right after the assignment.

As an additional unexpected by-product, this initiative has also improved the retention rate of new employees. Since the launch of the Ishikawa training school, there have been very few new employees who have quit. During the six months at the Ishikawa training school they are able to concentrate on learning the fundamentals and skills of manufacturing without being distracted by interpersonal relationships at work. Moreover, it’s a teacher, not their boss, who trains them. Even after being assigned to a site, they can still consult with their teachers about any questions or concerns they may have. The by-product of creating this environment where employees can learn the job and ask for advice has been higher employee retention rates. The result

is a virtuous cycle in which the number of people seeking internships has increased, thereby securing the next generation of talent. Currently at the Ishikawa training school, we have strengthened training for using actual machines by removing several machines that were used in the production line and repurposing them for educational use. The spare capacity in manufacturing has been made useful in the site of human resources development.

Our Development Division has been equipped with the same types of machining centers as our users use, and tests our tools in the same environment. To make proposals to users, our own experience is essential. Otherwise, I don’t think it would be possible to improve the machining accuracy. By actually using our own tools, we can experience what kind of phenomena occurs on-site, which can change the way we perceive our own work. It also helps us understand the criteria that users who purchased our products will consider good and make new discoveries. In the future, we plan to expand the scope of education at the Ishikawa training school to include machining using tools the trainees have made themselves. For employees who joined the Company before the Ishikawa training school opened, we would like to improve their skills and make them multiskilled by developing the curriculum in a format where they can go to relearn skills.



Training session at the Ishikawa training school

Toward proposals that go beyond individual products

We hold technical exchange meetings, which are conducted in the form of remote (online) exchanges of ideas between user engineers and our development personnel. In the meetings, we explain our products and hear the needs of the manufacturing front line, and these opportunities have been well received by participants. Receiving various inquiries

from users is a good opportunity to grasp the needs of the market, and we try to utilize this information in the development of new products.

For example, we conduct machining tests that can last well longer than a workday, but you can't stop the test halfway or you would need to restart from the beginning the next day. To solve this problem, we developed our own automated monitoring device. When we unveiled it at a technology exchange meeting, we learned that there was a high demand for it at our users' sites, so we are now considering commercializing it for sale to the public. In this way, the scope of information exchange is expanding beyond the technical aspects of tools to include the environment in which they are used.

Another example of collaboration concerns the high hardness materials such as CBN (cubic boron nitride) that we use in our tools. Looking ahead to future product evolution, we determined that it would be difficult to develop products using commercially available whetstones, so we decided to collaborate with a manufacturer to develop our own proprietary whetstones and produce them in-house. Furthermore, with the aim of realizing environmentally friendly production, we are currently working with several companies to develop returnable material boxes that utilize recycled materials such as resin. Now that the prototype is finally ready, we will complete the returnable material boxes and start using them to reduce our use of packaging materials. We will continue to take on the challenge of improving the efficiency of the manufacturing environment, including not only tool products but also peripheral equipment, and improving every process of manufacturing.

Manufacturing supported by a spirit of challenge

Our manufacturing "For Crafting Tomorrow" depends on a spirit of challenge. Having a curious mind, not being afraid of failure and never giving up will help you overcome obstacles. Even if you fail, instead of casting blame, think about what you can do to avoid repeating the same mistake. It is important to thoroughly face this thought process and connect it to the next improvement. The person who failed is a pioneer who took the initiative to tackle a failure that someone else might have made. I would like to create an atmosphere where employees respond to failure by saying, "Nice try!"

In a company where employees are afraid of failure and never take on challenges, they are simply doing "tasks" and not "work." While it is premised that the goal of a challenge is success, I see failure as part of the work. This is because I believe that employees grow by learning from failures and improving through reflection and correction, which leads to the growth of the Company. As information technology advances, "tasks" may be taken over by robots and AI, but "work," which is based on will and thought, will remain.

I myself have made many mistakes, but by facing the mistakes and overcoming them instead of giving up, I have been able to see that the mistakes were not such a big deal after all. That's what I call progress. I want us to be a company where all of our employees can fully demonstrate their spirit of challenge, and I believe this will lead to manufacturing "For Crafting Tomorrow," which is what we are pursuing.



Returnable material boxes made from reused waste materials currently under development

The history of manufacturing supporting today's NS TOOL

1970s	1972	<ul style="list-style-type: none">• Installs NC machinery made by U.S. Unison Corporation for the first time in Japan.• Enters into mold industry with "Power End Mill," the first in-house brand end mill with unequal spacing 3-flute using high-speed steel.<ul style="list-style-type: none">→ "Nisshin of Power End Mills" takes root.
1980s	1982	<ul style="list-style-type: none">• Launches "Cemented Carbide Solid End Mill Power End Mill."
	1985	<p>Enters into the automotive mold industry.</p> <ul style="list-style-type: none">• Installs CNC-based universal tool grinding machine manufactured by U.S. Hoffman Group, which was used in the U.S. aircraft industry, for the first time in Japan.
	1986	<ul style="list-style-type: none">• Installs CNC-based universal tool grinding machine manufactured by German WALTER.• Launches "NHR-2 carbide solid deep rib end mill" for the industry-first rib grooves milling for plastic injection molds.
1990s	1994	<p>Declaration of specialization in small-diameter tools. (NS TOOL defines "small-diameter" as end mills with a diameter of 6mm or less.)</p> <ul style="list-style-type: none">• Installs CNC-grinding machine manufactured by Rollomatic SA, a major Swiss manufacturer of small-diameter cemented carbide end mills, for the first time in Japan.
	1996	<ul style="list-style-type: none">• Installs "MASAMUNE," an original CNC machine for manufacturing small-diameter cemented carbide end mills.
	1997	<ul style="list-style-type: none">• Launches cemented carbide end mills "MUGEN COATING Series." (Original coating with excellent wear resistance and lubricity using TiAlN coating.)
2000s	2003	<p>Terminates production of high-speed steel end mill "Power End Mill."</p> <ul style="list-style-type: none">• Launches "CBN Super Finish Ball End Mill." (Standardizing the small-diameter end mills using cBN for high-precision mold for the first time in the world.)• Launches "MUGEN COATING Power 'Z' end mill." (Enabling the process from plunging to grooving without stepping)
	2005	<ul style="list-style-type: none">• Launches a tool for super micro milling "Micro Edge." (Standardizing up to ϕ 0.01 with the square end mill for the first time in the world.)
	2006	<ul style="list-style-type: none">• Develops in-house Tool Grinding Machine "TGM." (CNC tool grinding machine for mass production of micro tools automates tool measurement and transfer, enabling unmanned operation.)
	2007	<ul style="list-style-type: none">• Starts in-house coating production, industry's first in-house production of product storage cases, and re-grinding business for CBN small-diameter end mills.• Launches "MUGEN COATING PREMIUM 2-Flute Ball End Mill for Hardened Steel." (Upgrade MUGEN COATING, dramatically increasing tool life even in direct milling of high hardness materials.)
	2008	<ul style="list-style-type: none">• Launches "Micro Drill Series." (Standardizing up to ϕ 0.01 with the drill for the first time in the world.)
	2009	<ul style="list-style-type: none">• Establishes new Manufacturing Center. (Current NS Engineering Co., Ltd. Headquarters and Main Factory)
2010s	2012	<ul style="list-style-type: none">• Launches "NS-MicroCAM." (CAD/CAM system specialized for precision and micro machining developed by a tool manufacturer.)
	2013	<ul style="list-style-type: none">• Launches "PCD Ball End Mill." (For mirror-like finished surface of hardened steel materials.)
	2018	<ul style="list-style-type: none">• Launches "DLC Coating Ball/Radius/Square Long Neck End Mill for Copper Electrode."
	2019	<ul style="list-style-type: none">• Launches "High Efficient 'Z' End Mill Series." (By adopting unique design, enabling high-efficiency machining exclusively for stainless steel and carbon steel materials.)
2020s	2020	<ul style="list-style-type: none">• Completes Sendai Factory R&D Center.• Launches "MUGEN COATING PREMIUM Plus." (Develops multilayer coating enabling cutting up to 70HRC.)• Launches "CBN 4-Flute Radius End Mill." (Adopting a new edge profile that reduces milling resistance, improving machining accuracy and speed.)
	2021	<ul style="list-style-type: none">• Launches "Ball End Mill for 5-Axis Machining."• Launches "MUGEN COATING PREMIUM Plus 3-Flute Long Neck End Mill." (Enabling high cutting and delivering.)
	2022	<ul style="list-style-type: none">• Launches "MUGEN COATING PREMIUM Plus Long Neck Radius End Mill." (Realizing mirror-like finish on the bottom surface.)• Launches "MUGEN COATING PREMIUM Plus Square End Mill." (Increasing the product tool life with the high hardened steel up to 70HRC.)• Expands the specifications of "PCD Ball End Mill." (Adding R1.5-3 to the lineup.)
	2023	<ul style="list-style-type: none">• Launches "High Efficient Corner Radius End Mill for Aluminum" (3-Flute L/D=3).• Launches "MUGEN COATING PREMIUM High Efficiency Lens Form 3-Flute End Mill."

• Manufacturing infrastructure-related • Product development-related



Takashi Goto gave the opening remarks.

Satoshi Chida and Yoshinori Ichikawa from the R&D Department lectured at the seminar on precision and micro machining.

We conducted a factory tour and explained our passion for quality.

The three-day event in October 2023 was attended by 156 users and the one-day event in February 2024 was attended by 56 users.

In October 2023, we held our first “Seminar for 5-Axis Precision and Micro Machining.”

Satoshi Chida
Manager, R&D Section,
R&D Group,
R&D Department

Joined NS TOOL in 2005. A dedicated member of the R&D Department involved in the development of many new products. Current duties in the R&D Section include performance evaluations of tools used in cutting.

At the seminar, I gave a lecture titled “How to use a 5-axis MC as a means to perform precision and micro machining.” My initial impression was that it was difficult to achieve accuracy with a 5-axis MC. However, when we installed the latest 5-axis MC and actually used it, we saw that the accuracy had significantly improved, and that this is an effective means for precision and micro machining. For example, because a 5-axis MC can be tilted, tools with short length of cut and under neck lengths can be used. Compared to longer tools, the tool rigidity is higher, making it less likely to tip over, which leads to higher precision machining. In the R&D Section, we have been using the latest 5-axis MC to build up our knowledge and know-how.

In planning this lecture, I wanted to give users a more concrete idea of what 5-axis machining is. It’s easy to visualize 3-axis machining because it unfolds in three directions: X, Y and Z. However, because 5-axis machining involves rotation and tilt, it can be difficult to visualize. My goal therefore was to make it easier to visualize 5-axis machining by introducing concrete examples in patterns, such as how to use the 5-axis MC according to machining shapes and the techniques used for 5-axis machining.

The content and materials for the presentation were created over a period of about four months by members of the R&D Department who met daily and went through repeated trial and error. As a tool manufacturer, we wanted to introduce tools specialized for 5-axis machining, but we haven’t reached that

point yet. Before we are able to make specific proposals to users, we are going to need to take a closer look at the wear caused by machining on a 5-axis MC and how the characteristics of 5-axis machining affect what happens to the tools. Now that we have an environment in place to automatically monitor tool phenomena and collect the data, we hope to put this to practical use and use it in the development of new tools.

COVID-19 led to fewer opportunities to interact with our users, but this seminar provided us with an opportunity to exchange opinions directly with them, and I’m grateful for the inspiration it provided. We will strive to provide added value by supplying, in addition to the tools themselves, tool-related information such as their requirements for use and how to use them, so that we can contribute to our users’ precision and micro machining by helping them use our tools more effectively. In addition to seminars, we also plan to hold technical exchange meetings with users to listen to their concerns and problems and use this information in the development of future products.

Yoshinori Ichikawa
Sub Leader, R&D Section,
R&D Group,
R&D Department

Joined NS TOOL in 2006, and after worked in tool manufacturing at Sendai Factory for one year. Accumulated machining knowledge by working in the Sales Engineering Section on tool performance experiments. After working as a salesperson, has been involved in new product development in the R&D Department since 2021.

In the lecture, I was in charge of the part titled “Proposals for practical precision and micro machining utilizing small-diameter end mills.” Our users are using their machining centers in their daily work, and they often do not have the time to perform the desired tests and checks even if they wanted to. Therefore, we wanted to hold a seminar where we could test the machining that our users have been wanting to test and learn about in their daily work, quantify it, and provide information on what is important and what they should pay attention to.

All of the experiments and tests presented in the seminar were conducted starting from scratch specifically for this seminar. I had conducted tests with certain expectations in mind, but the results did not go as planned. Therefore, I needed to conduct many more experiments and tests than I had anticipated, including repeated trial and error. It took about four months of preparation, including exploring how to create materials that would be easy for users to understand.

I received feedback from users who attended the seminar, saying it was very informative and educational, which gave me a sense of accomplishment. On the other hand, I also received feedback that there wasn’t enough time allotted for the demo machining and technical consultation sessions held at the R&D Center, so I would like to hold a follow-up on another occasion, such as technical exchange meetings.

