THK Sustainability Report

2020

Responding to the Coronavirus

— Protecting employees and their families, maintaining business activities and upholding responsibilities as a supplier, and working toward a new era —

Before getting into the main topics of the THK Sustainability Report 2020, we would like to share how our company has been responding to the coronavirus.

In December 2019, the Chinese city of Wuhan in Hubei Province observed cases of patients with pneumonia from an unidentified source. Then in January 2020, the Japanese Ministry of Health, Labour and Welfare sent out a warning, and the World Health Organization (WHO) confirmed the detection of a novel coronavirus. Despite earnest efforts initiated worldwide to care for those infected and prevent the spread of the virus since then, there is still a steep road ahead before achieving social and economic recovery.

Based on our Emergency Response Manual, we quickly established a coronavirus response task force led by the CEO in February. Since then, we have used web conferencing tools to gather and share information with every location in and outside of Japan. As the global crisis has grown, we have listened to our customers asking us to continue shipping products, and with great pride as an essential business, we have worked daily to consider and execute measures that allow us to continue operations and fulfill our responsibility to supply products while ensuring the safety of our employees and their families. In addition, we have promoted the development of products in anticipation of the "post-corona" society and economy.

Although we may struggle with how to balance virus countermeasures along with social and economic activities for the foreseeable future, we intend to continue meeting the expectations of our stakeholders so they may feel reassured when doing business with us.

The following report details the coronavirus countermeasures our company has implemented.

Establishing the Coronavirus Response Task Force

The coronavirus response task force was established on February 3 to anticipate future business risks caused by the coronavirus and thereby enable us to continue operations and fulfill our responsibility to supply parts globally no matter the circumstances. The task force convened daily with the heads of each division and branch (including those in China), anticipating the worst scenarios in order to solve them through various countermeasures.

At first, based on the Chinese State Council's announcement that the Chinese New Year holiday would be extended, we immediately moved forward with efforts to support China. This is the country with our second greatest number of workers after Japan, so we focused on determining how to maintain operations while ensuring our employees' safety and how to prepare for a reopening if plants would have to be shut down. Because of our

Coronavirus response task force (reviewing global infection data)

Responses As the coronavirus pandemic gradually worsened, THK took early action to fulfill its responsibility as a supplier. The following timeline

	January	February
Japan and the World[1]	6: Ministry of Health, Labour and Welfare issued warning about unidentified pneumonia in Wuhan, China 14: WHO confirmed existence of novel coronavirus 16: First confirmed case in Japan 30: WHO declared a global emergency	25: Government determined a basic policy and urged companies to move forward with remote work and staggering working hours 28: Hokkaido governor declared a state of emergency
THK (primarily in Japan)	21: Sent announcement asking employees to avoid going out unnecessarily 27: Prohibited business travel to China	3: Established coronavirus response task force and prohibited all international business travel 17: Prohibited sick employees from coming to work and forbade all unnecessary domestic and international business travel 24: Prohibited all travel to China, South Korea, and Japan from abroad 26: Began staggering work times, generally prohibited in-person visits from guests, and closed the headquarters show room 28: Began remote work trial and gradually expanded the program

[1] Created based on sources including the NHK coronavirus web page

experience with the Great East Japan Earthquake and novel influenza, we have been keeping a stock of disaster and hygiene supplies at our headquarters, so we were fortunately able to send masks and disinfectant to our sales and production facilities in China. At the same time, the members responsible for each of our Chinese locations took thorough action locally to prevent infections, so they were able to resume sales and production activities in an orderly fashion without any major problems as the coronavirus issue began to settle down.

