

For Crafting Tomorrow

NS TOOL CO.,LTD.

Fiscal Year Ended March 31, 2021 (April 1, 2020 to March 31, 2021)

Business Report

R&D Center at Sendai Plant





Disclaimer

Notes regarding the Company's estimates

This report contains forward looking estimates including plans, strategies, financial performance and other

statements. These estimates are

obtained currently. Please note that the actual results are supposed to be

affected by various types of risks and

uncertainties and, as a result, can be largely differ from these estimates.

Brand Statement

For Crafting Tomorrow

In any time of period, we have always been proud to support Japan's *monozukuri* (manufacturing) and the commitment has been our basis since foundation.

As a leading company specialized in small-diameter cemented carbide end mills, NS TOOL manufactures high value-added products by responding to needs and expectations of customers and society. NS TOOL strives constantly to enhance its own technological standards and create cutting-edge solutions.

Wishing for delivering unseen innovation in technology, quality and service for the future and the world, we, NS TOOL, will open up the infinite dreams and possibilities of *monozukuri*.

Management Philosophy

mann

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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ent Team ce Structure

oto, Senior Executive Vice President × Satoru Toda, Director) tivities Information



Major Milestones of NS TOOL Group

Net sales (¥ million) Net sales — Ordinary profit 12,000 In 2016, NS TOOL CO., LTD. took a new step forward under the brand statement of "For Crafting Tomorrow." Since our establishment in 1954, we have grown side by side with Japan's monozukuri. The new brand statement reflects our pride 10,000 - of tireless support on nation's development, and our unwavering commitment to create innovations in small-diameter cemented carbide (SDC) end mills and to explore the future of "Made in Japan" together with our customers. NS TOOL's customers are engaged in the development and manufacturing of various products and parts days and nights in the cutting-edge field of precision and micro machining, where even the slightest measurement error can compromise the 8,000 entire guality. The ultra-downsizing in the electronics world has led to micro-miniaturization, high-level integration, and thinning of electronic parts and devices. As a result, technological requirements at monozukuri sites are far greater than ever before. 6,000 As a company specializing in SDC end mills, NS TOOL constantly improving precision and durability to meet customers' needs and expectations, as well as enhancing our own technological standards to create cutting-edge technologies and products. 4,000 2,000 Collapse of bubble economy Oil crisis **Global Financial Crisis**

1954 1972 1977 1978 1979 1980 1981 1982 1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021

History of NS TOOL

1954

1972

NS PEPE.

Establishes Nisshin Kogu Seisakusho.

1961 Establishes Nisshin Kogu Seisakusho L.C. in Shinagawa-ku, Tokyo.

Launches the original "Power End Mill" with

helix angle of 50 degrees.

1979 Changes the organization

Constructs new Fujisawa Plant

and establishes operation of

three-production sites.

1990

Acquires ISO9001 certification.

Makes Gtech Co., Ltd. and Sato Tool, Ltd. (Niigata Nisshin Co., Ltd.) wholly-owned subsidiaries.

2006

2004

2009

Acquires ISO14001 certification.

Lists on the JASDAQ Stock Exchange.

Establishes NS Engineering Co., Ltd.

Completes the third stage of construction Consolidates Production Division and

2001

Establishes R&D Center on the premises next to Sendai Plant.

Launches a project to develop an original Tool Grinding Machine "TGM." Launches CBN end mills.

Holds the first NS Private Show. Completes the first Tool Grinding Machine

Completes the fourth stage of construction of Sendai Plant.

2008

Holds the second NS Private Show.

Makes Makino Industry Co., Ltd. a wholly-owned subsidiary

2013 Establishes NS TOOL HONG KONG LIMITED.

2016

2011

Reforms the corporate identity. NS Engineering Co., Ltd. takes over Niigata Nisshin Co., Ltd.

2009

Establishes a new Manufacturing Center.

2011

Sendai Plant recovers from Great East Japan Earthquake in one month.













2003

"TGM" developed by NS TOOL.









Value Creation Process of NS TOOL Group

- 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 Japan's monozukuri is best at, our Group challenges technologies, quality and services beyond other companies' reach and has been restlessly working to create new added values.

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 high profit margin and a thorough debt-free management.

NS TOOL Group (Fiscal year ended March 31, 2021)

Specialist of small-diameter end mills

Net sales	¥8.1 billion (Ratio of small-diameter: 78.3%)
Operating profit	¥1.5 billion
Profit attributable to owners of parent	¥1.2 billion

Solid financial base

Total assets	¥16.9 billior
Shareholders' equity	¥15.1 billior
Equity ratio	89.4 %
Cash and deposits	¥7.6 billior

Elite specialists of small-diameter end mills

Employees

339 Of which, 29 development personnel

Abundant and excellent products

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

Intellectual property owned

Acquired patents, etc. 51

Awards received

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

Monozukuri Japan Conference, The Nikkan Kogyo Shimbun, Ltd. "Super" Monozukuri Parts Award: (2011)(2012)(2014)(2015)(2016)(2019)(2020) Received 7 times

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

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



*TGM: Tool Grinding Machine

Resources for creating added values For Crafting Tomorrow

Development system specialized in high-precision and micro machining

Development

#工具#式会社

Milling examples by data and video



"Micro Edge" Micro End Mill



"Creating New" – End Mills that Contribute to Society's Development –







"monozukuri" means manufacturing in Japanese.



Review of business activities in FY3/21

In the market environment after medium-term demand cycle of cemented carbide end mills peaked out in 2018, we had expected FY3/21 to be tough under intensified conflicts between the U.S. and China and the unprecedented economic crisis due to the COVID-19 pandemic. As situation became so severer than expected as economic activities temporarily stopped in 1H FY3/21, we disclosed financial forecasts for 1H FY3/21, at the announcement of 1Q results on July 31, 2020 after considering further downward risks. In fact, the decline in net sales from the beginning of the fiscal year to the summer was extremely deep, and we turned into the red virtually for the first time since the global financial crisis.

During this period, we worked on cost reduction as much as possible to avoid losses while protecting employment, by implementing such temporary measures as cutback of plant operation and reducing the board members' remuneration. After bottoming out in 2Q, demand for tools began to recover, as the smartphone-related market started to pick up, and the automobile-related market, which had been in a deep decline, also show some improvement in 2Q. As a result, we decided to disclose our full-year financial forecasts on October 28, 2020.

In terms of production, our ongoing measures of manufacturing cost reduction have enabled us to recover our value-added ratio per employee to the level of the pre-COVID-19 pandemic even in a severe production cutback phase. As a specific measure, we have been working on improving production yields by encouraging capital investment to introduce cutting edge production facilities. In addition to improving our production facilities, we were working on cost reduction by shortening setup times, making a single person capable of handling multiple machines simultaneously and promoting

Quarterly trends of cost of sales ratio and SG&A expenses ratio



unmanned operation, which we believe, led us shift to a downward-resilient earning structure in the COVID-19 pandemic.

As a result of these efforts, actual full-year results for FY3/21 exceeded financial forecasts and we were able to achieve profitability at all group companies, while saving R&D investment for the next generation. I thank our people at operating sites for their tireless efforts.

Summary of financial forecasts for FY3/22

We assume that FY3/22 will continue to be significantly affected by the COVID-19 trends. Although there is a risk of the prevalence of variant viruses, we expect that vaccination will begin and the constraints on economic activities will be gradually removed. With regard to the macroeconomic environment, the Japanese manufacturing industries are expected to remain steady mainly in the export driven industry sectors supported by relatively robust economic conditions in the U.S. and China. From 2H FY3/22 onward, the economy, including the service industry, is expected to recover.