Demand for precision and micro machining is expected to increase in the future. In addition to our existing users, there

will be new companies entering this field. Our growth will be tied to the success of various users using our end mills for machining and our ability to provide high-added-value products to increase our users’ corporate value. To build and maintain a win-win relationship, it is essential to share information, and I believe this needs to be further strengthened from now on. I also feel that it is becoming more important than ever to exchange information with users from a wide range of industries.

Our R&D Center is equipped with 18 cutting-edge machining centers. This environment gives us the advantage of being able to tackle issues together with our users and make proposals from their perspective. In addition to product development, what will lead to stronger sales of our products is showing our users data-driven results that lead to solutions to the problems and questions they have, or tests that they would like to carry out but cannot. With “high precision and high efficiency” as our keyword, which will become even more important in the future, we will increase opportunities to share information with our users and contribute to improving their productivity and quality.

We interviewed three Sub Leaders who oversee the manufacturing site at Sendai Factory about their thoughts on human resources development and team building.



Mika Komaba

Sub Leader, Factory Control Section, Production Control Group, Production Department

Joined NS TOOL in 1998 after working in sales administration at a trading company. Responsible for general affairs, purchasing and maintenance in the Factory Control Section of Sendai Factory. Has been serving as a Sub Leader since 2020.

When I joined NS TOOL, I had the impression that it was a company with a good atmosphere that embodied the company motto of “MEI-RAKU-SO (Cheerful, Comfortable and Creative).” Based on our company motto, as a Sub Leader, I try to create a cheerful atmosphere. To achieve this, I feel it is first necessary for me to develop myself into someone capable assuming the role of Sub Leader. I am always mindful of how I should act in order to make it easier for all members to express their thoughts and opinions. Every morning, I confirm the schedule of the members, actively engage with them, and strive to create a workplace environment where it’s easy to ask for advice and share information. By promoting positive communication, I want to enhance team unity and motivation, build trust and unite the team toward our goals.



Ryo Oikawa

Sub Leader, Manufacturing Section-3, Manufacturing Group, Production Department

Since joining NS TOOL in 2013, has been consistently assigned to the Production Department. Currently, mainly in charge of improvements in the department responsible for machining cutting edges for the TGM. Has been serving as a Sub Leader since 2021.

I am currently involved in developing a function that automatically modifies the shape and diameter of the cutting edge to improve the machining efficiency of our proprietary tool grinding machine, TGM, which handles a variety of machining. In the future, I would like to work on automating production planning on the TGM. The most important thing to keep in mind when building a team is how to increase motivation. The team has members with various areas of expertise. By leveraging each individual’s area of expertise and effectively combining members, we were able to successfully implement the current improvements. I believe that a leader needs to have the perspective to plan the overall picture and decide who is responsible for what based on an understanding of each employee’s individuality so that they can demonstrate that individuality in their work. I approach my daily work with this in mind.



Minami Takahashi

Sub Leader, Manufacturing Section-1, Manufacturing Group, Production Department

After joining NS TOOL in 2005, gained experience in a variety of processes in the Production Department, and is currently responsible for the final process of product manufacturing in Manufacturing Section-1. Appointed as a Sub Leader in 2023.

Since joining NS TOOL, I have been involved in a variety of product machining processes, and currently I am in charge of the final process in the end mill manufacturing process. First of all, I want to thoroughly learn the job in the process I am in charge of. On the other hand, we cannot make an end mill by just mastering one process. While it may not be easy and could take time, I would like to challenge myself to ultimately understand the entire process. As a new Sub Leader, I often feel confused, but I try to proactively reach out to my team members and gather information on my own. Each team member has a unique personality. I want to strive to build a better team by paying attention to how to give instructions tailored to each individual.

We are working to strengthen the on-site capabilities of the sales team by creating opportunities for upskilling that lead to motivation.



Naoki Toyoshima

Group Manager
East Group, Sales Department

The domestic sales structures organized into an East Group and a West Group, along with six associated sales offices. Our sales teams work under the direction of each sales manager and are primarily responsible for expanding product sales and providing customer support.

An important aspect of the work of our sales teams is communicating the features of our high value-added products and the value they bring to customers, and translating that into sales. In addition, the Company recognizes the importance of a stable product supply. Legislation in Japan limiting overtime hours for drivers has created the so-called “2024 Logistics Problem.” To address this, we are working with other departments to strengthen our system, including sales agents, to ensure that we can stably provide the necessary products at the necessary timing.

At the sales site, you need a certain amount of technical knowledge. When a customer asks our advice, we need to understand the technical aspects and be able to listen to what is needed. To create an environment where employees can acquire the required knowledge and skills, we regularly hold machining case study sessions on topics selected by each sales office based on what they want to learn. By explaining the process and background of how the work sample was made, we are not only teaching technical knowledge but also trying to make learning interesting so that it will motivate employees to improve their sales skills. We will continue to provide opportunities to improve skills that will lead to sales expansion and customer support, and work to develop human resources who can support the sales sites.

I myself will support each sales manager and work to create a new system that can quickly examine and implement the opinions and suggestions that come up from the sales site so that we can respond to customer requests in a timely and appropriate manner.

We will continue to focus on initiatives that link high value-added products to the strengths of our users and allow us to grow together.



Shintaro Kato

Manager
Tokyo Office, East Group, Sales Department

The Tokyo Office covers the Tokyo metropolitan area, Niigata Prefecture and a part of Shizuoka Prefecture. While conducting sales activities for our products targeted at sales agents, we also visit users, respond to their requests and assist in resolving any issues they may have. With the recent growth in the precision and micro-machining market, new competitors are entering the market and competition from other companies is intensifying. To achieve sales, which is the biggest role of the sales division, it is crucial to actively approach sales agents and develop new users.

This involves four steps: attention, interest, desire and action. For NS TOOL, when it comes to attention and interest, we have put in place a sales support system in which the entire company works together. Examples of this include providing brochures explaining the product features; sharing information via platforms such as social media and direct messaging; providing technical information through the creation of work samples; tours of Sendai Factory to learn about our passion for manufacturing; and the R&D Center’s “Seminar for 5-axis precision and micro machining.”

In our Tokyo Office, we are actively utilizing these business foundations to propose solutions that can connect the strengths of our high value-added products to our users’ strengths. With respect to the last two processes, desire and action, we are focused on working with our sales agents to strengthen these as well. As a result, we will contribute to the growth of NS TOOL together with our customers.

In order to grow through high value-added products, technical knowledge is indispensable, even in sales. The Tokyo Office is responsible for the overall employee training in the Sales Department, so we are committed to focusing on human resources development to support the sales sites.

From NS TOOL Hong Kong Ltd.
Hong Kong Headquarters



Tommy Li
Director, Vice General Manager

For the supply of high-quality products

NS TOOL Hong Kong Ltd. has been in operations for 11 years. We are mainly responsible for supplying products to mainland China and overseeing inventory management in Hong Kong. Additionally, at our representative offices in Shenzhen and Suzhou, we primarily focus on sales activities centered around technical support for our customers.

We work collaboratively as a team, regularly communicating with each other. We are also highly professional and accountable, and brainstorm ideas to achieve our company's goals while supplying high-quality products to our customers.

We will continue to make progress with NS TOOL in Japan in order to foster further development and growth in the future.



Employees of the Shenzhen Representative Office



Employees of the Hong Kong Headquarters

From NS TOOL USA, INC.



Darrell Johnson
Executive Vice President

When the FUTURE arrives – “We are Ready.”

NS TOOL Products and People are the some of the best Globally. This is critical. Our customers are Craftspeople. So Japanese *monozukuri* (manufacturing) is easily recognizable in NS TOOL employees and products making us a natural fit. One true enjoyment is discussing applications with end users and sharing expertise. And when they experience the results – We have succeeded.

NS TOOL USA, Inc. has now been operating for about 3 years. We interact daily with the International Sales Department and Administration Department. Our level of teamwork provides a virtually 24 hours a day operation.

NS TOOL People make “distinction.”



Employees of NS TOOL USA



EMO Hannover 2023	
Dates	September 18–23, 2023
Venue	Hannover Fairground (Germany)
Number of participating companies	Approx. 1,850
Number of registered attendees	Approx. 92,000

We exhibited at EMO Hannover 2023, an international trade fair for machine tools held every other year in Europe. The previous event in 2021 was held online due to COVID-19, making this the first in-person event in four years. The trend in recent years has been toward online services, and the number of trade shows is on the decline. As an in-person exhibition where manufacturers and users can make direct contact, EMO attracted a large number of visitors with a specific purpose and enabled us to conduct high-quality PR. As this was the largest machine tool exhibition in the world, our booth attracted visitors from a wide range of industries, including automotive and medical, from Europe and around the world. Our booth showcased the “CBN/PCD Series” aimed at high-precision finishing of mold machining, the “Micro Edge Series” aimed at expanding the micro-machining market, and a compilation of machining examples by industry, including the medical and automotive industries. We focused on solving our users’ problems and provided specific proposals tailored to their individual challenges. In particular, the high-precision dimensional tolerances and meticulous finish of the “MUGEN COATING PREMIUM Plus Series” were well received by many users looking for high-performance tools.



Our booth at EMO Hannover 2023



MECHATRONICS TECHNOLOGY JAPAN 2023 (MECT 2023)	
Dates	October 18–21, 2023
Venue	Port Messe Nagoya
Number of participating companies	490
Number of registered attendees	77,225

We exhibited at MECHATRONICS TECHNOLOGY JAPAN 2023 (MECT 2023), which is held every other year in Nagoya. The construction of a new exhibition hall has allowed the event to be expanded in scale, and the number of participating companies reached an all-time high. We exhibited products in four categories: mirror finishing, high accuracy, precision and high efficiency. Since there are many companies involved in auto parts manufacturing in the Tokai region, we focused on promoting our aluminum series, which is in the high-efficiency category, as well as end mills for parts processing. In addition, aiming to develop new demand, we made early announcements of two products that were subsequently launched in January 2024: the “AL3D-345R” High Efficient Corner Radius End Mill for Aluminum and the “MLFH330” High Efficiency Lens Form 3-Flute End Mill.



Our booth at MECT 2023

Expressing originality by creating unique designs with micro machining

Mr. Hajime Asaoka, a self-taught watchmaker, is active around the world as an independent watchmaker creating ultra-high-end mechanical wristwatches. NS TOOL President Hiroji Goto spoke to Mr. Asaoka, who is also a user of our tools, about watchmaking and the micro machining that supports it.



Mr. Hajime Asaoka
Independent Watchmaker



Independent watchmaker, a member of the Académie Horlogère des Créateurs Indépendants (AHC) in Switzerland
Contemporary Master Craftsman
CEO, Precision Watch Tokyo Co., Ltd.

All parts, including the movement, exterior, dial, hands and crown, are made in-house based on a custom plan and design. Garnered significant attention when he became the first Japanese craftsman to succeed in making a Tourbillon wristwatch, said to be one of the three most complex mechanisms in the world of timepieces. Established Precision Watch Tokyo Co., Ltd. in 2016.

Journey to mechanical watchmaking

Goto I understand that after graduating from the Department of Design at Tokyo University of the Arts, you worked as a graphic and product designer while learning watchmaking all by yourself. You started making watches in 2004. Can you tell me your story leading up to that point?

Asaoka After graduating from university, I worked as a freelancer, mainly in advertising. However, the bursting of the dot-com bubble in the early 2000s resulted in the disappearance of IT-related jobs, while on the other hand, jobs related to luxury wristwatches began to emerge. I have always been better at craftsmanship rather than product design, so I kept milling machines and lathes in my office,

and while tinkering with them, I started making watches. I had seen a lot of luxury watches in my advertising work, and I was also interested in watches. In the wake of the global financial crisis in 2008, my work decreased and I had more free time, so in the spring of that year I started the designing of a Tourbillon with the goal of making it actually move. And I still remember that the movement inside the watch started to move on New Year's Day of the next year. Then, we started working on the exterior, and the prototype Tourbillon was completed in the spring of that year.

Goto Even though it was a prototype, you made it by yourself in just one year, which is unbelievable. You said that "Watchmaking is the mastery of micro machining," but what has been your involvement in micro machining?

Asaoka A mechanical wristwatch has about 10 gears, and the mechanism is not as complicated as you might think. What makes it special, though, is how small the parts are. Therefore, if you can do micro machining, you can make almost any parts. So, I started studying micro machining. I was unable to make any progress using manual lathes or milling machines, so I obtained a CNC (computer numerical control) machine cabinet that had been used for operational testing from a manufacturer of small machining equipment. I then attached the control section myself and created an environment where I could carry out all the necessary machining operations. I started by machining the gears, but ran into a number of problems, including the effects of thermal variation generated during machining. However, the beauty of machining is that you can think logically to come up with answers to any problems that arise. For example, if you think that thermal variation is what is causing a defect in machining accuracy, measures can be taken to keep the heat level constant. In this way, I overcame the problems one by one, and became able to make parts to a certain extent. Although the prototype was completed in this way, the level of perfection as a watch did not reach the product level, so I made improvements and then launched the first Tourbillon in Japan in 2011.