Simultaneously, we began enacting countermeasures in Japan. Because we were taking action against an unknown virus, we gathered all the information we could. Having done this, we focused on fully eliminating things that carried a risk of infection. For our employees, we encouraged hand washing, required masks to be worn, instituted daily temperature checks, established home quarantine periods for those with fevers and anyone who was in contact with them, prohibited in-person meetings with guests, and forbade the use of public transit. In these and other efforts, we requested the full compliance of our employees, their families, and our suppliers. In order to ensure we would fulfill our responsibilities as an essential supplier even as infections were predicted to spread in Japan, we developed thorough countermeasures to ensure continued business operations, including preparing to transition to remote work and establishing our "value teams." On March 27, around 90% of our headquarters and sales staff (excluding those at our production facilities) were working from home.

As a result of the numerous measures we took, our production facilities in Japan were able to maintain operations even when a state of emergency was declared. Due to how the virus was spreading in different regions around the world, some overseas production facilities were forced to suspend operations, but we quickly recovered our machine utilization rates once they resumed work again.

In addition, we utilized our global network to acquire and donate medical masks in chronically short supply to the National Cancer Center Japan and the "mask team" established by the Ministry of Health, Labour and Welfare.

Ensuring Operations: The Resolve of the Value Teams

Witnessing Chinese cities being locked down to prevent the spread of the virus, we took measures to ensure we could supply our products to our customers even if people's mobility were restricted. We selected the minimum office staff members (in international sales, purchasing, finance, systems, engineering, etc.) required to maintain operations, and those units began operating as "value teams" beginning March 3. We created two teams to have an operational back-up in case of an infection, with one team located at the headquarters and the other at the Technology Center. As a precaution to minimize the risk of infection within those teams, we provided space in the office for everyone to sit alone, and certain routes within the buildings were reserved for them to avoid contact with other employees. We took the greatest possible care, even having team members stay at and commute to work from nearby hotels.

Keeping future trends in mind, in order to make remote work a possibility, we also had the value teams try out paperless methods of taking care of work we once thought could only be performed at the office. In the end, we identified various problems and solved them one by one, enabling our transition to remote work.

Value team at the Technology Center

highlights some of our main responses. Additionally, the task force has continued to meet daily since February 3 and responds to circumstances as appropriate.

March

- **9:** Panel of experts called for social distancing
- **23:** Travel advisory issued for Iran, Germany, France, etc.
- **25:** Tokyo governor issued a call for people to have a sense of urgency about exploding rates of infection, to work from home, and to not go out at night or when unnecessary
- **3:** Began operating value teams of staff essential for business continuity
- **9:** Sent message from the CEO to employees (thanking everyone for their efforts)
- **25:** Sent message from the CEO to employees (reminding everyone about virus prevention), then sent updates on 3/29, 4/2, 4/5, and 4/12
- **27:** Fully implemented remote work

April

- **1:** Government mandated 2-week quarantine for people coming to Japan from any other country
- **7:** Seven prefectural governments declared a state of emergency to reduce interpersonal contact by 70% to 80%
- **16:** Government expanded state of emergency to all of Japan (lifted May 25)
- **8:** Sent message from the CEO to employees in and outside of Japan (about virus countermeasures and business continuity)
- **29:** Sent message from the CEO to employees (about being careful during the Golden Week holiday)