In this macroeconomic environment, we expect an increase in operating expenses due to our aggressive future plans to participate in many exhibitions suspended in the COVID-19 pandemic, and a decrease in non-operating income due to the absence of proceeds from insurance policy termination and various government subsidies for such as employment adjustment, advanced energy conservation investment and the implementation of temporary leave, all of which were earned in FY3/21. These non-operating income factors are the reason why ordinary profit exceeded operating profit in FY3/21.

Trends of tangible non-current assets turnover and value added ratio per employee

Top Message

Overview by business segment and key measures from FY3/22 onward

Domestic business overview

In FY3/21, where face-to-face sales activities were difficult, we improved and streamlined day-to-day operations. In addition, we held webinars in collaboration with other peripheral makers and provided remote technical consultations. The exhibition "JIMTOF2020: The 30th Japan International Machine Tool Trade Fair," which we have most focused on ever been, was held online from November 6 to 27, 2020. We also experienced our first online participation. We have worked to produce on-line adopted contents and brochures for new products much comprehensive from user's perspective.

We intend to strengthen DX (Digital Transformation) further at our business sites, including effective marketing and sales activities via web media, from FY3/22 onward.

In the pandemic environment we have also reviewed our sales training system for new employees. We have created additional lecture materials for sales training, and have conducted approximately 30 training courses. We feel that the results have been dramatically more effective than the previous sales training. In the future, in addition to new employee training, we plan to conduct follow-up training to improve specialized skills, not only for new employee for the second year and beyond, but also for other employees in each department to support their self-development.

Overseas business overview

Through marketing activities utilizing multiple social networking services (SNS), which are prevalent in various regions, the volume and quality of communications with local dealers and customers, including the regions of Europe and the U.S., has improved, and this has led to the development of new customers. In FY3/21, we held a number of large-scale webinars and actively promoted on-line supports such as seminars and technical advices.

Based on these efforts, in FY3/22, we will establish new digital marketing as the core of our new sales style by providing online customer supports through a cloud website and enhancing customer communications through social networking services. In addition, we will introduce the information on products, technologies, and procurement data on the cloud website.

To cultivate new markets, we aim to capture demand related to 5G (fifth-generation mobile communication system), EVs (Electric Vehicle), and FCVs (Fuel-Cell Vehicle) and expand market shares. Specifically, we will make a full-scale entry into EV-related marketplace in Greater China and cultivate the precision machining business. In Europe, the U.S., and Asia, we will propose precision machining that captures demand for EV to existing automotive related manufacturers.

Initiatives for next-generation monozukuri

Since the launch of iPhones in 2007, the performance of smartphones has improved to the same level as that of computers. One of the reasons behind this is that the industries of tool manufacturers, machinery manufacturers, and mold and electronic parts manufacturers have been promoting coordination of downsizing and miniaturization. In addition, demand for precision and micro machining is expected to continue expanding due to the ongoing evolution of ADAS (Advanced Driver Assistance System), evolution into EV and FCV, and acceleration of 5G compatibility.

We expect demand for electronic parts, including semiconductors, to grow from FY3/22 onward. In response, we are keen to develop the small-diameter end mills market more deeply. To build stronger positions in these markets, we invested in the all-round seismically insulated R&D Center adopting seismic insulation and earthquake-safe structure first time in monozukuri industries. In order to achieve high-precision and micro machining, an environment that does not shake nor vibrate is essential. We create a processing environment in which vibration is curbed with such an accuracy that humans cannot sense, and the environment is also resilient to earthquakes. That is the concept of the R&D Center.

The Fukushima Earthquake on February 13, 2021 observed a maximum magnitude of 6, but with the solid functioning of all-round seismically isolated structure, the earthquake had no impact on the R&D Center. Based on this experience, we will further strengthen our efforts toward the next generation of monozukuri.

Summary of financial results for FY3/21 / financial forecasts for FY3/22

Unit: ¥ million	FY3/20 Actual	FY3/21 Actual	YoY Changes	FY3/22 Forecasts	YoY changes	<reference> FY3/21 (Forecasts as of Jan-15-21)</reference>
Net sales	9,531	8,100	-15.0%	8,740	7.9%	7,930
Operating profit	2,219	1,512	-31.8%	1,770	17.0%	1,460
Ordinary profit	2,231	1,712	-23.3%	1,780	3.9%	1,650
Profit attributable to owners of parent	1,545	1,214	-21.4%	1,210	-0.4%	1,150
R&D expenses	364	388	6.4%	_	_	_
Capital investment	1,755	462	-73.7%	589	27.6%	357
Depreciation	698	707	1.3%	713	0.9%	714
EPS	¥61.81	¥48.55	-21.4%	¥48.38	-0.4%	¥45.98
DPS	¥45.00	¥35.00	-22.2%	¥20.00	_	¥35.00
Dividend payout ratio	36.4%	36.0%	_	41.3%	_	_

Note: The Company conducted a 2-for-1 stock split on April 1, 2021. "Earnings per share (EPS)" is calculated assuming that the stock split was conducted at the beginning of FY3/20. "Dividends per share" for FY3/22 forecast is the amount after the applicable share split.

Domestic training activities





Strengthening online marketing activities



Large-scale webinars held in Thailand, China, and Vietnam



On-line support in China, our major market

Message to our stakeholders

We have been shifting to small-diameter tools ahead of trends in the user markets since the declaration of specialization in small-diameter in 1994. In the meantime, the values we have appreciated are a thorough commitment to quality. Currently, there is only an environment for monozukuri based on all-round seismically isolated structure that is compatible with high-precision and micro machining, so we would like our customers to have various experiences at the R&D Center and take on the challenge of the next generation of high-precision and micro machining. In order to create this flow, we will actively invest in further technologies and production bases to "For Crafting Tomorrow."

Unlike large-diameter tools, small-diameter tools are made in small quantities of materials, but we have been working for many years on resource conservation and monozukuri through high-guality processing. We believe that pursuing long-life products will minimize waste and lead to the creation of environment friendly products. We aim to contribute to the society in a broader sense by continuing to create and introduce brand new technologies and products first time in the world, including manufacturing equipment.

I would like to ask all of our stakeholders for their continued support for our Group, which aims to be No. 1 in quality.



We aim to stabilize quality first, improve quality next.

Takashi Goto

Executive Vice President, in charge of manufacturing and development NS TOOL CO., LTD.

Way to specialization in smalldiameter tools

When the first phase of construction of the Sendai Plant began in 1993, our mainstay was still large-diameter tools. In 1994, President Isamu Goto (at the time) pledged to specialize in small-diameter tools in the speech at the Sendai Plant opening ceremony, which also commemorated the 40th anniversary of our company's foundation. In 1986, we developed the industryfirst "NHR-2 cemented carbide solid deep rib end mill" for rib milling of molds for plastic products. Although we were aware of a demand of our customers for small-diameter tools, there were still few machines that could make small-diameter tools at that time. Therefore, in reality, we were not "specialized" in making as small-diameter tools then. Major tool manufacturers also did not ordinarily handle tools with diameters of 3mm or less.

In 1994, we introduced to Japan the first CNC grinder manufactured by Rollomatic SA, and in 1996 we developed the original CNC machine "MASAMUNE" for small-diameter cemented carbide end mills. After these events, we finally started to specialize in small-diameter tools at full scale around 2000.