Tourbillon Noir

announced at the 2023 AHCI Exhibition "Masters of Horology"

Unlike the conventional assembly process, all four parts of the movement are modularized.



Project T

High machining accuracy achieved through collaboration with two partner companies outside of the timepiece industry



The goal of "Project T"

Goto In 2014, you announced "Project T" in collaboration with YUKI Precision Co., Ltd., which was known at the time as a "local R&D-oriented factory," and a tool manufacturer. What was the aim of that?

Asaoka Until then, I had been working on the Tourbillon piece by piece by myself, but by teaming up with precision machining professionals in Japan, I thought I could achieve outstanding machining precision and improve the level of perfection. Japanese manufacturers are good at *monozukuri*, but I had the impression that they only make things that are good quality for a relatively low cost; in other words, good value for money. On the other hand, Swiss luxury watch manufacturers take a completely different approach, making watches that are vastly more expensive compared to Japanese watches. So, I began to wonder if Japanese *monozukuri* could adopt a similar approach. I didn't want to do it alone; I wanted to collaborate with a *monozukuri* company to create a real-life example of this approach. I had a strong desire for the entire Japanese manufacturing industry to take notice of this. I was also able to publish a book about Project T, so I believe I have achieved my goal to a certain extent, at least in terms of communicating my thoughts and feelings.

Stable tool accuracy supports watchmaking

Asaoka In watchmaking, where there are inherent size constraints, the real joy of design is arranging the parts while eliminating dead space. Pursuing an efficient mechanism in the face of constraints—this leads to a sophisticated design. The uniqueness of the design is what gives the product its character, and realizing a design just as you envisioned it is a direct expression of your own way of thinking.

Goto That's why the machining accuracy of the parts is so important. Currently, you are using our tools extensively for precision processing of parts, can you please tell us the reason why?

Asaoka I respect NS TOOL as a manufacturer that continues to make tools of consistent quality with a single-minded focus. My company, Precision Watch Tokyo, uses high-precision micro-machining equipment, but there is no point if there is a large amount of deflection when the tool is set in the holder. Therefore, we always measure the core deflection for each set and check that it is within the standard range (1 to 2 μm). When you do machining under these conditions, any variations on the tool side will lead directly to variations in machining accuracy. In that regard, your tools are very helpful as they show little variance and can produce consistent machining accuracy. Furthermore, to maintain machining accuracy, we use up an

extravagant number of tools and replace them early. To that end, we always make sure we have plenty of tools in stock.

What do you expect from NS TOOL in the future?

Goto NS TOOL is always striving to create highly accurate products with uniform quality. I'm really happy that you appreciate that. Finally, could you tell us your opinions and wishes for NS TOOL?

Asaoka I currently use about 30 different tools. To achieve high precision, I use tools with the shortest possible cutting edge relative to the depth to be machined. Even if the diameter is the same, the length needs to be adjusted according to the depth, so a considerable variety of tools are required. In the case of NS TOOL, I am grateful that you have an impressively wide variety of standard products. However, the tools used in the timepiece industry have quite a few quirks, so I would be even more grateful if you offered a range of tools that met those specific needs.

Goto For us, having a product lineup that suits the timepiece industry is important, so we will respond appropriately. We will continue to make every effort to provide a stable supply of high-precision tools of uniform quality. Thank you for your valuable insights today.



Background of NS TOOL Group's unique management training plan

Kobayashi NS TOOL's employee structure is organized into three tiers: practical positions are filled by employees who have just joined the Company, specialist positions are filled by employees responsible for areas such as sales and research and development, and dedicated positions are filled by employees responsible for office work and manufacturing in factories. Above that are the management and the managerial layers. However, if you look at the age distribution, it is M-shaped, with a shortage of employees in their 30s. Our training system had not been sufficient in the past, and we felt a sense of impending crisis that if we did not develop employees with the leadership skills to effectively manage their subordinates, young employees would never fully settle into the Company. This led us to consult with Mr. Kawamura, who has been facilitating our self-understanding training for nearly 30 years. The training targets not only employees in managerial positions in the Group but also those who assist them, including assistant managers ("AMs"), and Sub Leaders ("SLs"). In addition, we thought that a minimum of three years of training was required, so we established a policy of conducting training three times a year over a three-year period.

Kawamura When planning this training program, I started by listening to the management team to find out what kind of employees they were looking for. I have been involved in creating recruitment systems for 30 years and have worked with over 1,000 companies, and during that time I have seen many cases where there was a large gap between management and the operational front lines. It is often the case that candidates recommended by the operational front lines are rejected in interviews with executives, so they gradually begin to recommend the types of candidates that the executives want. This is what we call *sontaku* in Japan, or reading a superior's face.

So, I started by asking the management team to organize their vision for the future of the Company and its business, and the organizational structure needed to achieve that vision. When I actually interviewed the management team, phrases like "career," "future" and "enjoy a good life" came up a lot, and it made me realize how much they care about their employees. Recently, it has become common for companies to hire and develop talented personnel mid-career, but I think the best policy is for the Company to prepare a platform for career advancement. I was surprised to hear the word "career" mentioned by almost everyone in the management team, but I thought it indicated one of the directions that the NS TOOL Group is aiming for.

Kobayashi This was the first time we conducted a wide range of interviews, not only with the Group's management team but with managerial positions, AMs and SLs, to consider the direction of the training program. The theme of the third training session is "Career," in which participants are asked to think about their own lives while aligning their direction with that of the Company and discuss what they can do to live autonomously.

NS TOOL Group's in-house management training

Getting to know your colleagues "For Crafting Tomorrow" and supporting autonomous and spontaneous action

Mr. Minoru Kawamura

Job Interview/Development Advisor
Part-time Lecturer,
Faculty of Economics,
Komazawa University



Masahito Kobayashi

Executive Officer
General Manager of General
Affairs Department
NS TOOL CO., LTD.



Toward strengthening cooperation between Headquarters and Sendai Factory

Kawamura In interviews with the trainees, the issue of strengthening cooperation between Headquarters and Sendai Factory was raised. The training participants are divided into three groups: managerial positions at the NS TOOL Group Headquarters, managerial positions at Sendai Factory, and the AMs and SLs. Each group has now completed two training sessions. The most lively discussions are in the group of AMs and SLs, who assist the managerial positions. I have noticed that especially if there are several women present, they seem to lead the discussion and play a crucial role in strengthening cooperation.

During the training, I conduct questionnaires with different content for each session, and I have noticed differences in perception between Headquarters and Sendai Factory, including of problems in the workplace. As an example, on the topic of stress from dealing with complaints, I noticed that the manufacturing site in Sendai had to deal with far more complaints than the sales site. There is pressure to use customer complaints to create better products. I felt strongly that sharing these facts with everyone would lead to significant insights.

In the fiscal year ended March 31, 2024, the NS TOOL Group started its own training program for employees in managerial positions and those who assist them, including assistant managers ("AMs") and Sub Leaders ("SLs"). To learn about their perception of the issues and goals for the training program, we interviewed Mr. Minoru Kawamura, an external lecturer who is responsible for everything from planning to curriculum construction and implementation, and Masahito Kobayashi, the General Manager of NS TOOL's General Affairs Department.

Kobayashi We asked you to come up with pre-training assignments with a focus on looking at oneself objectively. The first year's training, which is based on those assignments, has the aim of "understanding each individual's personality and building relationships that bring out their full potential." The third training session will combine all the groups, so I would like to keep a close eye on the atmosphere and comments made there. This is because we want each employee who participates in the training to speak up and demonstrate responsibility through action in the workplace. First and foremost, I would consider it a success if about 20% of the participants can become leaders at their work sites. I believe that if there are people who take the lead, others will follow, so I want to be sure to develop those kinds of leaders.

Becoming a company rich in diversity through autonomy that embodies "MEI-RAKU-SO (Cheerful, Comfortable and Creative)"

Kawamura In general, when a company implements rank-specific training, a lot of people come in with a mindset of "the schedule is set and I just have to endure those hours." There are also many cases where training sessions are parts simply bolted on to a preexisting education system. For this training program, I wanted to do something different. For example, while harassment is a communication problem, it is also a leadership problem, and it encompasses a variety of other problems. I think the fact that we were able to link all these elements together was a major achievement of this training program. At present, the content of the training is general, but in the future I plan to break it down into specific topics while maintaining a consistent theme.

To help participants put these results into practice, we provide pre- and post-training assignments and online training for those who cannot attend in person in an effort to ensure that no one is left behind. The training was originally scheduled to take place over two nights and three days, but in the end, we consolidated it into four hours and adopted a format where everyone has discussions. Therefore, to benefit from the training, you really need to come prepared with a story, complete the pre-assignments and engage in some self-reflection. I also come fully prepared to tackle this with 120% determination. I see my role as ultimately to define a set of basic rules for managers.

Kobayashi I love the way you summarized the phrases that came up when you interviewed the management team, and how you described the type of talent the Group is looking for: "a group rich in diversity through autonomy; people who can think and act for themselves yet create together to build the future; and people with a sincere, emotional and grateful heart." One phrase that everyone on the management team mentioned was "MEI-RAKU-SO (Cheerful, Comfortable and Creative)," which is our company motto. We need to take this motto to heart and become a company that creates the future with diversity through autonomy and initiative.

Financial and Non-Financial Highlights

NS TOOL CO., LTD. and Consolidated Subsidiaries

(¥ million)											
	FY3/15	FY3/16	FY3/17	FY3/18	FY3/19	FY3/20	FY3/21	FY3/22	FY3/23	FY3/24	23/24 Changes
Profit and loss (For the year)											
Net sales	7,402	8,382	8,825	9,767	10,476	9,531	8,100	9,524	9,656	9,040	-6.4%
By product	End mills (Diameter 6mm or less)	5,301	5,931	6,377	7,390	7,832	7,310	6,338	7,449	7,483	-4.4%
	End mills (Diameter over 6mm)	925	971	1,033	1,095	1,152	945	739	909	891	-11.9%
	End mills (others)	661	805	788	577	697	614	478	488	536	-18.2%
	Other products	514	673	626	704	793	660	543	677	744	-11.1%
	Ratio of small-diameter end mills	71.6%	70.8%	72.3%	75.7%	74.8%	76.7%	78.3%	78.2%	77.5%	—
Overseas net sales ^{*1}	1,703	1,944	2,167	2,553	2,898	2,916	2,495	2,954	3,112	2,716	-12.7%
Ratio of overseas net sales	23.0%	23.2%	24.6%	26.1%	27.7%	30.6%	30.8%	31.0%	32.2%	30.1%	—
Gross profit (loss)	3,707	4,389	4,823	5,528	5,929	5,224	4,137	4,891	5,115	4,942	-3.4%
Selling, general and administrative expenses	2,226	2,475	2,810	2,833	3,049	3,005	2,624	2,780	3,007	3,075	2.3%
Operating profit (loss)	1,481	1,914	2,013	2,695	2,879	2,219	1,512	2,111	2,108	1,867	-11.4%
Ordinary profit (loss)	1,534	1,954	2,026	2,733	2,894	2,231	1,712	2,156	2,131	1,908	-10.5%
Profit (loss) attributable to owners of parent	973	1,342	1,420	1,903	1,970	1,545	1,214	1,522	1,475	1,320	-10.5%
Cash flows (For the year)											
Cash flows from operating activities	1,619	1,756	1,894	2,910	1,868	1,908	2,526	2,261	1,614	1,834	13.6%
Cash flows from investing activities	(594)	(1,322)	(787)	(657)	(1,383)	(1,769)	(187)	(348)	(1,137)	(575)	-49.4%
Free cash flows	1,025	434	1,107	2,252	485	138	2,338	1,912	477	1,259	164.0%
Cash flows from financing activities	(186)	(250)	(499)	(562)	(563)	(562)	(438)	(763)	(560)	(883)	57.6%
Financial status (At year-end)											
Total assets	10,339	11,371	12,517	14,467	15,381	16,017	16,936	17,874	18,857	19,241	2.0%
Cash and deposits	3,716	3,898	4,659	6,325	6,209	5,784	7,674	8,543	8,497	8,893	4.7%
Inventories	1,509	1,467	1,592	1,745	2,056	2,201	1,758	1,840	2,320	2,381	2.6%
Shareholders' equity	8,464	9,557	10,652	11,993	13,400	14,383	15,162	15,944	16,929	17,441	3.0%
Per share data ^{*2}											
Earnings per share (EPS) (¥)	38.92	53.69	56.81	76.12	78.80	61.81	48.55	60.89	59.16	53.03	-10.4%
Net assets per share (¥)	339.12	382.66	426.55	479.94	535.74	574.81	605.44	640.58	680.51	705.25	3.6%
Dividend per share (DPS) (¥)	10.00	12.50	20.00	22.50	22.50	22.50	17.50	22.50	22.50	27.50	22.2%
Dividend payout ratio	25.7%	23.3%	35.2%	29.6%	28.6%	36.4%	36.0%	37.0%	38.0%	51.9%	—
Financial data											
Gross profit margin	50.1%	52.4%	54.7%	56.6%	56.6%	54.8%	51.1%	51.4%	53.0%	54.7%	—
Ordinary profit margin	20.7%	23.3%	23.0%	28.0%	27.6%	23.4%	21.1%	22.6%	22.1%	21.1%	—
Value added per employee ^{*3} (¥ thousand)	14,286	16,535	15,705	17,299	18,004	16,329	14,033	15,878	16,065	15,433	-3.9%
Return on assets (ROA)	10.0%	12.4%	11.9%	14.1%	13.2%	9.8%	7.4%	8.7%	8.0%	6.9%	—
Return on equity (ROE)	12.0%	14.9%	14.0%	16.8%	15.5%	11.1%	8.2%	9.8%	9.0%	7.7%	—
Equity ratio	82.0%	84.2%	85.2%	83.0%	87.1%	89.7%	89.4%	89.2%	90.1%	91.1%	—
R&D expenses	232	304	366	330	296	364	388	428	422	409	-3.1%
Capital investment	612	1,295	774	663	1,268	1,755	462	659	686	563	-18.0%
Depreciation	474	505	632	625	629	698	707	692	669	627	-6.3%
Non-financial data											
Number of employees	281	280	322	338	343	338	339	348	352	350	-0.6%
Number of directors	9	9	9	8	7	8	9	9	9	10	11.1%
Ratio of independent directors	22.2%	22.2%	33.3%	37.5%	28.6%	37.5%	33.3%	33.3%	33.3%	40.0%	—
Ratio of external directors	22.2%	22.2%	33.3%	37.5%	28.6%	37.5%	33.3%	33.3%	33.3%	40.0%	—
Ratio of female directors	11.1%	11.1%	22.2%	25.0%	28.6%	25.0%	22.2%	22.2%	22.2%	30.0%	—