Efforts Toward the Corona and Post-Corona Eras

The Customers Are Hurting Most: Working with Users and the Supply Chain

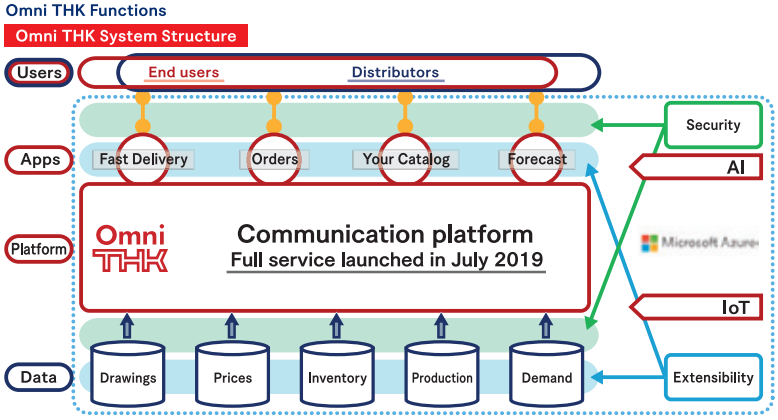
Our business environment has changed drastically these past few months. Around the world, society suddenly found itself facing unprecedented challenges, ranging from a shortage of ventilators and inspection equipment in medical institutions to a scarcity of the computers and communication devices needed to transfer the hub of corporate activity from the office to the home. As many of our industrial machinery products are used in such medical devices and in semiconductor manufacturing equipment, our customers urged us to continue producing and supplying them with goods. While 90 percent of staff at our headquarters and other Japanese locations worked from home, our motto became "The customers are hurting most" as we thought about how we needed to change, and we focused on utilizing digital tools to make it happen. Since our founding, our philosophy has been "A unique solution for every customer," which has informed our style of business where we propose a solution to each customer's problems and achieve their desired outcome. With this mindset, we have worked to deepen bilateral communication with our customers. To address the issues we are currently facing, we have offered the following support to our customers while maintaining social distancing and without traveling long distances:

- Checking in with long-time customers and new visitors to our technical support site over the phone and through online consultations on our website
- Holding online technical seminars
- Having engineers virtually attend in-person meetings between sales representatives and customers

Furthermore, we promoted our DX (Digital Transformation) Project in 2019 in order to restructure the user experience, and we released our "Omni THK" virtual communication platform for customers. Omni THK is a system that connects us with our customers and has features that provide information in a timely manner in order to offer greater convenience, including "Fast Delivery" for instantly selecting and checking inventory of standard products, "Your Catalog" for managing custom product drawings, "Forecast" for sharing critical information, and more (see "Omni THK Functions").

Through these endeavors, we have realized that this virtual fusion of the physical and digital, which requires no travel and allows for social distancing, enables us to continue supporting our customers' operations. We believe this is a new system that is extremely effective for the corona and post-corona eras.

Omni THK Functions



Aiming to Contribute to Society with Contactless Robots:
Our Relationship to Society as a Company Focused on Creation and Development

While we develop products that meet the needs of our customers based on our extensive core technology we have cultivated since our founding, we believe it is also our mission to develop new products in anticipation of next-generation markets, and these principles guide us in our daily work. In response to the coronavirus, we have developed contactless robots to reduce the risk of infection for medical and service professionals.

For the medical profession, we created a remotely operated robot that can stand at the entrance to a place of business, take temperatures, and disinfect in place of people. If someone's temperature is above a certain threshold, the operator can converse with that individual and encourage the appropriate action to be taken from afar. We have employed these robots at our headquarters and Technical Center, where they automatically measure the temperature of employees when they display their badge upon entering the building. The daily information for each individual is aggregated so it can be used to monitor employee health.

Taking temperatures in the lobby

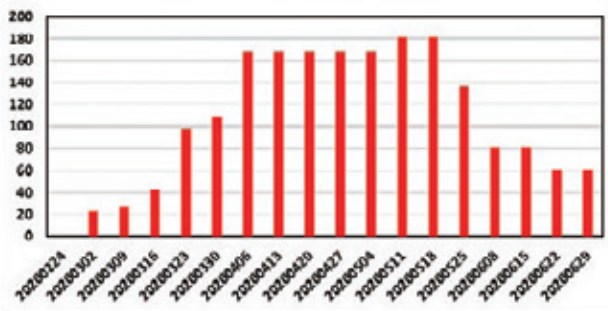
To take over some tasks in the service industry, we have developed a robot that moves autonomously to bring beverages on a tray to a specified location and automatically raises and lowers the tray to bring it to an appropriate height for a person to grab a drink. The use of this robot is not just limited to the dining industry; it can also be used as a transfer cart in an office setting. With the humanoid robots, robot arms, lifting units, and moving carts we have already introduced to the market, we are working expediently on addressing the societal need for contactless hospitality services.