In-house development project of "TGM"

Nevertheless, there was no machinery that met our requirements. After a couple of events like designated machine manufacturers sold new machines developed and improved under our advices and discretion to our rivals, even with the sales tagline that we put high values on those machines, we finally decided to develop machinery in-house. This was the start of the Tool Grinding Machine "TGM" project. It was in 2003.

As a result of a number of trials and errors, we eventually succeeded in developing "TGM" in-house in 2006. "TGM" is a

CNC-powered tool grinder for mass production that can process even fine tools with diameter $10\mu m$ (0.01mm) and measure produced tools automatically and simultaneously, which enables continuous unmanned operations.

Meanwhile, in 2005, we developed the "Micro Edge" tool for super micro milling. The standardization of an end mill with diameter of 10µm (as a mass standardized product) was unprecedented in the world at that time and attracted attentions of the industry.

We try it even if we fail.

Personally speaking, I did not expect that the development of "TGM" would go well from the beginning. I dared to let our people challenge even if we might fail. We never know whether we can make it or not, unless we challenge, even fail. We tackled the task with belief that it was worth challenging if we could think ourselves succeed in a sense after realizing what we could not achieve. I am grateful that the success of the development in the initial challenge was the result of the efforts of our employees.

The first priority is quality stability.

Although we succeeded in developing "TGM," I did not approve the adoption of the first successful unit for production. The reason was that the performance of "TGM" was too good, resulting in widely varied qualities of products when we use it in conjunction with conventional facilities.

We heard from a customer who used thousands of smalldiameter tools that they chose our products because the quality was constant with no variation while other manufacturer had the longest product life. That was exactly what I was thinking. The main premise is to manufacture products with stable quality without any variation, and on top of that, we are allowed to think that improving the level of quality is most important. Repeating this process will result in the trust of our customers.

Beyond the "TGM" story just mentioned, we are always thinking a variety of ways to improve stability when it comes to end mill production.

Looking ahead, we believe that materials will also become an important field to explore. There is no material exceeding tungsten cemented carbides yet. Although this is a field that takes time and money to research, I would like to take on the challenge to improve the level of materials.

NS Engineering Co., Ltd.

Its Head Office Plant, located on the premises of the NS Tool Sendai Plant, focuses on coating while its Niigata Plant focuses on manufacturing end mills. Its Niigata Plant has begun manufacturing small-diameter tools in order to diversify our production system in case of emergency. Through these efforts, we will strive to achieve a risk diversification.

Head Office Plant: Taiwa-cho, Kurokawa-gun, Miyagi Niigata Plant: Uonuma-city, Niigata Business lines: Coating processing, re-grinding, and processing of cemented carbide end mills (mainly products with diameters over 6mm)



Makino Industry Co., Ltd.

The main business of Makino Industry at present is the manufacture of plastic cases. Makino Industry is inevitably connected to the NS Tool business because it forms plastic cases with molds, and those molds are made by tools of NS TOOL, and we see a possibility of synergy and business expansion if we can co-produce molded products together.

Head Office: Shirakawa-city, Fukushima Business line: Manufacture and sales of plastic molded products, mainly tool cases



NS TOOL Group's *monozukuri* system

The "quality-focused *monozukuri*" has been originated and promoted by NS TOOL, and this initiative is also expanded to our Group companies, NS Engineering Co., Ltd. and Makino Industry Co., Ltd. From the perspective of the NS TOOL Group, we have begun new initiatives aimed at total optimization of our *monozukuri* base.

Outline of NS TOOL Group's manufacturing system



To provide stable quality with no variations... "If you do it, do it right."

Koichi Okada Plant Manager and General Manager of Production Department NS TOOL CO., LTD.

Commitment to "automation driven by people*" that has begun to bear fruit

In 2006, we developed the Tool Grinding Machine "TGM" inhouse for producing small-diameter end mills with high accuracy and stability. Based on this first machine, we have accumulated improvements. We combined TGM with a system that automatically measures the produced tools and feeds back dimensional correction. We also invented an automatic workpiece transfer system, and a series of established automated equipment made unmanned operations possible even on nights and holidays. As a result, we are capable of producing tools with high accuracy in several microns unit, stably, with no variations. The customers who visited our plant always evaluate us, saying that: "I understood why your tools are always stable with same dimensions." We will continue to implement further initiatives and improve our production for much higher accuracy to meet the requirements of our customers.

*Note: Not automation, but "automation driven by people." The automation that NS TOOL aims for is driven by people. Even if works are left to machinery, any evolution and development of *monozukuri* can be achieved only with the inspirations of people. This is the basic idea behind our monozukuri.



Initiatives for ISO standards to reduce risks and improve operations

We have obtained ISO9001 (quality management system, registered in February 2001) and ISO14001 (environmental management system, registered in January 2004) certifications. At the Sendai Plant, under strong commitment of the management team, we are working daily to reduce risks and improve operations, including QC (Quality Control) activities such as small-group activities, considering internal conditions and external environments. Based on the divisional policies in line with the management policies, each smallgroup defines its goal and methodology clearly, which leads to good outcomes as a result. The top-down PDCA is functioning firmly.



Capture COVID-19 pandemic as an opportunity

We saw an opportunity to improve operations when the production was reduced due to the COVID-19 pandemic. Another major achievement was that the elimination of shift work enabled all employees to gather ideas and exchange

Creating something unprecedented in the world — the history of developing products —

Micro Edge

In 2005, we released "Micro Edge" as a tool for supermicro milling. In the past, we received inquiries from customers: "No tool smaller than 0.1mm has been launched in the world. Can NS TOOL, specializing in small-diameter, develop such a tool?" or "Can NS TOOL develop a tool with diameter of 0.03mm?" We met their expectations by taking orders as made-to-order basis, like special tools separate from the catalogue. However, at the production site, only a few good final products could be produced out of 100 units, and yields were poor. After trials and errors for technological improvements, we could finally introduce Micro Edge as a standard product listed on catalogues. As a result, we won the "Ten Great New Products Award" by Nikkan Kogyo Shimbun, Ltd. This mass production technology provided an opportunity to innovate production technologies of other tools.





The history of monozukuri supporting the "now" of NS TOOL

	1970s		1980s		1990s		2000s	
	 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 → "Nisshin of Power End Mills" takes root. 	1982	• Launches "Cemented Carbide Solid End Mill Power End Mill"	1993	• Launches "Copper Electrodes Cutter Series"	2003	 Terminates production of high-speed steel end mill "Power End Mill" Starts in-house developed tool grinding machinery project Launches "CBN Super Finish Ball End Mill" (More than twice as hard as cemented carbide, enabling long-term high-precision machining from pre-hardened steel to high-hardness materials) 	2012
		1985	Enters into automotive mold industry • 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	1994	 Declaration of specialization in small-diameter tools (We define "small-diameter" as the end mill diameters 6mm or less) 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 	2005	Launches a tool for super micro milling "Micro Edge"	2016
		1986	 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 	1996	 Installs "MASAUNE," an original CNC machine for manufacturing small-diameter cemented carbide end mills 	2006	• Developed in-house Tool Grinding Machine "TGM" (CNC tool grinding machine for mass production of micro tools automates tool measurement and transfer, enabling unmanned operation)	2018
				1997	• Launches cemented carbide end mills "Mugen Coating Series" (Original coating with excellent wear resistance and lubricity using TiAlN coating)	2007	 Establishes a Manufacturing Center for in-house coating production, industry's first in-house production of product storage cases, and starts 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) 	, 2019
						2008	• Launches "Micro Drill Series"	2020
_	→ Leading movement	for ceme	nted carbide tools					2021

monitors stable production

opinions actively regarding how to improve operations and change working practices. It is important to think and understand on our own. We are committed to continuing these "if you do it, do it right" initiatives to grow into a better company

CBN End Mills

While large-diameter CBN end mills to cut large molds such as for automobile bodies existed in the early 2000s, we developed a small-diameter CBN end mill as a tool to machine hard hardened steel of precision molds for a long period of time. This tool is used for milling of precision molds, so the dimensional tolerances of the tool also require an accuracy within several microns. In addition, CBN, which is about twice as hard as carbide materials, is a material difficult to grind into end mills and to achieve stable mass production with minimal variations. We have accumulated technologies to grind highprecision small-diameter CBN end mills by repeating trials and errors for many years and compiling data on these experiences. We will continue to develop much higher valueadded CBN end mills.