*1 Overseas net sales include those via domestic export trading companies.
*2 The impact of the share split (1:2) implemented on April 1, 2021 was considered.
*3 Value added per employee = (operating profit + personnel expenses (including labor costs) + depreciation) / number of employees

Analysis on Financial Position and Management Results



Review of consolidated financial results for FY3/24

► For a summary of the consolidated financial results for the fiscal year ended March 31, 2024 and the consolidated financial forecasts for the fiscal year ending March 31, 2025, please see “Message from the President” on pages 11–14.

In the fiscal year ended March 31, 2024, the overall economy was reported to be on a moderate recovery trend, but the business outlook for the manufacturing industry was mixed, with production of cemented carbide tools and cemented carbide end mills, the main domestic markets in which the Group operates, finishing lower than the previous fiscal year’s results, placing us in an extremely difficult business environment.

The automotive industry, which is a major source of demand in the Group’s business, saw a recovery in production volume as the shortage of semiconductors and parts was resolved. However, due to the impact of the certification fraud issues caused by auto manufacturers toward the end of the fiscal year and other external factors, there was a delay in the recovery of

demand for tools, particularly for molds. Furthermore, sales of semiconductors and electronic devices slowed due to inventory adjustments and remained sluggish throughout the year.

Furthermore, there was a major slump in overseas markets, especially for exports to the Greater China region. As a result, consolidated net sales for the fiscal year ended March 31, 2024, decreased by 6.4% year on year to ¥9,040 million.

By product category, net sales of end mills (diameter 6mm or less) decreased by 4.4% year on year to ¥7,153 million, and the ratio of small diameter (diameter 6mm or less) increased by 1.6 points to 79.1%.

By region, domestic net sales declined by 3.4% year on year to ¥6,323 million due to a slow recovery in sales to major customers. Overseas, the impact of a slump in Greater China (China, Hong Kong and Taiwan) and other regions in Asia caused overall net sales to decline to ¥2,716 million, down 12.7% from the previous fiscal year’s record-high overseas sales. As a result, the ratio of overseas net sales decreased by 2.1 points year on year to 30.1%. Net sales in Greater China in particular fell by 21.7% to ¥1,192 million due to the slowdown in the Chinese economy and moves to avoid the risks of production in China.

Amid the tough market conditions, on the sales side, we promoted measures focused on ensuring product variation and expanding inventory, and on the production side, as costs continued to rise due to rising raw material and electricity costs, we implemented additional cost-cutting measures by strengthening “Orange FC Activities,” which are QC activities conducted in small groups. As a result, despite the fact that gross profit in the fiscal year ended March 31, 2024 decreased by 3.4% year on year to ¥4,942 million, the gross profit margin increased by 1.7 points to 54.7%. In terms of expenses, although there were no major costs such as large-scale

exhibition expenses, personnel expenses rose due to wage increases, and domestic and overseas travel expenses increased with the resumption of full-scale sales activities. Consequently, SG&A expenses increased by 2.3% year on year to ¥3,075 million.

As a result, financial results for the fiscal year ended March 31, 2024 were as follows. Due mainly to the decline in net sales, operating profit decreased by 11.4% year on year to ¥1,867 million, ordinary profit decreased by 10.5% to ¥1,908 million and profit attributable to owners of parent decreased by 10.5% to ¥1,320 million. Regarding the key performance indicator (KPI) target of a 20% ordinary profit margin, we exceeded the target as a result of our successful product strategy and cost reductions, achieving a margin of 21.1%. However, with regard to the other target of ROE 10% or more, profit attributable to owners of parent decreased by 10.5% year on year, yielding a ROE of 7.7%, which was below the target and lower than the assumed cost of capital. Going forward, we will continue to implement various measures to achieve sustainable growth and restore and strengthen profitability.

Financial position for FY3/24

As for the financial position for the fiscal year ended March 31, 2024, total assets increased by ¥383 million compared to the end of the fiscal year ended March 31, 2023, to ¥19,241 million, due to an increase in cash and deposits funded by profits. Compared to the fiscal year ended March 31, 2023, total liabilities decreased by ¥144 million to ¥1,512 million due to a decrease in elements including income taxes payable, and total net assets increased by ¥528 million to ¥17,729 million due to factors such as an increase in retained earnings.

Regarding cash flows, net cash provided by operating activities increased by 13.6% year on year to ¥1,834 million, mainly due

to ¥1,906 million of profit before income taxes offset by cash outflows such as decrease in trade payables and income taxes paid. Net cash used in investing activities decreased by 49.4% year on year to ¥575 million reflecting a decrease in proceeds from sale of property, plant and equipment. Net cash used in financing activities increased by 57.6% to ¥883 million mainly due to dividends paid and purchase of treasury shares.

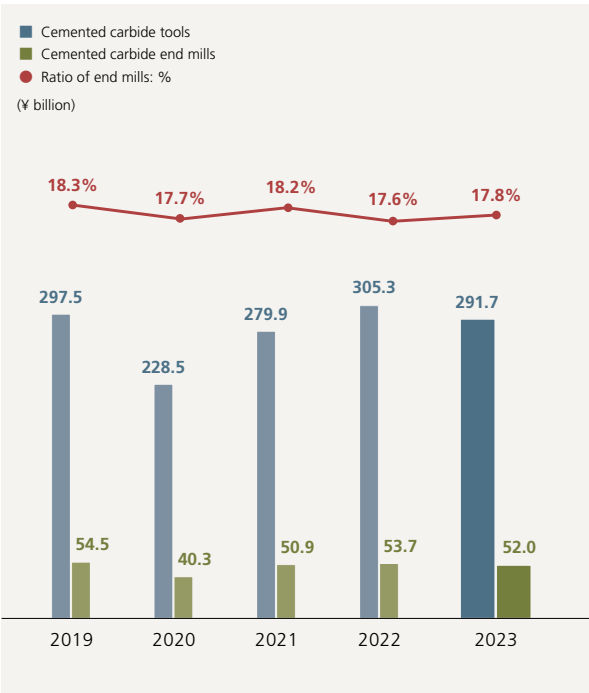
Considering those results and the effect of exchange rate changes, cash and cash equivalents at end of period increased by ¥396 million or 4.7% year on year to ¥8,793 million on a consolidated basis.

Shareholder returns policy

Returning profits to shareholders is an important management issue. Therefore, regarding dividends, we will continue to consider capital efficiency in addition to the stability and continuity of dividends, comprehensively consider performance trends and dividend payout ratios, and consciously determine distribution in accordance with growth, based on the assumption of maintaining the on-hand liquidity necessary for medium-term business execution.

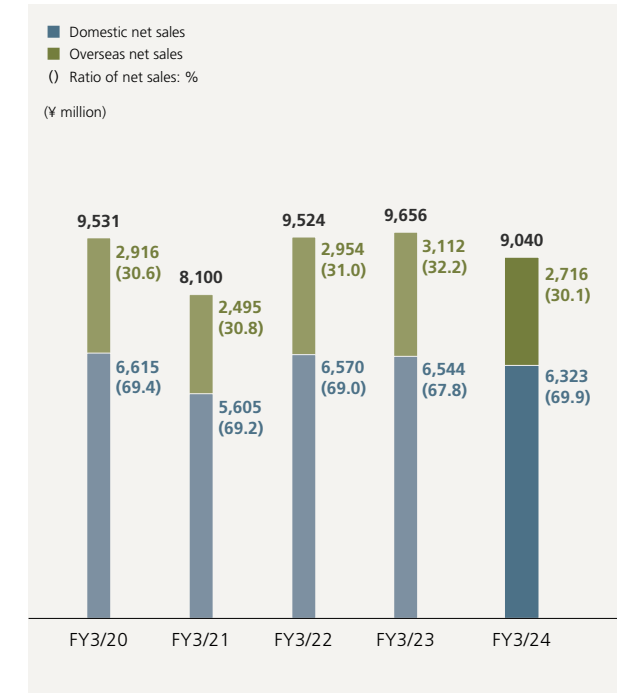
Regarding the dividend per share for the fiscal year ended March 31, 2024, the interim dividend is ¥15.0, including a 70th anniversary commemorative dividend of ¥2.5 implemented at the same time as the interim dividend, and the year-end dividend is ¥12.5, that is, ¥27.5 in total. Additionally, for the fiscal year ending March 31, 2025, in light of the above policy and its business performance forecast and financial plan for the said year, the Company is planning on paying an interim dividend of ¥15.0 per share and a year-end dividend of ¥15.0 per share, for a total annual dividend of ¥30.0, which is higher than that for the previous fiscal year.

Trends of production of cemented carbide tools and cemented carbide end mills (Calendar year)

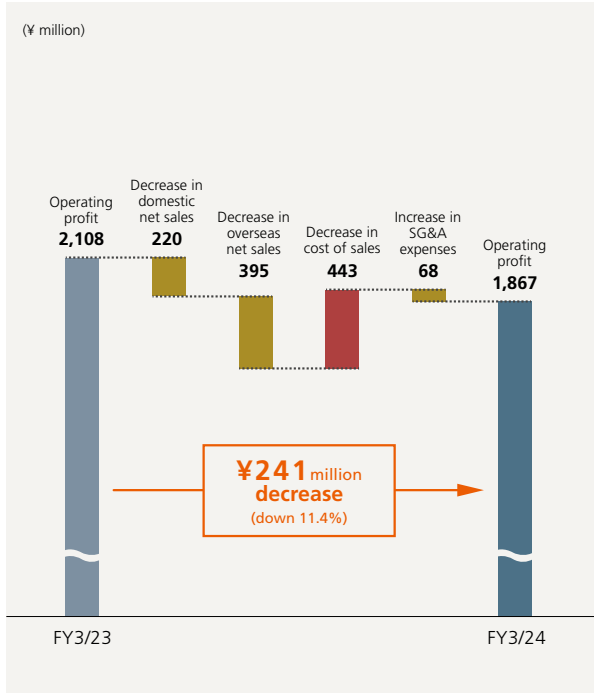


Source: Machinery Statistics, Ministry of Economy, Trade and Industry

Trend of net sales (Domestic and overseas)



Analysis on increases/decreases in consolidated operating profit



Dividend forecasts (Shareholder returns)



Note: The impact of the share split (1:2) on April 1, 2021 was considered.