Just like other departments, the members of our development divisions are generally working from home to prevent the spread of the virus, and those who are coming to the office work on a staggered schedule with the minimum number of people required (see the "Engineering Division Employees Working from Home" graph).

We worked quickly to send the desktop computers required for drawing work to those at home and provide them with CAD, technical documents, and all other necessary software.

We take great pride in creating products that are essential to the world. Even as in-person customer visits were limited, we actively took advantage of web conferencing. As a result, we held 339 meetings between March and June, an even greater record than with in-person consultations. Even during future unforeseen events, the development divisions will work in unison to satisfy customer requirements and push forward with developing technology that further serves our customers' needs.

Engineering Division Employees Working from Home



Fulfilling Our Responsibility to Continue Supplying Products: Our Determination as a Manufacturer

Our task was two-fold: protect our employees from the dangers of an invisible virus while also meeting customer requirements and continuing to supply them with products.

For this reason, in order to maintain our supply structure, we thoroughly instructed our employees to avoid going out unnecessarily. In addition, to prevent the virus from entering our production facilities, we have employees take their temperature before work, when they arrive at work, and in the afternoon. People who have displayed a fever were forbidden from coming to work, and they were sent home with guidance from a public health nurse. Furthermore, we have also received cooperation from employees' family members with regards to temperature checks, and we have required employees to stay home if someone in their household has a fever. We also have any visitors take their temperatures. We have ensured that these and the other various rules we established are being followed, and we have reiterated with our staff what our current circumstances are and what is required of us.

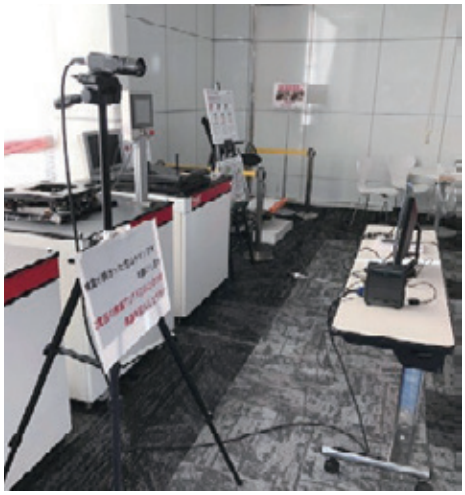
Immediately after the coronavirus issue emerged, some of our production facilities in China were forced to suspend operations, but our other facilities in Japan and around the world worked together to continue supplying products. This was a moment where we fully demonstrated our strength as a company with production and sales structures in every corner of the world. We also worked with our suppliers to ask them to institute coronavirus precautions similar to ours and ensure an uninterrupted supply.

Furthermore, we had two teams with members from support departments such as production management, material procurement, and design work at separate locations in order to establish a back-up structure to keep our business going at our Japanese production facilities during Japan's state of emergency.

While the coronavirus pandemic brought a number of issues to the surface, we instituted several measures for boosting productivity, such as further expanding our employees' skill sets and introducing a diagnostic system for detecting component failure that makes use of OMNI edge,[1] our original IoT product. We will continue to establish robust structures that allow us to flexibly respond to market trends during unforeseen events.

With the pride we gain from supplying essential products to the market as we anticipate social and economic conditions after the coronavirus, we will continue to work to supply even more customers with even greater products.

[1] OMNI edge: A product with networking capabilities that diagnoses the damage and lubrication status of an LM Guide to provide predictive failure detection.

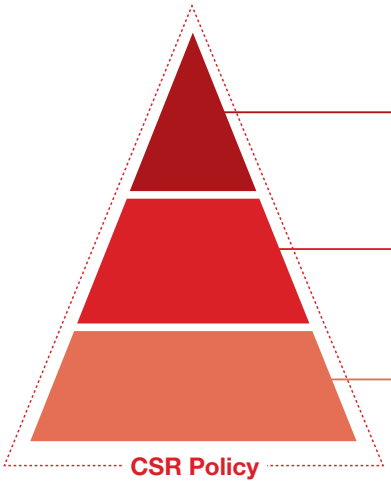


Temperature measuring equipment created and set up for visitors at the Kofu plant

CSR Policy

We endeavor to improve our long-term corporate value with our CSR policy, which is founded on our Corporate Philosophy that represents our entrepreneurial spirit, our Action Charter that serves as a guide for our actions, and the Corporate Basic Policies that we must follow as we perform our duties.