FCV-separator mold (Ima

- Launches "Diamond Coating Series"
- (For processing of graphite and composite materials)
- Launches "PCD* Square End Mill" (*Poly Crystalline Diamond)
- (For finishing of cemented carbide materials)
- Launches "NS-MicroCAM"

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(CAD/CAM system specialized for precision and micro machining developed by a tool manufacturer)
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- Launches "PCD Ball End Mill (Version Upgrade)" (For mirror-like finished surface of hardened steel materials)
- Launches "Long Neck Ball End Mill for Copper Electrodes" (Adopting coating and edge profile specialized for copper electrodes. By milling with less burr, ideal for copper electrodes and copper-tungsten machining)
- Launches "High Efficient "Z" End Mill Series" (By adopting unique design, enabling high-efficiency machining exclusively for stainless steel and carbon steel materials)
- Completes Sendai Plant R&D Center • Launches "Mugen Coating Premium Plus" (By improving "Mugen Coating Premium" to multilayer coating, enabling high hardness
- steel machining up to 70HRC) • Launches "CBN 4-Flute Radius End Mill"
- (Adopting a new edge profile that reduces milling resistance, improving machining accuracy and speed
- Launches "Ball End Mill for 5-Axis Machining"

From Business Sites



Being aware of technologies for not only "manufacturing" but also "using"

Katsuji Fujii

General Manager of R&D Department, Sendai Plant NS TOOL CO., LTD.

Organizational structure of R&D Dept.

R&D Dept. is composed of 4 sections. As the R&D Group, which is mainly involved in the development of new products, there are the Design Development Section, the R&D Section, and the New Business Development Section. And the Production Technology Section specializes in the development of facilities for the "automation driven by people."

The R&D Dept. has a wide variety of machining facilities. We have had the most advanced major facilities in each era, and therefore we can obtain data closer to our customers. This environment allows engineers to acquire a broad range of specialized knowledge, enabling them to communicate more deeply with our customers.

With an awareness of what can be useful

We are regarded as a specialist of small-diameter tools, and the

R&D Dept. is also aware of this. In addition, what we place importance is that we should develop such products that our customers think useful, rather than just manufacturing smalldiameter tools. We are constantly aware of the user's perspective on how our products are being used by our customers, and are working to develop technologies not only for "manufacturing" but also for "using." We would like to upgrade "Micro Edge," which led to the recognition that NS TOOL is a specialist of small-diameter tools, even more useful.

For Crafting Tomorrow

We are conscious of developing products that are not yet used in the world from the perspective that those products become useful sometime in near future. We will boldly challenge to keep developing while looking a little ahead of customers' perspectives.

Introducing new product and additional standards products on "INTERMOLD 2021"

From April 14 to 17, 2021, a mold machining technical exhibition "INTERMOLD 2021" was held at the Tokyo Big Sight. We introduced a new product for 5-axis MC machining, additional standards for CBN products and series products for copper electrodes. We also provided technical information at technical workshops on extending the tool life and improving the efficiency of high-hardness steel machining using the latest small-diameter end mills.

New product

Mugen Coating Premium Plus Series 3-Flute Ball End Mill for 5-axis machining

MSBSH330-5X

(Scheduled for release in June 2021)

In 5-axis machining, 2-axis of "rotation" and "tilt" are added to 3-axis (X/Y/Z). It is possible to machine continuous threedimensional curved surfaces

and hidden machined surfaces, dramatically improving productivity and machining accuracy. "MSBSH330-5X" is a 3-Flute, highly rigid ballshaped end mill that takes advantage of the features of 5-axis machining. It is a new product that reduces the total cost of machining. We plan to offer a total of eight sizes with ball radius ranging from 0.1mm to 1.0mm.

Addition of standard sizes

CBN Super High Precision Radius End Mill

SHPR400 (Scheduled for release in June 2021)

We developed our first CBN end mill in 2003. This enabled longtime, high-precision machining of high-hardness materials. Since then, we have cultivated

new application markets through various technological developments and proposals. In order to meet the expanding user needs, we will expand the variation of 4-Flute Radius End Mills realizes good machined surfaces will be "SHPR400," which won the Machine and Robots expanded to all 321 sizes to meet expanding Part Award at the "Super" Monozukuri Parts market needs. Award in October 2020, from diameters 0.1mm to 3.0mm, for a total size of 142.

Addition of standard sizes

Long Neck End Mill Series for Copper Electrode

DHR237/DRB230/DHR237R (Scheduled for release in July 2021)

This series was launched from 2018 to 2019 sequentially, and in October 2019, it received the Incentive Award at the "Super' Monozukuri Parts Award, The



sharp cutting edge suppresses burrs (unintentional protrusions and residues generated in the milling process), and the variation of the series that

Introduction of monozukuri by our Group companies

NS Engineering Co., Ltd.



Masahito Kobayashi President

Our commitment is the quality above all. At both the Head Office Plant and the Niigata Plant, we thoroughly control the quality in each process and are committed to stable quality. We carry out standardized operational procedures and checks reliably, and conduct monozukuri with absolute quality in mind.

During the production adjustment period in the COVID-19 pandemic, we took steps to improve our activities and improve the skills of our employees, seeing this as an opportunity to cultivate multi-skilled workers in preparation for unforeseen circumstances. As a result, regardless of volume of work, we have become capable to flexibly level out workloads, and even if our production recovers more than expected, we are able to carry out operations smoothly.

Our current focus is on developing competitive and high-performance new coating films, and improving technologies for handling mass production of coating films with high accuracy. We are co-working with NS TOOL to speed up developments. At the same time, we are focusing on technological improvements to provide our customers for stable products and ensure they can use them with a sense of security. We intend to establish a stable mass production with much higher accuracy and enhance the NS TOOL Group's branding.

Makino Industry Co., Ltd.



We are mainly engaged in manufacturing and sales of plastic cases for tools. In 2011, we acquired a land for the current Head Office Plant, and at the same time we joined the NS TOOL Group. The stable production is our highest priority from the viewpoint of cost reduction. We are working on several projects to improve and resolve our issues, such as promoting the "automation driven by people." Although there are many challenges that lie ahead, we, as a NS group company, will leverage the NS TOOL Group's strengths to work on further streamlining of operations and improving quality.

Kimihiro Shimotamari Director and Plant Manager

"monozukuri" means manufacturing in Japanese.