Corporate Governance (As of March 31, 2024)

Profile of Management Team



Hiroji Goto
President

Apr. 1986: Joined NS TOOL
Oct. 1988: Director and Deputy General Manager of General Affairs Group
Apr. 1992: Managing Director of NS TOOL
Jan. 1995: Executive Director, in charge of sales
Apr. 2011: Executive Vice President, in charge of sales
Jan. 2013: CEO of NS TOOL Hong Kong Ltd. (present post)
Apr. 2013: President of NS TOOL
Oct. 2016: President of NS TOOL, in charge of sales (present post)
Apr. 2021: Representative Director of G-Tech Co., Ltd. (present post)
Nov. 2021: President/CEO of NS TOOL USA, INC. (present post)



Kazuo Fukuda
Director
(Audit & Supervisory
Committee Member)

Apr. 1974: Joined The Sanwa Bank, Limited (current MUFG Bank, Ltd.)
Apr. 1995: Tokyo External Affairs Officer
Jun. 1998: Joined The Wakashio Bank, Ltd. as Director and General Manager of Business Development
Apr. 2003: Joined NS TOOL as General Manager of Administration Department
Jun. 2003: Director and General Manager of Administration Department
Jun. 2009: Auditor
Jun. 2010: Full-time Auditor
Jun. 2015: Director (Full-time Audit & Supervisory Committee Member)
Jun. 2021: Director (Audit & Supervisory Committee Member) (present post)



Takashi Goto
Senior Executive
Vice President

Apr. 1984: Joined NS TOOL
Oct. 1988: Director and Deputy General Manager of Production Department
Jan. 2002: Managing Director, in charge of production/development
Apr. 2009: President of NS Engineering Co., Ltd.
Apr. 2010: President of G-Tech Co., Ltd.
Apr. 2011: Executive Managing Director of NS TOOL, in charge of production/development
Apr. 2013: Senior Executive Vice President of NS TOOL
Apr. 2016: Representative Director of NS Engineering Co., Ltd. (present post)
Oct. 2016: Senior Executive Vice President, in charge of production/development (present post)
Jan. 2021: President of Makino Industry Co., Ltd. (present post)



Naoko Fujisaki
Independent External Director
(Audit & Supervisory
Committee Member)

Apr. 1968: Joined Sumitomo Bank, Ltd. (current Sumitomo Mitsui Banking Corporation)
Oct. 1977: Joined MICRONICS JAPAN CO., LTD.
Dec. 2000: Director and Department Manager of Accounting Department of MICRONICS JAPAN CO., LTD.
Dec. 2004: Managing Director and Department Manager of Accounting Department, Administration Division of MICRONICS JAPAN CO., LTD.
Oct. 2007: Managing Director and General Manager of Administration Division of MICRONICS JAPAN CO., LTD.
Dec. 2009: Senior Managing Director and General Manager of Administration Division of MICRONICS JAPAN CO., LTD.
Oct. 2010: Senior Managing Director and General Manager of Planning & Administration Division of MICRONICS JAPAN CO., LTD.
Jun. 2016: Independent External Director (Audit & Supervisory Committee Member) of NS TOOL (present post)



Yuko Adachi
Managing Director

Apr. 1978: Joined AIU General Insurance Co., Ltd.
Apr. 1985: Joined NS TOOL
Sep. 2001: Director and General Manager of General Affairs Department
Feb. 2002: Director and General Manager of General Affairs Department, and President of G-Tech Co., Ltd.
Jun. 2003: Director of NS TOOL, and President of G-Tech Co., Ltd.
Apr. 2005: Managing Director of NS TOOL (Information Supervisor)
Nov. 2015: President of Makino Industry Co., Ltd.
Oct. 2016: Managing Director of NS TOOL, in charge of general affairs/administration (Information Supervisor) (present post)
Apr. 2017: Chairman of Makino Industry Co., Ltd.
Sep. 2020: Chairman and President of Makino Industry Co., Ltd.
Jan. 2021: Chairman of Makino Industry Co., Ltd. (present post)



Toshiaki Hiraga
Independent External Director
(Audit & Supervisory
Committee Member)

Apr. 1999: Registered as attorney (belonging to Tokyo Bar Association)
Oct. 2007: Established law firm, Kitamura & Hiraga, Partner (present post)
Mar. 2009: External Auditor of MS&Consulting Co., Ltd.
Apr. 2014: External Director of Polaris Capital Group Co., Ltd.
Jun. 2016: Independent External Director (Audit & Supervisory Committee Member) of NS TOOL (present post)
Jun. 2016: External Auditor of HUMAN ASSOCIATES HOLDINGS, Inc. (current MBK Wellness Holdings & CO., LTD.)
Jun. 2019: External Director (Audit & Supervisory Committee Member) of HUMAN ASSOCIATES HOLDINGS, Inc.
Apr. 2022: Auditor of Regrowth Capital Management Co., Ltd. (present post)
Jun. 2022: Auditor of Polaris Capital Group Co., Ltd. (present post)



Satoru Toda
Director

Apr. 1984: Joined Tokai Bank, Ltd. (current MUFG Bank, Ltd.)
Oct. 2006: General Manager of Corporate Division 1, Yokohama Branch, Bank of Tokyo Mitsubishi UFJ, Ltd.
Oct. 2009: Transferred to Mitsubishi UFJ Securities Co., Ltd. (current Mitsubishi UFJ Morgan Stanley Securities Co., Ltd.)
Apr. 2010: Registered as a Certified Public Tax Accountant (Chiba Prefectural Tax Accountant's Association)
Jun. 2014: General Manager of Corporate Business Division 5, Mitsubishi UFJ Morgan Stanley Securities Co., Ltd.
Apr. 2020: Joined NS TOOL
Jun. 2020: Director and General Manager of CEO Office
Feb. 2021: Director and General Manager of Administration Department
Jul. 2021: Director, General Manager of Corporate Planning Office and Administration Department (present post)



Kenichi Sasamoto
Independent External Director
(Audit & Supervisory
Committee Member)

Jun. 1980: Joined Chuo Audit Corporation
Sep. 1998: Senior Partner of Chuo Audit Corporation
Jul. 2007: Senior Partner of A&A Partners
Jun. 2010: External Audit & Supervisory Board Member of TOKATSU HOLDINGS CO., LTD.
Sep. 2014: External Audit & Supervisory Board Member of Japan Corporate Housing Service Inc. (current SUNNEXTA GROUP Inc.)
Sep. 2016: Left A&A Partners
Oct. 2016: Opened Certified Public Accountant Sasamoto Kenichi Office, Representative (present post)
Jun. 2018: External Audit & Supervisory Board Member of TOKATSU HOLDINGS CO., LTD.
Jun. 2019: Independent External Director (Audit & Supervisory Committee Member) of NS TOOL (present post)
Jun. 2019: External Director (Audit & Supervisory Committee Member) of TOKATSU HOLDINGS CO., LTD. (present post)
Sep. 2020: External Director (Audit & Supervisory Committee Member) of SUNNEXTA GROUP Inc. (present post)



Hiroshi Tajima
Director
(Audit & Supervisory
Committee Member)

Apr. 1985: Joined Universal Securities Co., Ltd. (current Mitsubishi UFJ Morgan Stanley Securities Co., Ltd.)
Mar. 2005: Joined NS TOOL as General Manager of Corporate Planning Office
Apr. 2010: General Manager of Administration Department
Jun. 2010: Director and General Manager of Administration Department
Jun. 2012: Executive Officer, General Manager of Administration Department
Apr. 2018: Executive Officer, General Manager of Corporate Planning Office
Jun. 2021: Director (Full-time Audit & Supervisory Committee Member) (present post)



Hideyo Nakano
Independent External Director
(Audit & Supervisory
Committee Member)

Nov. 1991: Vice President of Cititrust & Banking Corporation
Oct. 1993: Senior Portfolio Manager and Head of Private Investment of Cititrust & Banking Corporation
Jan. 2000: Director and Head of Investment Division of FuNNeX Asset Management Inc.
Mar. 2004: Founded Trias Corporation, CEO (present post)
Mar. 2020: External Director, OUTSOURCING Inc.
Jun. 2021: External Director of HOCHIKI CORPORATION (present post)
Jun. 2022: Outside Director of DKS Co. Ltd. (present post)
Jun. 2023: Independent External Director (Audit & Supervisory Committee Member) of NS TOOL (present post)



Yuji Goto

General Manager of Sales Department

Koichi Okada

Head of Sendai Factory and General Manager of R&D Department

Masahito Kobayashi

General Manager of General Affairs Department

Corporate Governance

Corporate Governance Structure

The Group has adopted basic guidelines for corporate governance to enhance the transparency and efficiency of its management and to enhance its corporate value in a stable and continual manner in order to meet stakeholders’ expectations.

For details, please refer to Corporate Governance (in Japanese only) on our website.

System Diagram (As of March 31, 2024)

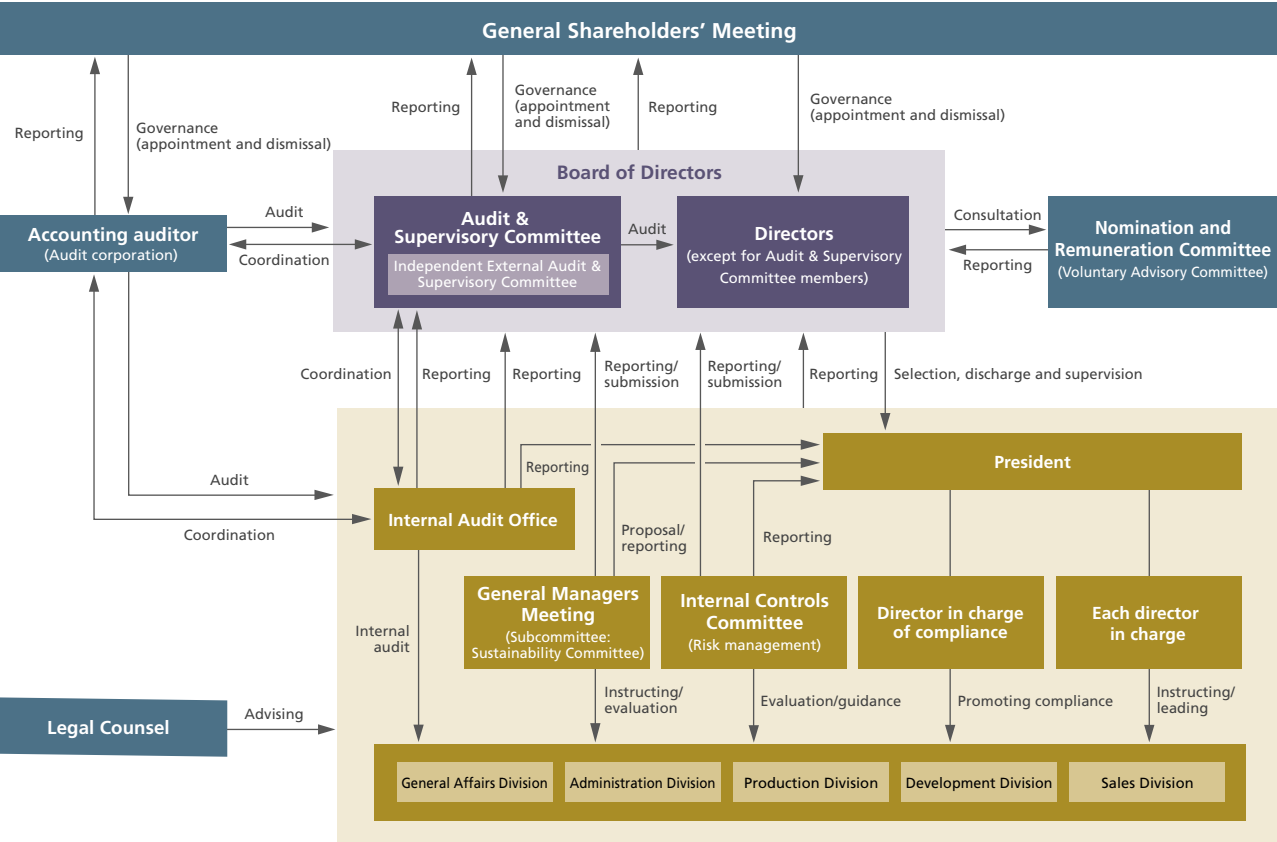


Chart of Structure (As of March 31, 2024)

Corporate governance system	Company with Audit & Supervisory Committee
Number of directors who are not Audit & Supervisory Committee members (of whom, external directors)	4 (0)
Number of directors who are Audit & Supervisory Committee members (of whom, independent external directors)	6 (4)
Term of office of directors	1 year (2 years for Audit & Supervisory Committee members)
Incentive provided for directors	Restricted Stock Compensation Plan (except for Audit & Supervisory Committee members), performance-linked bonuses (except for Audit & Supervisory Committee members), executive stock ownership plan
Business execution system	Executive officers’ system (currently consisting of 3 members)
Optional committees	Nomination and Remuneration Committee (consisting of 3 members: 2 external directors and 1 internal director)
Accounting auditor	Audit corporation, A&A Partners

Company with Audit & Supervisory Committee

The membership of the Audit & Supervisory Committee consists of six members (one full-time Audit & Supervisory Committee member and five part-time Audit & Supervisory Committee members, of which four are external directors). The Committee performs audits on managerial decision-making and the status of business execution. The members of the Audit & Supervisory Committee attend important meetings including meetings of the Board of Directors and express necessary opinions. One of the Audit & Supervisory Committee members is appointed as a full-time member and works to ensure the effectiveness of audits by inspecting draft plans, which have been circulated for permission and approved, forms, contracts, etc., by meeting with the manager of each division, and by enhancing coordination with the internal audit division and accounting auditor.

Current status of governance system

The Group’s managerial decision-making and business execution processes are as follows.