Since 2007, we have published the CSR Report and disclosed our ESG data. This year, we have changed the title to the Sustainability Report in order to provide even more complete information and to inform stakeholders of our activities geared towards achieving a sustainable society that is conscious of the SDGs.



Corporate Philosophy

Providing innovative products to the world and generating new trends to contribute to the creation of an affluent society

Corporate Basic Policies

1. Creating value and contributing to society
2. Being customer-oriented
3. Compliance with laws and regulations

Action Charter

Principles of behavior set forth for the THK Group to shoulder social responsibility based on high ethical standards to create a sustainable society

THK RHYTHM Kyushu plant with completed addition (in front)

Contents

■ **Reporting Period** This report covers activities performed during and around the period of January 1, 2019, to December 31, 2019. The time period included in specific data is noted in each section. Furthermore, we plan to publish this report every year in September, and the CSR Report 2019 was published in September 2019.

■ **Scope** This report covers THK CO., LTD., and its consolidated and unconsolidated subsidiaries. The scope of data in the environmental section is noted in that section.

■ **References** This report was prepared in accordance with the GRI Standards and the Ministry of the Environment's "Environmental Reporting Guidelines" (2018).

How THK Connects with Stakeholders

THK Has Signed the UN Global Compact

THK signed the UN Global Compact in February 2020. The UN Global Compact is an initiative based on universal principles regarding human rights, labor, the environment, and anti-corruption, and it calls for corporations and organizations to take sound, responsible actions to achieve sustainable growth for society. In support of this initiative, we will contribute to sustainable growth for society through our global business activities.

Working to Achieve a Sustainable Society

Aiming to become an indispensable company

THK CO., LTD. President and CEO
Akihiro Teramachi

To Everyone Afflicted with the Coronavirus

The coronavirus has infected many people in Japan and overseas since it emerged as a major issue in the beginning of 2020. My deepest sympathies go out to everyone affected by this disease, and I hope for your speedy recovery. I also offer my condolences for the lives that were tragically lost. I hope that this unprecedented problem can be resolved as soon as possible.

Reflecting on 2019

Last year saw economic friction between the US and China, the issue of Brexit in Europe, chaos in the Middle East, and more, casting the future into even greater uncertainty. In the midst of all of this, we continued to see demand stagnate in many industries as a consequence of the sustained economic friction between the US and China, resulting in low orders for our industrial machinery business. For our automotive and transportation business, global automotive sales were slow as CASE[1] progressed within the automotive industry. Yet even as we faced this environment, we kept a firm grasp on social and economic trends and have moved to set up an environment where we can offer products and services with high value and generate future business opportunities while anticipating how the market will evolve.

THK's Strategies

At THK, our corporate philosophy is providing innovative products to the world and generating new trends to contribute to the creation of an affluent society. We were established in 1971, and in the following year, we became the first in the world to develop the Linear Motion (LM) Guide, a task long considered difficult to achieve. This product enabled dramatic improvements to the mechanical performance of mechatronic devices by making them more precise, faster, and more energy-efficient. Since then, we have fulfilled our role as a company focused on creation and development by introducing numerous products to the market, which have been adopted in a wide variety of fields. We are committed to further expanding our business through three growth strategies: *full-scale globalization*; the *development of new business areas*; and fully utilizing AI, the IoT, robots, and other technologies through a *change in business style*.