We develop and manufacture coating films for end mills, couduct re-grinding and recoating, and sell seismic detectors and "NS-MicroCAM" at the Head Office Plant, while manufacturing end mills and cylindrical grinding at the Niigata plant. The Niigata Plant has begun to produce not only large-diameter tools but also small-diameter tools so that it can function as a risk diversification base in the event of any emergencies.

At the Head Office Plant, we apply coating processing to end mills made at the NS TOOL's Sendai Plant, and also handle the final processes of production such as final inspections and packaging operation. In developing new coating films, which have a major impact on tool's milling performance, we are playing a vital role in the NS TOOL Group by co-operating with NS TOOL.



Junya Horigome Director and Plant Manager, Head Office Plant

Financial and Non-Financial Highlights NS TOOL CO., LTD. and Consolidated Subsidiaries

	FY3/12	FY3/13	FY3/14	FY3/15	FY3/16	FY3/17	FY3/18	FY3/19
Profit and loss (For the year)								
Net sales	5,781	5,997	6,418	7,402	8,382	8,825	9,767	10,476
By product End mills (Diameter 6 mm or less)	4,011	4,193	4,570	5,301	5,931	6,377	7,390	7,832
End mills (Diameter over 6 mm)	750	738	825	925	971	1,033	1,095	1,152
End mills (other)	579	646	586	661	805	788	577	697
Other products	440	419	435	514	673	626	704	793
Ratio of small-diameter end mills	69.4%	69.9%	71.2%	71.6%	70.8%	72.3%	75.7%	74.8%
Overseas net sales*1	1,101	1,247	1,268	1,703	1,944	2,167	2,553	2,898
Ratio of overseas net sales	19.0%	20.8%	19.8%	23.0%	23.2%	24.6%	26.1%	27.7%
Gross profit (loss)	2,740	2,843	3,076	3,707	4,389	4,823	5,528	5,929
Selling, general and administrative expenses	1,777	1,922	2,006	2,226	2,475	2,810	2,833	3,049
Operating profit (loss)	962	921	1,069	1,481	1,914	2,013	2,695	2,879
Ordinary profit (loss)	1,032	951	1,107	1,534	1,954	2,026	2,733	2,894
Profit (loss) attributable to owners of parent	535	527	694	973	1,342	1,420	1,903	1,970
Cash flows (For the year)								
Cash flows from operating activities	505	731	1,147	1,619	1,756	1,894	2,910	1,868
Cash flows from investing activities	(1,207)	(886)	(82)	(594)	(1,322)	(787)	(657)	(1,383)
Free cash flows	(702)	(155)	1,065	1,025	434	1,107	2,252	485
Cash flows from financing activities	(22)	(109)	(121)	(186)	(250)	(499)	(562)	(563)
Financial status (At year-end)								
Total assets	7,906	8,297	9,075	10,339	11,371	12,517	14,467	15,381
Cash and deposits	2,231	1,913	2,856	3,716	3,898	4,659	6,325	6,209
Inventories	1,272	1,382	1,466	1,509	1,467	1,592	1,745	2,056
Shareholders' equity	6,678	7,106	7,678	8,464	9,557	10,652	11,993	13,400
Per share data ^{*2}								
Profit per share (¥)	42.96	42.19	55.56	77.85	107.38	113.63	152.23	157.59
Net assets per share (¥)	534.08	568.32	614.21	678.23	765.33	853.10	959.88	1,071.48
Dividend per share (¥)	8.75	9.75	15.00	20.00	25.00	40.00	45.00	45.00
Dividend payout ratio	20.4%	23.1%	27.0%	25.7%	23.3%	35.2%	29.6%	28.6%
Financial data								
Gross profit margin	47.4%	47.4%	47.9%	50.1%	52.4%	54.7%	56.6%	56.6%
Ordinary profit margin	17.9%	15.9%	17.2%	20.7%	23.3%	23.0%	28.0%	27.6%
Value added per employee ⁻³ (¥ thousand)	12,866	11,481	12,318	14,286	16,535	15,705	17,299	18,004
Return on Assets (ROA)	7.1%	6.5%	8.0%	10.0%	12.4%	11.9%	14.1%	13.2%
Return on Equity (ROE)	8.3%	7.7%	9.4%	12.0%	14.9%	14.0%	16.8%	15.5%
Equity ratio	84.5%	85.6%	84.6%	82.0%	84.2%	85.2%	83.0%	87.1%
Research and development expenses	196	207	231	232	304	366	330	296
Capital investment	1,051	1,001	469	612	1,295	774	663	1,268
Depreciation	471	563	534	474	505	632	625	629
Non-financial data								
No. of employees	232	281	284	281	280	322	338	343
No. of directors	12	10	9	9	9	9	8	7
Ratio of independent directors	16.7%	20.0%	22.2%	22.2%	22.2%	33.3%	37.5%	28.6%
Ratio of external directors	16.7%	20.0%	22.2%	22.2%	22.2%	33.3%	37.5%	28.6%
Ratio of female directors	8.3%	10.0%	11.1%	11.1%	11.1%	22.2%	25.0%	28.6%

*1 Overseas net sales include those via domestic export trading companies.

*2 The impact of the share split on April 1, 2021 was not considered.

*3 Value added per employee=(Operating profit+Personnel expenses (including labor costs)+depreciation)/number of employees

		(Unit: ¥ million)
FY3/20	FY3/21	20/21 Changes
9,531	8,100	-15.0%
7,310	6,338	-13.3%
945	739	-21.8%
614	478	-22.1%
660	543	-17.7%
76.7%	78.3%	_
2,916	2,495	-14.4%
30.6%	30.8%	—
5,224	4,137	-20.8%
3,005	2,624	-12.7%
2,219	1,512	-31.8%
2,231	1,712	-23.3%
1,545	1,214	-21.4%
1,908	2,526	32.3%
(1,769)	(187)	—
138	2,338	1582.9%
(562)	(438)	_
16,017	16,936	5.7%
5,784	7,674	32.7%
2,201	1,758	-20.1%
14,383	15,162	5.4%
123.62	97.11	-21.4%
1,149.63	1,210.87	5.3%
45.00	35.00	-22.2%
36.4%	36.0%	_
54.8%	51.1%	_
23.4%	21.1%	_
16,329	14,033	-14.1%
9.8%	7.4%	_
11.1%	8.2%	_
89.7%	89.4%	_
364	388	6.4%
1,755	462	-73.7%
698	707	1.3%
338	339	0.3%
8	9	12.5%
37.5%	33.3%	_
37.5%	33.3%	_
25.0%	22.2%	_

Financial Analysis

Review of consolidated financial results for FY3/21

For the summary of FY3/21 consolidated financial results and FY3/22 consolidated financial forecasts, please see "Top Message" on page 9 to 12.

In FY3/21, economic activities were significantly affected, particularly in 1H, by the global spread of COVID-19 infections. In 2H, the economy returned to a recovery trend due to the resumption of economic activities in each country and the emergence of pent-up demand, but the second/third waves and the outbreak of mutant viruses have increased uncertainty again.

Under such a micro environment, the overview of the cemented carbide tool industry, where our business is based, shows the production value of cemented carbide tools and cemented carbide end mills in CY2020 decreased by 23.2% yoy to ¥228.5 billion and 26.0% yoy to ¥40.3 billion, respectively. Furthermore, the long-term trend of cemented carbide end mills production value from 1997 to 2020 shows the depth of the recession caused by the COVID-19 pandemic, although not as deep as the decline at the time of global financial crisis.