Important managerial issues are proposed to the Board of Directors for deliberation. With regard to the agenda items of the Board of Directors, efforts are made to enhance the appropriateness and efficiency of the execution by the directors of their duties by, for example, providing the Board of Directors with as much information as possible in advance. The effectiveness of the Board of Directors meetings is also evaluated on a regular basis and efforts are made to improve the content of its operation. The agenda items submitted to the Board of Directors shall be approved or rejected through thorough deliberations and, if necessary, amendments such as adding conditions. Candidate proposals and remuneration proposals for directors (excluding directors who are Audit & Supervisory Committee members) will be consulted to the Nomination and Remuneration Committee and resolved after receiving a report from the Committee.

As for the agenda items that have been approved, executive officers and general managers in charge of individual business operations shall bear responsibility to perform the operations and report the status of the business operations they are in charge at the Board of Directors meetings. In addition, the Group has established the Sustainability Committee in-house, which regularly submits reporting and proposals to the Board of Directors regarding its own sustainability (aiming for sustainable growth while coexisting with society), including climate change and human capital issues.

Directors receive reports from each executive officer and general manager, and supervise the status of the execution of their duties. As a rule, the Board of Directors meeting is held monthly. Special meetings of the Board of Directors are convened from time to time when necessary.

Development status of internal control and risk management systems

In order to establish the internal control and risk management systems, the Group has established the organization in which control and management are effectively done. Furthermore, the Group provides a system for approval via internal memos, and

conducts business operations based on the rules such as internal regulations. The Internal Audit Office, which is independent from executing businesses, conducts internal audits of all the departments including affiliates inside and outside Japan, and makes reports to the President, Board of Directors and Audit & Supervisory Committee. In response to the internal control reporting system, the Group has established the Internal Controls Committee, chaired by the managing director, to evaluate the development and application status of each control process, and has exchanged views with the audit corporation in a timely manner for coordination, so that matters that should be improved can be improved adequately.

External directors

The Company has appointed four external directors, all of whom are Audit & Supervisory Committee members.

The role expected of external directors is to check the performance of duties of other Board members (without executing duties themselves) from an objective perspective, so that their duties are fulfilled appropriately via the Board of Directors meetings. With regard to the election of external directors, candidates are required to (i) have a high level of insight with respect to corporate management or abundant experience in the specialty field necessary to fulfill their auditing duties, (ii) have no issues with independence by taking into consideration such factors as relations with the Group, the President and other directors, executive officers and important staff members, and (iii) be able to attend the Board of Directors meetings and the Audit & Supervisory Committee. The Company has designated all the external directors that meet the requirement for independent director as independent directors.

In addition, the Independent External Audit & Supervisory Committee, composed of independent directors, has been established within the Audit & Supervisory Committee.

Reasons for election

Ms. Naoko Fujisaki has extensive insight and abundant experience as a director of a listed company, as well as extensive knowledge in finance and accounting.

Mr. Toshiaki Hiraga has not only high-level professional knowledge and experience as an attorney but also extensive insight and abundant experience as an external director at other companies.

Mr. Kenichi Sasamoto has advanced expertise and experience as a certified public accountant, as well as experience and insight as an external director of other companies.

Ms. Hideyo Nakano has extensive experience in investment decision-making at asset management companies and providing advice at IR/PR support companies, as well as experience as an external director at other companies.

The four were appointed as external directors (Audit & Supervisory Committee members) based on the Group’s judgment that, considering their wide range of knowledge and experience, they will offer objective advice and proposals to ensure adequacy and appropriateness of the decision-making related to the Group’s business execution, which will further enhance the management system. Also, the Company deems that the four are adequate in the roles of independent directors as they will cause no conflict of interest among general shareholders since they are neither major shareholders of the Group nor former employees of major business partners thereof.

Corporate Governance

Director’s Expertise and Experience

Name of director	Audit & Supervisory Committee member	Nomination and Remuneration Committee	Required fields of experience and expertise						
			General management	Sales and marketing	Development and production technologies	International business	Finance and accounting	Legal affairs and organizational compliance	ESG and sustainability
Hiroji Goto		●	●	●	●	●			●
Takashi Goto			●	●	●				●
Yuko Adachi			●	●			●	●	●
Satoru Toda						●	●	●	●
Hiroshi Tajima	●						●	●	●
Kazuo Fukuda	●					●	●	●	●
Naoko Fujisaki	●	●	●				●	●	
Toshiaki Hiraga	●	●	●					●	●
Kenichi Sasamoto	●		●				●	●	●
Hideyo Nakano	●		●			●	●		●

Board members’ remuneration, etc. (FY3/24)

The remuneration of the Company’s directors (except for directors who are Audit & Supervisory Committee members) shall be a remuneration system linked to shareholder interests so that it functions sufficiently as an incentive to continuously improve corporate value, and when determining the remuneration of individual directors, the basic policy is to set an appropriate level based on each responsibility.

Remuneration for directors (excluding directors who are Audit & Supervisory Committee members) and executive officers consists of basic remuneration (monetary remuneration) as fixed remuneration, performance-linked remuneration, etc. (monetary remuneration), and share remuneration (non-monetary remuneration).

Considering the role of audits in the execution of duties by directors (except for Audit & Supervisory Committee

members) from an objective and independent standpoint, directors who are Audit & Supervisory Committee members are paid only the basic remuneration (monetary remuneration) as a fixed remuneration. There is no variable remuneration for directors who serve as Audit & Supervisory Committee members.

For performance-linked remuneration, as a short-term incentive, the plan for payment considering the level of contributions made by the individual is formulated based on the total amount and calculated using the following formula: expected consolidated operating profit at the end of the fiscal year multiplied by a coefficient. The proposal is subject to consultation with the Board of Directors before being resolved. With regards to the Restricted Stock Compensation Plan, as a medium- to long-term incentive, we allocate the Company’s shares with transfer restrictions until retirement.

Board members’ remuneration (FY3/24)

Positions	Total amount of remuneration, etc. (¥ million)	Total amount of remuneration, etc., by type (¥ million)			Number of directors eligible for remuneration
		Fixed remuneration	Performance-linked remuneration, etc.	Non-monetary remuneration, etc.	
Directors (except for Audit & Supervisory Committee members) (except for external directors)	287	162	82	42	4
Directors (Audit & Supervisory Committee members) (except for external directors)	31	31	—	—	2
External directors (Audit & Supervisory Committee members)	32	32	—	—	4

Note: The amount of directors’ remuneration does not include the salaries paid as employees to directors who serve concurrently as employees.

Business and Other Risks

The following are the major risk factors and the status of engagement in those risks in the Group’s business.

For details, please visit the URL below.

https://www.ns-tool.com/ja/ir/business_strategy/risk/ (in Japanese only)

Response to disasters, infectious diseases, etc.

In the event of the occurrence of large-scale disasters or new infectious diseases, supplies of products to the market may experience delays or an impact on production networks may occur. The Group introduced a split shift framework and teleworking framework to continue business with flexible work structures that can adapt to the situation. In addition, the Group takes comprehensive measures by splitting the holding of its inventory among Tokyo, Sendai and its two overseas subsidiaries and by promoting a split production network that spans Sendai Factory (Miyagi) and Niigata Factory (Niigata).

Concentration of production and development bases

While streamlining the production and development framework by concentrating its production and development bases in the northern part of Sendai (Miyagi), the Group has focused on strengthening and thoroughly taking measures against earthquakes, and taken overall measures such as possessing inventory and dispersing production bases. However, in cases where a large earthquake or other disaster occurs, the entire production and development framework of the Group will be impacted. The Group has placed the focus of related endeavors on seismic countermeasures at its Sendai Factory in particular. In addition to a further level of ideas and enforcement for regular countermeasures, the Group has incorporated new techniques, such as “All-round Isolation System.” As a result, when the earthquakes of intensity 6 upper occurred in the Tohoku region in February 2021 and March 2022, the Group managed to fully recover production in a day or two.

Concentration of small-diameter end mills

The Group’s business is centered on the manufacturing and sale of small-diameter end mills. While the standard method of precision and micro machining is cutting using small-diameter cemented carbide end mills, in the future this may be replaced with products containing other materials or new machining methods. The Group has also been developing, manufacturing and otherwise addressing products made with materials other than cemented carbide materials such as CBN (cubic boron nitride) and PCD (polycrystalline diamond), and is pursuing diligent research on other materials as well. As for machining methods, in recent years, many new machining technologies, such as selective laser sintering (SLS) additive manufacturing using 3D printers and laser machining, are being developed. The Group will continue to highlight the superiority by providing environmentally friendly small-diameter end mills, ones ensuring high performance in uniform sizes and shapes for reasonable prices.

Competition

In the small-diameter end mill market, major domestic tool manufacturers and companies of other business categories have turned their attention to that growth and have been reinforcing their production and sales framework. Competition will likely further intensify going forward. The Group believes that by focusing its management resources on small-diameter end mills and by the in-house developed specialized machining tools as well as its development, production and sales framework that specializes in small-diameter end mills, it has successfully constructed a business model to create and provide high value-added products at a low cost, and will proceed to work toward a further level of framework reinforcement.

Procurement of raw materials and rise in resource prices

There are concerns about the rising price and tight supply and demand for the major components of cemented carbide end mills, such as tungsten and cobalt (a binding agent), both of which have become major problems, being referred to as “conflict minerals” as a result of the issue of human rights violations in the mining process. The Group enforces traceability, and while eliminating the intermingling of conflict materials using methods such as receiving certificates from suppliers, it selects suppliers who are capable of long-term, stable supply as it engages in the procurement of materials. Additionally, regarding increase in the cost associated with the rise in the price of raw materials, while we were able to absorb some of this through cost reduction activities, some of the increases had to be passed on. We revised the prices of cemented carbide products in November 2022.

Environmental issues

The Group conducts the business activities in an environmentally friendly manner in accordance with ISO standard and the Basic Policy on Sustainability. At the same time, social demands for environmental consideration are growing by the day, and the Group is being called upon by various stakeholders to respond from an even higher line of sight. The Group has established the Sustainability Committee, which regularly discusses and reports environmental issues in the Group to the Board of Directors, formulates KPIs for various departments based on the Basic Policy on Sustainability and incorporates a policy of addressing the environment in its management targets. Concerning the response to climate change, the Group has commenced the disclosure of information based on the Task Force on Climate-related Financial Disclosures (TCFD).

Roundtable Discussion



Position, name and brief biography			
1	2	3	4
5	6	7	



Current State and Future of Women’s Participation in the Group

As of March 2024, two women have been promoted to managerial positions in the Group, and three have been promoted to the position of assistant manager (“AM”), which is a supervisory position that supports managers. The Group’s female section managers and AMs joined the senior female external directors to discuss the current state of women’s participation and future challenges.

- 1
Naoko Fujisaki
Independent External Director
(Audit & Supervisory Committee Member)
NS TOOL CO., LTD.
After serving in various roles including Director and General Manager of the Accounting Department and Executive Director and General Manager of the Planning & Administration Division at a listed company, since June 2016 has served as an Independent External Director (Audit & Supervisory Committee Member) of NS TOOL.
- 2
Katsuko Tezuka
Substitute Independent External Director
(Audit & Supervisory Committee Member)
NS TOOL CO., LTD.
Appointed President and CEO of Showadenkichuko Co., Ltd. in May 2007. Has served on the boards of several industry associations. Substitute Independent External Director (Audit & Supervisory Committee Member) of NS TOOL since June 2023.
- 3
Yuka Sasaki
Manager, Manufacturing Section-2,
Manufacturing Group, Production Department
NS TOOL CO., LTD.
After joining NS TOOL in 2002, gained experience at a number of manufacturing sites. After serving as a Sub Leader, assumed current position in April 2023.
- 4
Kana Morikawa
Manager, Administration Section
Makino Industry Co., Ltd.
Joined Makino Industry Co., Ltd. in 2006. Served as Manager of the Tokyo office from April 2020, and transferred to the headquarters and main factory in 2021. Has been in current position since March 2021.
- 5
Kinue Naganuma
AM, Sales Administration Section
G-Tech Co., Ltd.
Joined NS TOOL in 1993. Transferred to G-Tech Co., Ltd. in 2002. Has been in current position since April 2023.
- 6
Yukiko Matsuo
AM, Accounting & Finance Section,
Administration Department
NS TOOL CO., LTD.
Joined NS TOOL in 2007. After gaining experience in the Sales Administration Section, was transferred to Accounting & Finance Section. Has been in current position since April 2023.
- 7
Akina Takahashi
AM, General Affairs Section,
General Affairs Department
NS TOOL CO., LTD.
Has been a member of the General Affairs Section since joining NS TOOL in 2009. Has been in current position since April 2023.

Managerial responsibilities and work-life balance

Fujisaki The fiscal year ended March 31, 2024 marked my eighth year as an external director at NS TOOL. At the beginning of my tenure, I was surprised that there were almost no female managers. At this time, I was very pleased to see Ms. Sasaki promoted to section manager at NS TOOL’s Sendai Factory, following Ms. Morikawa at Makino Industry.