Although 2020 started off with a persistent air of economic uncertainty, as technologies such as AI, the IoT, and robots have progressed, I believe that the expanding demand for semiconductors and electronic devices; the trends of automation, robotization, and motorization in service industries; and the progression of CASE in the automotive industry present us with great opportunities for the medium to long term. Under these circumstances, we have expanded our "Omni THK" e-commerce website that allows customers to easily search for products and place orders from anywhere and at any time. We have also developed our "OMNI edge" system that performs predictive failure detection for machine components such as the LM Guide and ball screws. Furthermore, we have been actively working on our DX (Digital Transformation) Project to revolutionize our internal processes to thoroughly utilize digital technology. As manufacturing stands on the cusp of a new era, we will accelerate these efforts in order to maximize the value we provide to our customers.

Efforts Toward the SDGs

Our CSR policy is a combination of our Corporate Philosophy, which represents the pioneering spirit of the THK Group; our Corporate Basic Policies; and The THK Group Action Charter. With the conviction that our business itself is our corporate social responsibility, we view our LM Guide and other THK products not as mere tools to satisfy the needs of customers, but as sources of solutions for social challenges.

One example is our seismic isolation system, which minimizes damage from major earthquakes and protects our lives, property, corporate assets, and information. In the field of renewable energy, which aims to prevent global warming, we have developed a low-torque shaft unit that enables wind turbines to activate during light breezes. We produce automotive components that must be both high-quality and lightweight. In anticipation of a shrinking workforce, our robots boost productivity and perform dangerous tasks in place of people. The list goes on.

At the same time, our corporate activities are aimed at a wide range of stakeholders, and we are deepening our contributions to local communities as a global corporation. We aim to be active participants in achieving the objectives of the SDGs by ensuring our business activities go one step beyond CSR and achieve CSV[2] while heightening our social value.

Signing the UN Global Compact

THK signed the UN Global Compact in February 2020. As a company whose business spans the globe, we will take even greater responsibility toward global society based on the ten principles and four goals of the UN Global Compact regarding human rights, labor, the environment, and anti-corruption.

In Conclusion

In order to meet everyone's expectations and truly become an indispensable company, we will establish a sound foundation for growth and bolster our corporate value in our main business. The entire THK Group will strive as one team to create an affluent society in an effort to always confront social challenges and continue our efforts toward a sustainable society.

[1] CASE stands for Connected, Autonomous, Shared & Services, and Electric.
[2] CSV is an abbreviation of "creating shared value." This is a strategy of using a company's strengths to solve social challenges and lead to sustained corporate growth.