As for the main demand trends of our Group's products, the situation was so severe as the temporary production volume of automobile-related products halved yoy in 1H FY3/21. However, in 2H FY 3/21 demand recovered

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



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

gradually due to some leading Japanese car manufacturers' policy to maintain production levels and demand recovery in the U.S. and China. Electronic parts and devices related fields was also on a recovery trend, enhanced by sales of 5G compatible models of mainstay smartphones in addition to the growth of PCs and related devices for wide-spread teleworking. The recovery trends of these customers have gradually adjusted the level of market distribution inventories of our products.

By product, "end mills (6 mm or less)" decreased by 13.3% yoy, "end mills (over 6 mm)" decreased by 21.8% yoy, and "end mills (others)" decreased by 22.1% yoy, resulting in the ratio of small-diameter end mills (diameter of 6 mm or less) increased by 1.6 percentage points yoy to 78.3%.

By region, overseas net sales decreased by 14.4% yoy to ¥2,495 million, domestic net sales decreased by 15.3% to ¥5,605 million, and the overseas net sales ratio increased by 0.2 points yoy to 30.8%. The major breakdown is as follows: net sales in China, Hong Kong, Taiwan decreased by 14.1% yoy to ¥1,164 million, Other Asia decreased by 18.7% to ¥620 million, Europe decreased by 11.8% to ¥571 million, and America and other areas decreased by 7.8% to ¥139 million.

In terms of profits, cost of sales reduced mainly due to reduction in variable costs such as raw material cost and outsourcing expenses due to production cut, and SG&A

Long-term quarterly trends of production of cemented carbide end mills (Calendar Year)



Source: Prepared by the Company based on the *Current Production Statistics* of the Ministry of Economy, Trade and Industry

expenses also reduced, mainly in promotion expenses and advertising expenses.

Capital expenditures expanded significantly in FY3/20, as a result of construction of R&D center and the new plant at a subsidiary. In FY3/21, it decreased by ¥1,293 million yoy to ¥462 million due to the postponement of some capital expenditures.

On the financials, total assets were ¥16,936 million (increased ¥918 million to the end of FY3/20), total liabilities were ¥1,609 million (increased ¥90 million to the end of FY3/20), and total net assets were ¥15,326 million (increased ¥828 million to the end of FY3/20).

In assets, there was an increase in cash and deposits at current assets due to insurance policy cancellation and capital expenditures restraints. In addition, non-current assets decreased due to depreciation exceeding capital expenditures as a result of capital investment restraints.

Liabilities increased mainly due to an increase in accrued consumption taxes. Net assets increased mainly due to an increase in retained earnings.

Consequently, equity ratio declined 0.3 percentage points to 89.4%.

Trends of net sales by product and ratio of small-diameter end mills



Shareholder returns policy

NS TOOL places one of the highest priorities on returning our profits to shareholders. Our basic policy is to deliver shareholder returns based on business results, while taking into account the earnings to be reserved internally for solid management infrastructures and future expansion of businesses. As for our dividend policy, we take holistic approach by evaluating business performance and dividend payout ratio, while paying attention to stability and sustainability of shareholder returns.

For FY3/21, we have set the interim dividend of ¥10 per share, the year-end dividend of ¥25 per share, and the annual dividend ¥35 per share therefore. For FY3/22, the annual dividend is expected to be ¥20 per share. In order to improve the liquidity of our shares and expand our investor base, we conducted a 2-for-1 stock split on March 31, 2021 as the record date (effective date of April 1). Considering this stock split, the dividend per share would be ¥2.5 per share higher than the dividend for FY3/21.

In addition, we have introduced a shareholders' benefit program to appreciate the continued support from our shareholders, enhance the attractiveness of investing in our shares, and encourage more shareholders to hold our shares over the medium- to long-term.



Analysis on increases/decreases in consolidated operating profit

Corporate Governance (as of March 31, 2021)

Profile of Management Team



Executive Officers

Yuji Goto

Hiroshi Tajima

General Manager of

General Manager of General Manager of International Sales Department

Corporate Planning Office Sales Department

Yuko Adachi

Apr. 1985: Joined NS TOOL

Apr. 1978: Joined AIU General Insurance Co., Ltd.

Affairs Department

Sep. 2001: Director and General Manager of General

Feb. 2002: Director and General Manager of General

Managing Director

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Affairs Department, and President of	
G-Tech Co., Ltd.	
un. 2003: Director of NS TOOL, President of G-Tech Co., Ltd.	
pr. 2005: Managing Director of NS TOOL	
(Information Supervisor)	
Iov. 2015: President of Makino Industry Co., Ltd.	
Oct. 2016: Managing Director of NS TOOL,	
in charge of general affairs/administration	
(Information Supervisor) (present post)	
pr. 2017: Chairman of Makino Industry Co., Ltd.	
(present post)	
ep. 2020: Chairman and President of Makino Industry Co., Ltd.	
an. 2021: Chairman of Makino Industry Co., Ltd.	
(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 Directo
	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 (Audit & Supervisory Committee
	Member) (present post)

	Kenichi Sasamoto
nber)	Independent External Director (Audit & Supervisory Committee Member)
	Jun. 1980: Joined Chuo Audit Corporation
ociation)	Sep. 1998: Senior Partner of Chuo Audit
ra & Hiraga,	Jul. 2007: Senior Partner of A&A Partners
	Jun. 2010: External Audit & Supervisory Board Member of
sulting, Co., Ltd.	TOKATSU HOLDINGS CO., LTD.
apital Group Co.,	Sep. 2014: External Audit & Supervisory Board Member of
	Japan Corporate Housing Service Inc. (currently
or	Sun Next Group Co., Ltd.) (present post)
ttee Member)	Sep. 2016: Left A&A Partners
	Oct. 2016: Opened Certified Public Accountant Sasamoto Kenich
Associates Holdings,	Office.Representative of the same (present post)
	Jun. 2018: External Auditor & Supervisory Board Member of
ipervisory	TOKATSU HOLDINGS CO., LTD. (present post)
nan Associates	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.
	Sep. 2020: External Director (Audit & Supervisory Committee
	Member) of Sun Next Group Co., Ltd. (present post)

Takashi Koizumi Koichi Okada

Masahito Kobayashi

Plant Manager and General Manager of Production Department General Manager of General Affairs Department

Corporate Governance

Corporate Governance Structure

The Company 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.

System Diagram (as of March 31, 2021)



Chart of Structure (as of March 31, 2021)

Corporate governance system	Company with Audit & Supervisory Committee
Number of directors who are not Audit & Supervisory Committee member (External directors out of them)	5 (0)
Number of directors who are Audit & Supervisory Committee member (Independent external directors out of them)	4 (3)
Term of office of directors	1 year (2 years for Audit & Supervisory Committee members)
Incentive provided for directors	stock option remuneration 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 5 members)
Optional committees	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 Audit & Supervisory Committee consists of 4 members (1 full-time Audit & Supervisory Committee member and 3 part-time Audit & Supervisory Committee members, with 3 external directors out of the three). The Committee performs audits on managerial decision-making and the status of business execution. The members of Audit & Supervisory Committee attend important meetings including meetings of the Board of Directors and express necessary opinions. One of the Audit & Supervisory Committee members, who should be internal director, obtains a full-time position 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 internal audit division and accounting auditor.

Current status of governance system

The Company's managerial decision-making and business execution processes are as follows.