Sasaki Thank you, Ms. Fujisaki. I have been with NS TOOL for over 20 years, and I have been in charge of various manufacturing processes at Sendai Factory. I have always

approached my work with the determination to be second to none in manufacturing. Before taking on the position of section manager, I spent three years gaining experience in leading a team as a Sub Leader. When I accepted the position, I was a little concerned, wondering if I was the right person for the job. However, I feel a strong sense of responsibility to lead everyone and believe that I have been able to accumulate substantial achievements. Since I took over the section manager position, the number of subordinates has more than doubled to about 20, and I started to question if they would continue to follow my leadership. That’s why I believe that I must grow first. As for my family, it’s a challenging situation as my child now has to spend time alone at home, but I am very happy that they are supporting me in my work.

Morikawa As a single mother, I was desperate to find full-time employment, and Makino Industry hired me. Motivated by the desire to repay that favor, I’ve been working diligently ever since. In 2021, I left my child in the care of my parents and transferred to the Headquarters and Main Factory in Shirakawa on a solo assignment. Since joining the Company, I have been able to manage things including taking care of my child, thanks to the support of my parents. However, what worries me is the future of my aging parents. Given the nature of my current job, it’s difficult to work remotely or on reduced hours, and I feel anxious about the current situation, not knowing what will happen tomorrow. At the workplace, I have become the manager of the Administration Section, and now that more team members are reporting to me, it is becoming increasingly difficult to communicate effectively with each one.

Many of my team members in the Administration Section are in the process of raising children, and I care about each person’s work-life balance, so I make sure to check in with them every day, and try to create an environment where everyone can work comfortably. I’m grateful for the compassion among the staff and the support they provide to each other on a daily basis.

Fujisaki It’s very reassuring to have team members who understand the importance of supporting each other. However, it would make no sense if the two of you were to take on too many problems and suffer a nervous breakdown, so it’s very important that you clearly convey and express in words that “this is difficult.” Women are different from men in terms of physical strength, and our male superiors understand that also, so you should speak up when things are difficult and ask your

Roundtable Discussion

subordinates to take on some of the work, which can help them to develop as employees. Work tends to concentrate in people who can do it. I think it is necessary to take stock of your work and consider a delegation schedule that specifies that this kind of task with this due date can be delegated to this person. When people are in a position to work remotely or with reduced hours, I understand that there are many situations that they can feel guilty. I believe that if you continue to do your job with pride without giving in to those feelings, seeing your example will make it easier for the younger generation to move forward.

How to build up a career, and how the Company can help

Tezuka It's very difficult to work in a situation where, as Ms. Morikawa says, "you never know what's going to happen." As a company, we cannot leave the burden to our employees and ask them to stay. I have always thought it's important for the Company to prepare a system to ensure that all employees can continue to work without losing their individual freedom. Now that we've heard from the two managers, I would like to ask the AMs: how do you envision your future career advancement?

Naganuma I've never been particularly career-conscious. I just worked hard on the tasks in front of me, and that's how I got to where I am today. However, if the company sees fit to give me a career boost, for example a promotion to the position of section manager, I would be grateful and welcome it positively. The current challenge for the Sales Administration Section, where I work, is the unbalanced age structure of the team, with no members in their 30s. In recent years, the number of younger members in their 20s has been increasing, and as a result, the organization is now made up of staff in their 40s and 20s. It is difficult to bridge this generation gap,



but our goal is to figure out how to do so. One of the things we are working on to strengthen our team is the sharing of information. Before, the Sales Administration Section thought of its work as simply performing tasks such as data entry. However, now that we are sharing information necessary for the company's growth, such as net sales and profitability, the team members' attitudes toward their work are changing.

Tezuka Recently, I feel that many people hesitate to accept promotion and advancement, so I think it's wonderful that there are employees who are willing to accept a promotion positively when approached by the Company. Perhaps it is precisely the fact that they are handling their daily work so well that leads to the confidence to embrace advancement. It's difficult to assess your own abilities by yourself. The people around you and your superiors will approach you because they want to entrust you with the job, and when you are nominated for advancement, I hope you will step up and take on the challenge. My path to my present position was that I was a homemaker for many years, managing the household affairs, but when the decision was made for me to take over the business from my late father, I learned the weight of my words as a manager and the seriousness required to make my employees happy. I believe that the differences between men and women are irrelevant to work, and that the job of a leader is to organize a team and lead them to success.

Fujisaki I hold the same view. There is no difference in ability between men and women, so if a person's abilities are suitable, I think a company should actively promote them to managerial or supervisory positions. There are concerns within our company that once employees reach managerial positions, they end up taking on the work of their subordinates and working more overtime. However, I want everyone to raise their voice and suggest improvements on this issue with the current work style of managers to the management team to lay the groundwork for the future. To achieve this, we need to do it in the spirit of "let's change the company." Once your spirit becomes apparent, people who support you will emerge. In recent years, there has been a trend to increase the proportion of women in managerial positions to 30% or more by 2030. People tend to focus on the numbers, but this is not the essence of the matter. The management team needs to promote the active participation of each and every employee, including women, through fair and impartial promotion policies, and all employees need to take action to change their work style to ensure they have enough time and can use it effectively.

What we can do now as supervisors and future challenges

Matsuo I'd never considered becoming a manager, so I find myself at a loss when asked about career advancement. However, one initiative that has helped me grow is the study groups and training sessions that members of the Accounting & Finance Section hold at each Group company. I myself conduct study groups and training sessions on topics such as the basics of accounting and budget details at Sendai Factory and Makino Industry. I had never delved so deeply into my knowledge of my work before. In preparing for the study group, I re-learned a lot of things again, leading to new insights. In the fiscal year ended March 31, 2024, for Makino Industry, whose business performance had not been growing stably, I went a step further and analyzed the cause. Based on the results, I shared financial information with everyone at Makino Industry, and I was very happy that everyone seriously worked on improvements, which led to a recovery in business performance.

Morikawa Although Makino Industry's business performance was not good, we were unsure of what to do about it. We asked Ms. Matsuo to be our teacher, and all the staff at the chief level and above attended the study group. This prompted employees at the level of chief or above to take the initiative in tackling challenges seriously, such as cost reduction in the factory.

Takahashi I used to conduct career-related questionnaire surveys in the General Affairs Section. While some people felt that NS TOOL is a place where women are active, many also said that they did not want to become managers. The issue of long working hours that you mentioned earlier stems from managers taking the initiative to work overtime in place of their subordinates. I think that the pressure of having to work so hard to become a manager leads to anxiety. As for future challenges in the workplace, I would like to promote diversity-based initiatives. Until recently, the General Affairs Department had no married staff members, so when considering initiatives that take into account those who are married and have children, we didn't understand their true needs. Recently, staff members at various life stages have joined our team, enabling the exchange of diverse opinions. I would like to engage in lively discussions every day with a diverse range of members, and to use this diversity to bring about change.

Topic Lecture for university students

On November 27, 2023, at the invitation of Mr. Minoru Kawamura, part-time lecturer in the Faculty of Economics at Komazawa University who is in charge of NS TOOL's human resources training, two of our AMs, Matsuo from the Accounting & Finance Section and Takahashi from the General Affairs Section, gave a lecture to students at the university titled "Corporate Organization and the Jobs and Tasks of General Affairs and Accounting." In the Faculty of Economics, many students are interested in accounting and general affairs jobs, which is why Mr. Kawamura set up a lecture by current employees from our Accounting & Finance Section and General Affairs Section, and the two AMs, both of whom are women, responded to the request.

The AMs prepared for this lecture based on the concept of not being bound by formality. They tried to provide firsthand information that you wouldn't normally hear during a regular job hunt. For example, they created graphs showing the progress of their own monthly salaries, analyzed the Company's salary levels and explained the reasons for their salary increases. After the lecture, feedback from a questionnaire survey included comments such as "It was good to hear the honest opinions of current employees" and "The two lecturers were excellent."



The lecture was attended by many university students.

Sustainability

The Group’s sustainability concept and initiatives

ESG Topic 1

Basic Policy on Sustainability and Materiality

From the standpoint of striving for its sustainable growth while coexisting with society, in November 2021 the Group formulated its Basic Policy on Sustainability, which it has disclosed alongside its priority challenges (materiality). Each division of production, development, sales and administration sets Materiality KPIs* based

on the Basic Policy on Sustainability and materiality, and through implementing the PDCA cycle with ISO quality and environmental management system, creates and provides high value-added products while coexisting with society.

*KPI: Key Performance Indicator. Important business targets that are scheduled and quantified.

Basic Policy on Sustainability

NS TOOL creates “Software (technology),” “Hardware (machines)” and “Heart (humanity).” We contribute to society by developing eco- and human-friendly products. Through implementing this management policy and providing precise small-diameter end mills to the entire world, we support innovation by corporations and engineers. We also acquired ISO 14000 certification in 2004, and have implemented various initiatives over time with awareness of the importance of consideration for the environment. Going forward, the NS TOOL Group will continue to do its part for the development of a sustainable society with harmony among people, society and the environment.

For the Group’s sustainability promotion system, please refer to our summary of business results and securities report.
Summary of Business Results
https://www.ns-tool.com/en/ir/index.html#Financial_Report
Securities Report (in Japanese only)
https://www.ns-tool.com/ja/ir/ir_library/securities_report/

Sustainability Policy

As a leading company in small-diameter end mills, by providing unprecedented high value-added products, we will coexist with society and strive for sustainable growth.

Materiality

1. Responding to environmental issues

2. Respect for human rights

3. Contributions to community and society

4. Employee job satisfaction

5. Partnerships with suppliers and distributors

6. Crisis management for disasters, etc.

ESG Topic 2

Response to human capital

In relation to materiality “4. Employee job satisfaction,” the Group determined the policies related to human resources development including securing diversity of human resources and internal environmental improvement policies as indicated below. Furthermore, in conjunction with the formulation of these two

policies, we have revised our General Employer Action Plan as indicated below. In this way, we are striving to create an environment where women can thrive and where all employees can balance both work and personal life.

Policy for human resources development

NS TOOL will develop human resources that put the company motto “MEI-RAKU-SO (Cheerful, Comfortable and Creative)” into practice for the growth of the Company and individuals.

Internal environmental improvement policy

NS TOOL will improve the organization and internal environment that realizes the company motto “MEI-RAKU-SO (Cheerful, Comfortable and Creative).”

General Employer Action Plan

Target 1

Target 2

Target 3

Note: Targets 1 and 2 are part of our action plan based on Japan’s Act on Advancement of Measures to Support Raising Next-Generation Children. Target 3 is part of our action plan based on Japan’s Act on the Promotion of Women’s Active Engagement in Professional Life.

ESG Topic 3

Status of realization of Materiality KPI progress

Regarding the policies related to human resources development including securing diversity of human resources and internal environmental improvement policies, we have set materiality KPI 4-8

below as: “Try to obtain *Kurumin* certification as a child-friendly company in around two years and increase the ratio of female employees by at least 1%.”

Materiality	Materiality KPI	Main division that promoted the KPI				
		Development	Production	Sales	Administration	Subsidiaries
1. Responding to environmental issues	1	Improve production efficiency and reduce defect rates in the production process.	△			○
	2	Reduce electricity used for production of a piece.	△			
	3	Implement activities for promoting reusing and recycling of the used products.	○		○	
2. Respect for human rights	4	Secure traceability of the raw materials such as tungsten and cobalt.	○			
3. Contributions to community and society	5	Participate in volunteer activities such as blood donation, cleaning, and traffic safety events in the Sendai area and support local sports teams.	○			
	6	Continued to the activity to donate food materials of Tohoku region to children’s community kitchen, Shinagawa children’s cafeteria.			○	
4. Employee job satisfaction	7	Establish internal education programs, enhance employee training system by position.	○	◎		
	8	Try to obtain <i>Kurumin</i> certification as a child-friendly company in around two years and increase the ratio of female employees by at least 1%.			○	
5. Partnerships with suppliers and distributors	9	Strengthen collaboration with partner companies that make up the sales channel.		○		
	10	Develop new products, etc. in cooperation with partner companies.				○
6. Crisis management for disasters, etc.	11	Increase and improve the production ability of Niigata Factory.	○			○

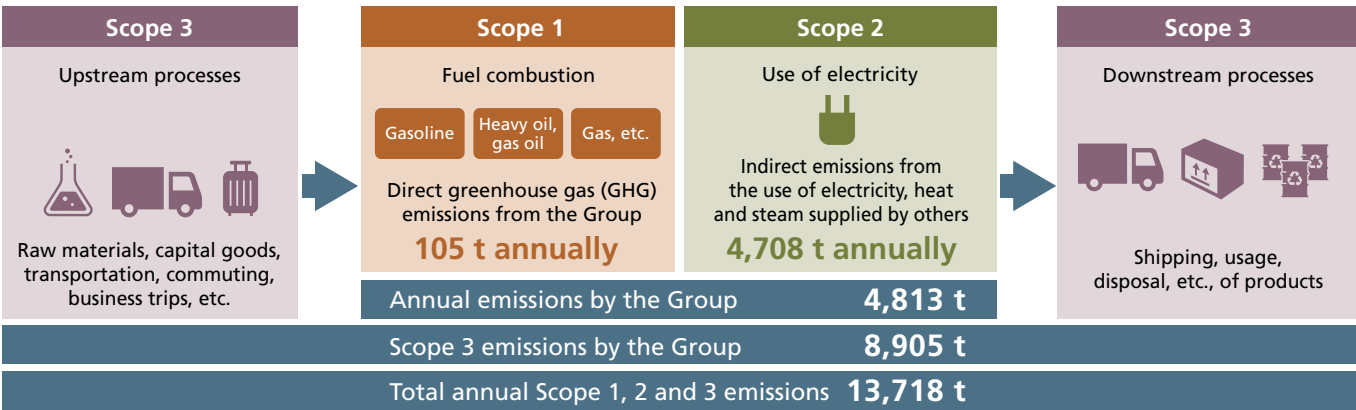
◎…Showing progress exceeding the plan ○…Showing progress roughly as planned △…Showing progress below the plan

ESG Topic 4

Indicators on climate change

Based on GHG Protocol standards, the Group calculates Scope 1, 2 and 3 greenhouse gas (GHG) emissions throughout the supply chain. Scope 1 and 2 emissions totaled 4,813 tons in the fiscal year ended March 31, 2023, an increase of 30 tons compared to the fiscal year ended March 31, 2022. This is due to the fact that the conversion

factor for CO₂ emissions has worsened compared to said year, despite the fact that total electricity consumption was lower. The Group has been working on energy conservation by setting targets for reducing power usage, and will continue to work on reducing Scope 1 and 2 emissions.