Important managerial issues are proposed to the Board of Directors for deliberation. For the purpose of securing enough time for the Board of Directors to discuss agenda items proposed, 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 agenda items submitted to the Board of Directors shall be fully discussed and negotiated, and, by hearing opinions from Audit & Supervisory Committee members, corrected if necessary. Finally, they shall be approved or rejected.

As for the agenda items that have been approved, executive officers in charge of individual business operation shall bear responsibility to perform the operations. They shall act as a leader in each business operation division, and report the status of the business operations they are in charge. Directors receive reports from each executive officer, 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 Company has established the organization in which control and management is effectively done. Further, the Company provides the approval workflow function in decision making, and conducts business operations based on the rules such as internal regulations. The Internal Audit Office directly under the control of the President, which is independent from operating departments, conducts internal audits of all the departments including the affiliates inside and outside Japan. In response to the internal control reporting system, the Company has built the Internal Control Committee, chaired by the Managing Director, to evaluate the development and application status of each control process, and has exchanged views with 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 3 external directors, both of whom are Audit & Supervisory Committee members.

The role expected as 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. 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 Company, the President and other directors, executive officers and important staff members, and (iii) be able to attend the Board of Directors and the Audit & Supervisory Committee. The Company has designated all the external directors that meet the requirement for independent director as independent directors.

Reasons for the elections

Ms. Naoko Fujisaki has an extensive insight and abundant experience as a director of a listed company, as well as extensive knowledge in finance and accounting (she was in charge of accounting, etc. for a period from December 1999 to December 2012 at a listed company).

Mr. Toshiaki Hiraga has not only high-level professional knowledge and experience as attorney but also an extensive

Board members' remuneration (FY3/21)

	Total amount of remuneration, etc. (¥ million)	Total amount of remuneration, etc. by type (¥ million)			Number of directors
Positions		Fixed remuneration	Performance-linked remuneration	Non-monetary remuneration (stock options)	eligible for remuneration
Directors (except for Audit & Supervisory Committee members) (except for external directors)	266	143	78	43	5
Directors (Audit & Supervisory Committee members) (except for external directors)	18	18	_	_	1
External directors	21	21	_	_	3

(NOTE) The amount of directors' remuneration does not include the salaries paid as employees to directors who serve concurrently as employees.

insight and abundant experience as external director at other companies.

Mr. Kenichi Sasamoto has an advanced expertise and experience as a certified public accountant as well as his experience and insights as an external board member of other companies.

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

Board members' remuneration, etc.

The remuneration of the Company's directors (except for directors who are Audit and 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 and 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 and Supervisory Committee members) from an objective and independent standpoint, directors who are Audit and 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 performancelinked 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 regard to the stock option remuneration plan, as a medium- to long-term incentive, we allocate share acquisition rights, for which a fair appraised amount is set as the amount to be paid.

ESG Topics

Topics

Pursuing stable quality leads to "earning power"



We are strengthening our manufacturing cost management system by analyzing the relevance of our daily manufacturing activities to cost of products manufactured. Satoru Toda, Director and General Manager of Administration Department, who leads this initiative, interviewed Takashi Goto, Executive Vice President, who oversees *monozukuri*, on the source of "earning power."

High growth is the result of pursuing quality stability

Toda: Net sales and profits have both grown significantly over the past decade or so following the global financial crisis and the Great East Japan Earthquake. Notably, the significant improvement in both net sales (volume) and profit margin (quality) have lifted the amount of profit by ¥1.12 billion from ¥0.43 billion to ¥1.55 billion in 10 years from FY3/11 to FY3/20, which is almost 4-fold increase. Breaking down the increase of ¥1.12 billion into factors, ¥0.39 billion is attributed to net sales increase and ¥0.73 billion is attributed to cost reduction in production. In other words, cost reduction efforts at the Sendai Plant contributed for 2/3 of the increase in profits. Is this the result of setting profit targets?

Goto: From a conclusion point of view, rather than having worked on something to make a profit, I think that the result of pursuing the quality stability of products is linked to profits. Our in-house developed Tool Grinding Machine "TGM" is equipped with an automated measuring instrument, which helps to ensure our stable quality. I think it is unique to have 1 unit of measuring instrument per machinery. It costs more and requires further space, but I would say that the unmanned operation through automatic correction by automatic measurement improved quality firmness and eventually led to profits. **Toda:** Well, your philosophy of pursing high-quality without focusing on profit turned out dramatic multiplying of profits. **Goto:** Yes. In addition, although many cutting tool manufacturers do not pay so much attention to the accuracy of the part that hold a tool (shank diameter), we really do. Generally, a range (tolerance) of about 5µm is acceptable, but in our case, the range is 1µm, which is 1-fifth of the normal range. This affects the accuracy of end tooth and flute of end mills.

Business performances





Manufacturing products properly from the initial stage of production (pre-processing) rather than correcting them at finishing. High-quality *monozukuri* can only be sustained by aiming for even better products. We are trying hard to pursue details that are invisible, I assume.

Toda: I understand manufacturing properly from the initial stage is an important to ensure stable quality. Where has this firm commitment to stable quality and precision come from?

Goto: Above all, it's what our customers want. It's a result of responding to it. It is precisely because we have responded to such customer needs, and therefore the efficiency has improved and the productivity has increased.

Need for capital expenditures with an eye on the future

Toda: Looking at the historical results, the gross profit margin improved each time as the number of facilities increased. Are large capital expenditures determined to be once every 4 years?

Goto: It would be easier to build a large building from the outset and gradually put in machinery and equipment, but it would be a waste of investment while the space is not used up. We believe that anticipating demand in the next few years and building up capital expenditures accordingly suits the current size of our business. It happens to be a 3- or 4-year cycle.

Toda: I guess investment on Buildings A to E of the Sendai Plant were conducted based on this idea.

Goto: All of these buildings were built to meet the demand of the times, and I imagined myself always moving machinery and equipment here and there each time of new investment. One of our *monozukuri* strengths is our ability to handle machinery and equipment maintenance in-house, including overhaul. We basically take measures in-house to optimize operational moving lines. It turned out that the R&D Center's all-round seismically

Property, plant and equipment balances and gross profit margins



FY3/11 FY3/12 FY3/13 FY3/14 FY3/15 FY3/16 FY3/17 FY3/18 FY3/19 FY3/20 FY3/21

isolated structure was functioning as designed in response to the Fukushima Offshore Earthquake that occurred in February 2021. At the Sendai Plant, we were able to adjust facilities and inspection equipment in-house, which contributed to the rapid recovery of production. Looking ahead, when the necessary verification at the R&D Center has been completed, we intend to build a new plant building with an all-round seismic isolation (Part2) further upgraded based on the findings, and start production there.

Future initiatives to become a "R&D oriented company"

Toda: Our R&D expenses are on the rise, but the ratio to EBITDA (operating profit before depreciation) has been declining. Please tell us about your thoughts for the future.

Goto: While there are discussions internally that R&D expenses may be increased a little more, we need to invest with clear purposes and themes. In this sense, I think it is urgent to secure human resources with the knowledge and skills necessary for R&D. On the other hand, we will promote collaboration with other companies as well as universities and research institutes for developments that have clear themes, which are difficult for us alone to implement.

Toda: What do you want to promote in the future as a "R&D driven company"?

Goto: We have developed products unprecedented in the world. In addition to the products of end mills, we have sent messages that we create technologies which no one was ever capable of. I think that is to "make invisible things into shape." Making invisible things into shape leads to new discoveries. We are sincerely committed to pursuing initiatives for that.