Introduction to Web Contents

NS TOOL publishes a wide range of contents to provide information about its products and manufacturing.



Owned media

For Crafting “FUTURE”

This is a useful site for *monozukuri* industries that makes readers think “I enjoyed reading the article, it was fun” and “It helped me” (in Japanese only).



Examples of articles



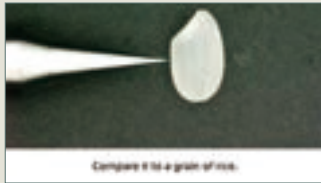
Video

YouTube / @ns_tool

▶ **Nikkei CNBC “Interview with Top Management”**
(Broadcast on September 6, 2023) (in Japanese only)



▶ **The inside story behind the development of “Micro Edge,” the end mill with $\phi 0.1\text{mm}$ or less.**



▶ **Monozukuri Taro Channel** (in Japanese only)



▶ **Precision and micro-machining video**



Social media

We distribute the latest information about exhibitions, new products, etc.



X (formerly Twitter)
@nstool_intl



Facebook



News

We have updated the “For Individual Investors” section (in Japanese only) of our IR website.

We have compiled a wide range of information in a concise format, including our history, business performance over time and commitment to quality. The section also provides individual investors quick access to a wide range of useful content.



Topics

Topic

1

Activities supporting children’s cafeterias

As part of our support activities, we have been providing food and daily necessities to Shinagawa’s network of children’s cafeterias since April 2022. The impetus for us to start local support activities was the Great East Japan Earthquake in 2011. To support Sendai Factory, which suffered damage, we began procuring supplies mainly from western Japan, which was unscathed, and sending them to the factory. As the effects of the earthquake began to subside, employees at Sendai Factory who had received support from the Company expressed a desire to help those who had suffered even more than they had. With the goal of supporting the children who will create Japan’s future and the local communities that have always supported us, we started making annual donations to the MICHINOKU Future Fund, which supports the education of children who lost their parents in the Great East Japan Earthquake. Our support for the fund ended in 2020 when the donation ceiling was reached, but seeking to continue our community support activities, we began supporting the network of children’s cafeterias in Shinagawa Ward, where our Headquarters is located. Regarding relief items, we ask the Shinagawa Children’s Cafeteria Network Secretariat what items are most in demand, and then send rice, sanitary products, pencils and other needed supplies every month.

To further contribute to the local community, all the rice we donate comes from Miyagi Prefecture, including rice grown by our employees who also work as part-time farmers. We sometimes receive words of thanks from the children and families who receive our donations.

Going forward, we intend to continue our support and engage in activities that are closely aligned with the needs of the local community.

What is a children’s cafeteria?

A cafeteria where children can go alone and eat for free or at a low cost. They are mainly run by local governments and local residents.



Topic

2

Super Minimum Challenge project sets new world speed record

We are supporting the Super Minimum Challenge (SMC) project led by Takushi Chikakane. The SMC team test drove its motorcycle and unofficially set a new world record in Ogata Village, Akita Prefecture on November 22–23, 2023. SMC competes for the title of the world’s fastest 50cc motorcycle at the Bonneville Motorcycle Speed Trials (BMST), held annually in Salt Lake City, Utah, USA. However, the competition was canceled last year due to a hurricane. In this

test run, the motorcycle recorded a speed of 117km/h, more than 15km/h faster than the world speed record set by the SMC team in the competition four years ago. Looking ahead, SMC aims to compete in the next BMST in August. Through our precision and micro-machining technology, we will continue to support the challenges of Japanese manufacturing.



Corporate Data/Stock Information (As of March 31, 2024)

Corporate Data

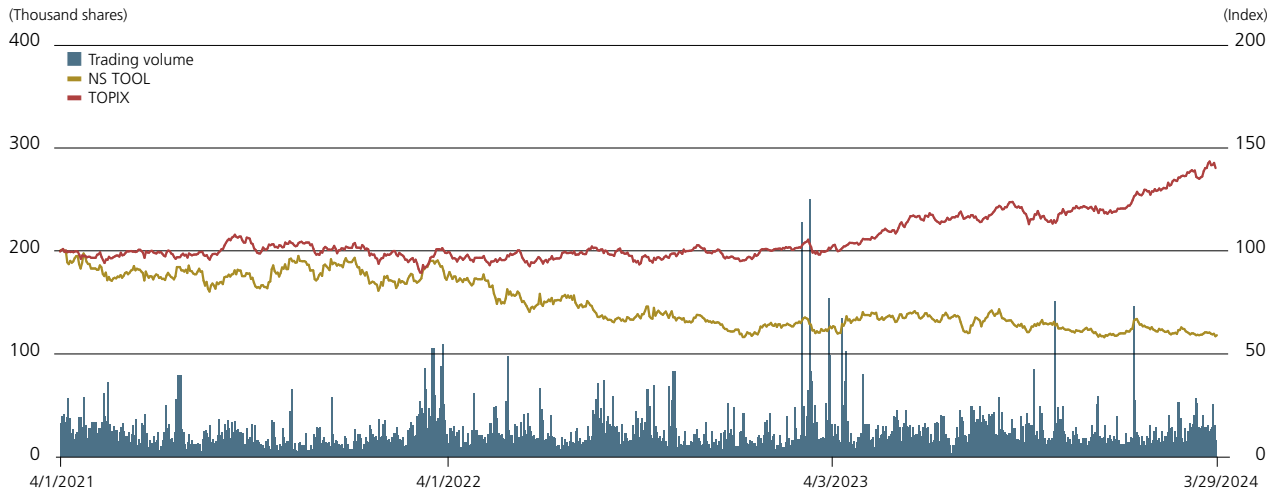
Company name	NS TOOL CO., LTD.
URL	https://www.ns-tool.com/en
Representative	Hiroji Goto
Headquarters	6F, Sumitomo Fudosan Oimachi Ekimae Bldg., 1-28-1 Oi, Shinagawa-ku, Tokyo 140-0014, Japan
Established	December 1954
Capital stock	¥455,330,523
Number of employees	350 (Consolidated)
Business	Manufacture and sale of cutting tools
Products	Cemented carbide end mills for molds and parts processing
Banks	MUFG Bank, Ltd. and Mizuho Bank, Ltd.
Subsidiaries	G-Tech Co., Ltd. NS Engineering Co., Ltd. Makino Industry Co., Ltd. NS TOOL Hong Kong Ltd. NS TOOL USA, INC.
Securities exchange	Prime Market of the Tokyo Stock Exchange

Major Shareholders

Shareholder name	Number of shares held (Thousand shares)*1	Shareholding ratio (%)*2
The Master Trust Bank of Japan, Ltd. (Trust account)	3,102	12.48
M.Y. CORPORATION, Inc.*3	2,497	10.05
Solpty Co., Ltd.*3	2,435	9.80
NORTHERN TRUST CO. (AVFC) RE FIDELITY FUNDS (Standing Proxy: The Hongkong and Shanghai Banking Corporation Limited, Tokyo Branch)	2,092	8.42
TI Road Co., Ltd.*3	1,847	7.44
BANK LOMBARD ODIER AND CO LTD GENEVA (Standing Proxy: MUFG Bank, Ltd.)	1,293	5.20
Custody Bank of Japan, Ltd. (Trust account)	980	3.95
NORTHERN TRUST CO. (AVFC) RE THE HIGHCLERE INTERNATIONAL INVESTORS SMALLER COMPANIES FUND (Standing Proxy: The Hongkong and Shanghai Banking Corporation Limited, Tokyo Branch)	781	3.15
Hiroji Goto	761	3.06
Takashi Goto	756	3.04

*1 The number of shares held less than a thousand is truncated.
*2 The shareholding ratio is calculated after deducting treasury shares (185,138 shares).
*3 M.Y. CORPORATION, Inc., Solpty Co., Ltd. and TI Road Co., Ltd. are asset management companies of Hiroji Goto, Takashi Goto and Yuji Goto, respectively.

Trends of Stock Price/Trading Volume/TOPIX



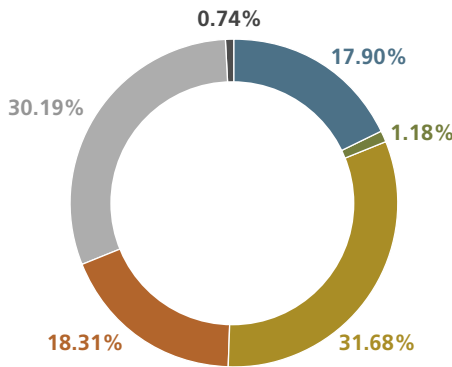
Note: This chart contains split-adjusted stock prices and trading volumes; stock prices and trading volumes before stock split have been adjusted retroactively.
NS TOOL's stock prices and TOPIX values are calculated assuming that the closing price data of April 1, 2021 is 100.

Stock Information

Number of authorized shares	38,400,000
Number of issued shares	25,035,034
Number of shareholders	6,470

Composition of Shareholders

- Financial institutions (10 shareholders, 4,481,800 shares)
- Financial instruments dealers ... (24 shareholders, 296,343 shares)
- Other corporations (70 shareholders, 7,930,012 shares)
- Foreign corporations, etc. (70 shareholders, 4,582,932 shares)
- Individuals and others (6,295 shareholders, 7,558,809 shares)
- Treasury stock (1 shareholder, 185,138 shares)



Shareholder Memo

Fiscal year	From April 1 to March 31 of the following year
General shareholders' meeting	1. Ordinary general meeting of shareholders: Held in June every year 2. Extraordinary general meeting of shareholders: Held as needed
Shareholder registry administrator Special account administrator	Marunouchi 1-4-5, Chiyoda-ku, Tokyo, Japan Mitsubishi UFJ Trust and Banking Corporation
Location of operations	Marunouchi 1-4-5, Chiyoda-ku, Tokyo, Japan Securities Agency Division, Mitsubishi UFJ Trust and Banking Corporation
Contact & mailing address	1-1 Nikko-cho, Fuchu-shi, Tokyo, Japan Securities Agency Division, Mitsubishi UFJ Trust and Banking Corporation Tel: 0120-232-711 (toll-free in Japan) [Mailing Destination] PO Box 29, New Tokyo Post Office, 137-8081, Japan Securities Agency Division, Mitsubishi UFJ Trust and Banking Corporation
Public announcements	Notices will be posted in electronic format. However, notices will be published in the <i>Nihon Keizai Shimbun</i> (a Japanese newspaper) when an electronic notification is not possible for unavoidable reasons.

- Notes:
- (1) In principle, the account administrator with whom you hold an account (e.g., securities firm) receives requests for change of shareholder's address, instruction to purchase and other operations. Please contact the securities firm, etc., with whom you hold the account. Please note that the shareholder registry administrator (Mitsubishi UFJ Trust and Banking Corporation) cannot handle such matters.
 - (2) With regard to operations concerning shares recorded on the special account, Mitsubishi UFJ Trust and Banking Corporation shall serve as the account administrator. Please contact them regarding such shares. Branches of Mitsubishi UFJ Trust and Banking Corporation throughout Japan will assist you as well.
 - (3) The main office and branch offices of Mitsubishi UFJ Trust and Banking Corporation will pay dividends not received.



Contact Us	NS TOOL CO.,LTD. 6F, Sumitomo Fudosan Oimachi Ekimae Bldg., 1-28-1 Oi, Shinagawa-ku, Tokyo 140-0014, Japan	Tel: +81-3-6423-1135 Fax: +81-3-6423-1186 Email: ir@ns-tool.com
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