Toda: I will do my utmost for contributing to the activities. Thank you very much.



R&D expenses and EBITDA ratios

ESG Topics

Topics

2

Leveraging inaudible hearing

Aiming for a "living together" society based on my own experiences

Hayato Uematsu

NS Tool athlete contract employee

Profile

After serving as a board member of the Japan Football Federation for the Disabled, Mr. Uematsu currently serves as the representative of Sign Football Shinagawa School, the manager of the Japan Deaf Football Association Deaf Soccer Men's Japan National Team, and an instructor of the Nippon Foundation Paralympic Support Center Challenge for Tomorrow! Academy. Joined NS TOOL as an athlete contract employee in October 2020.



After playing for the Deaf Futsal Japan National Team, from 2017 Mr. Uematsu was appointed as a manager of Deaf Soccer Men's Japan National Team of the Japan Deaf Football Association (JDFA). He is engaged in activities to promote understanding of para-sports and people with disabilities through deaf soccer.

Aiming to increase awareness by inviting the Deaflympics

The Olympic and Paralympic Games are a worldwide sporting festival, but there is no event in the Paralympic Games where the hearing-impaired can compete. Just like the Olympic and Paralympic Games, the Deaflympics, which are held once every 4 years, is the highest-level tournament which athletes with hearing disabilities aim at. However, the reality is that public awareness of the Deaflympics in Japan is overwhelmingly lower than that of the Paralympic Games.

The next Deaflympics is scheduled to be held in Brazil in May 2022, and bidding campaign for the after next Game has begun. Japanese Government is supporting activities to the event in Japan in 2025. Efforts are being made to improve the awareness of the Deaflympics.

Efforts to promote understanding for hearing-impaired by encouraging assistance of NS TOOL

I have received a great deal of support from NS TOOL, not only for being the main sponsor of JDFA, but also personally for contracting as an athlete contract employee. I'd like to extend this valuable support to activities such as, enhancing my skills as the manager of Japan National Team, increasing awareness of the Deaflympics through the deaf football experience, and promoting social empathy for hearing impairment through parasports.

Aiming to realize a society that lives together

Hearing impairment is said to be an invisible disability, and because they look like healthy individuals at first glance, there are fewer opportunities to be featured in the media or actually meet them, and the ways of how to communicate with them is not easily adopted in society

I myself have also experienced difficulties in living as a hearing-impaired. However, my experience has led to conveying true feelings and thoughts of hearing-impaired's in various fields to society, and eventually leading to proposals for the ideal future. There are a variety of ways to communicate between those who are unable to hear and those who can hear. For those who only think of written conversations, I would like to help upgrade the way of thinking.

I will continue to leverage my inaudibility of hearing to make a "living together" society come true, where we appreciate each other's goodness.



Deaf soccer practices

Corporate Data/Stock Information (as of March 31, 2021)

Corporate Data

Company name	NS TOOL CO., LTD.
URL	https://www.ns-tool.com/en/
Representative	Hiroji Goto
Head office	6F. Sumitomo Fudosan Oimachi Ekimae Bldg., 1-28-1 Oi, Shinagawa-ku, Tokyo 140-0014
Established	December 1954
Capital stock	¥444,372,743
Number of employees	339 (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	Gtech Co., Ltd. NS Engineering Co., Ltd. Makino Industry Co., Ltd. NS TOOL Hong Kong Ltd.
Securities exchange	First Section of the Tokyo Stock Exchange

Major Shareholders

Shareholder Name	Number of Shares Held (thousand shares)	Shareholding Ratio (%)
M.Y. CORPORATION, Inc.	1,248	9.98
Solpty Co., Ltd.	1,217	9.74
NORTHERN TRUST CO. (AVFC) RE FIDELITY FUNDS Standing Proxy: The Hongkong and Shanghai Banking Corporation Limited, Tokyo Branch	943	7.55
П Road Co., Ltd	923	7.39
The Master Trust Bank of Japan, Ltd. (trust account)	779	6.23
BANK JULIUS BAER AND CO., LTD. Standing Proxy: MUFG Bank, Ltd.)	646	5.17
NORTHERN TRUST CO. (AVFC) RE HCR00 Standing Proxy: The Hongkong and Shanghai Banking Corporation Limited, Tokyo Branch	481	3.85
Custody Bank of Japan, Ltd. (trust account)	460	3.68
Hiroji Goto	324	2.60
Fakashi Goto	324	2.60
Yuji Goto	324	2.60

Note 1: The number of shares less than a thousand is truncated Note 2: 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



NS TOOL's stock prices and TOPIX values are calculated, assuming that the closing price data of April 2, 2018 is 100

Stock Information

Number of authorized shares	19,200,000
Number of issued shares	12,505,627
Number of shareholders	3,120

Composition of Shareholders

Financial institutions	(23 shareholders, 2,273,900 shares)
Financial instruments dealers	(18, 121,031)
Other corporations	(59, 4,031,513)
Foreign corporations, etc	(70, 2,476,276)
Individuals and others	(2,949, 3,602,388)
Treasury stock	(1, 519)



Shareholder Memo		
Fiscal year	From April 1 to March 31 of the following year	
General shareholders' meeting	 Ordinary general meeting of shareholders: held in June every year 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	Nikko-cho, Fuchu-shi, Tokyo, Japan Securities Agency Division, Mitsubishi UFJ Trust and Banking Corporation 0120-232-711 (toll-free in Japan) [Mailing Destination] PO Box 29, New Tokyo Post Office, 137-8081, Japan Securities Agency Division, Mitsubishi UEL Trust and Banking Corporation	
Public announcements	Notices will be posted in electronic format. However, notices will be published in the Nihon Keizai Shimbun (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.

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Report on Election of New Director

We are pleased to report that the following new director was elected based on a resolution by the 60th annual general meeting of shareholders held on June 22, 2021.

Reasons for Electing a New Director

We have decided to appoint Mr. Tajima as director (audit & supervisory committee member) in view of his wealthy experiences and knowledge through many years of working at a securities firm, as well as his high-expertise of management analysis, financial practices and accounting after his career at NS Tool as director and executive officer of finance and accounting, corporate planning and internal audit.



Hiroshi Tajima Director (Audit & Supervisory Committee Member)

Profile of New Director

Name (Date of Birth)	Biography		
	April 1985: Joined Universal Securities Co., Ltd. (current Mitsubishi UFJ Morgan Stanley Securities Co., Ltd.)		
Hiroshi Tajima (April 26, 1961)	March 2005: Joined NS TOOL as General Manager of Corporate Planning Office		
	April 2010: General Manager of Administration Department		
	June 2010: Director and General Manager of Administration Department		
	June 2012: Executive Officer, General Manager of Administration Department		
	April 2018: Executive Officer, General Manager of Corporate Planning Office		

Reference: Directors on and after June 22, 2021

Hiroji Goto, Director	Kazuo Fukuda, Director (Audit & Supervisory Committee Member)
Takashi Goto, Director	Hiroshi Tajima, Director (Audit & Supervisory Committee Member)
Yuko Adachi, Director	$Naoko\ Fujisaki,$ Independent External Director (Audit & Supervisory Committee Member)
Satoru Toda, Director	Toshiaki Hiraga, Independent External Director (Audit & Supervisory Committee Member)
	Kenichi Sasamoto, Independent External Director (Audit & Supervisory Committee Member)