About THK

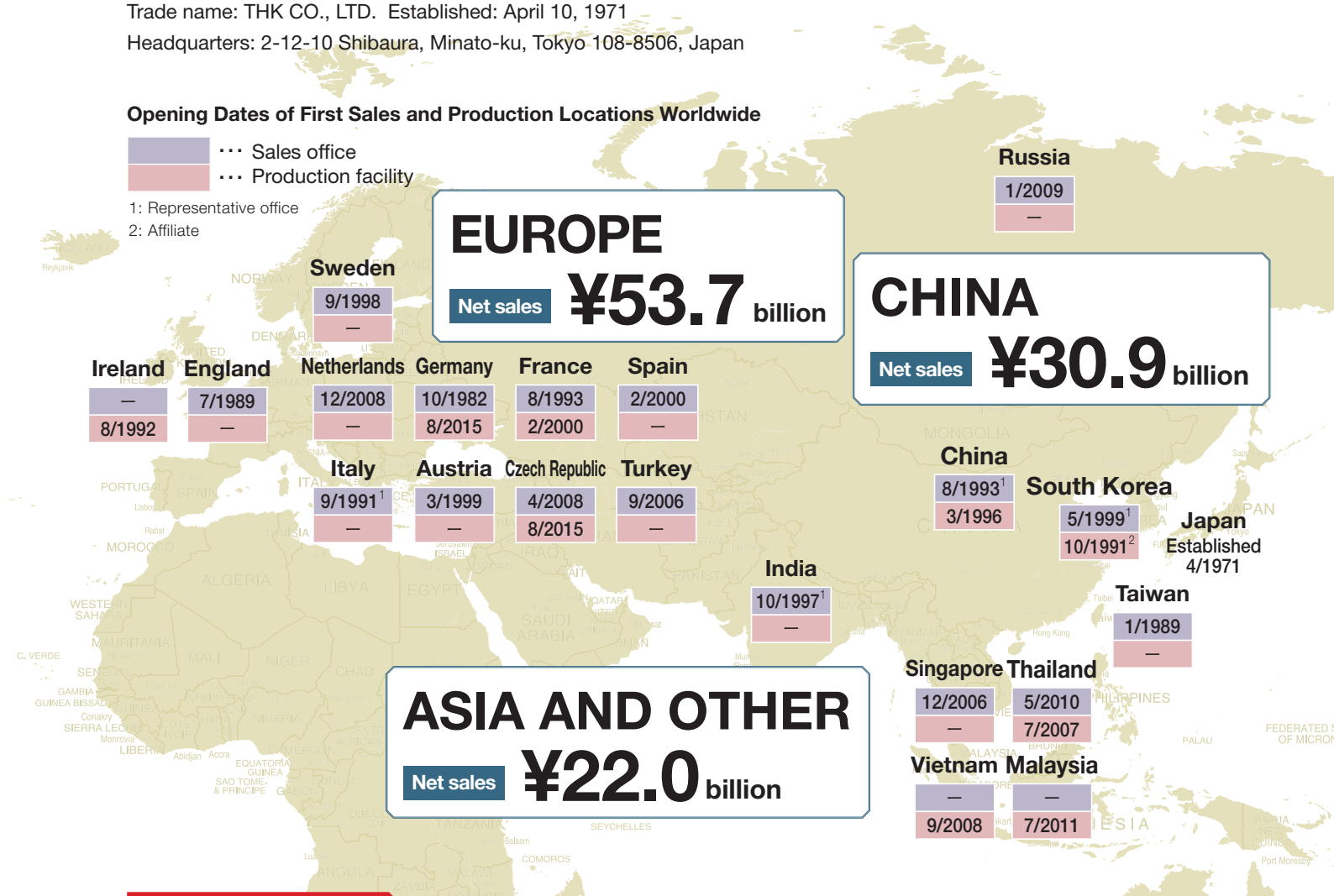
We manufacture and supply vital machine components around the world. THK products help to convert slippage into controlled rotary motion, enabling parts of machinery to move smoothly, easily, and precisely with linear motion. As a company focused on creation and development, we have committed ourselves to developing a variety of products, including the Linear Motion (LM) Guide, since our company's establishment in 1971. To fulfill our responsibility of providing these products to the world, we have established an integrated production and sales structure of 122 sales offices and 37 production facilities located close to centers of demand in order to produce and sell locally in four regions: Japan, the Americas, Europe, and Asia.

Trade name: THK CO., LTD. Established: April 10, 1971
Headquarters: 2-12-10 Shibaura, Minato-ku, Tokyo 108-8506, Japan

Opening Dates of First Sales and Production Locations Worldwide

··· Sales office
··· Production facility

1: Representative office
2: Affiliate



Group Companies

(As of March 31, 2019)

Europe

- THK Europe B.V. ●1 ◆1 (The Netherlands)
- THK GmbH ●10 (Germany: 2, England, Italy, Turkey, Sweden, Russia, Austria, Spain, Czech Republic)
- THK France S.A.S. ●1 (France)
- THK Manufacturing of Europe S.A.S. ▲1 (France)
- THK Manufacturing of Ireland Ltd. ▲1 (Ireland)
- THK RHYTHM AUTOMOTIVE GmbH ▲1 ■1 (Germany)
- THK RHYTHM AUTOMOTIVE CZECH a.s. ▲1 (Czech Republic)
- THK CAPITAL UNLIMITED COMPANY ▼1 (Ireland)
- THK FINANCE UNLIMITED COMPANY ▼1 (Ireland)

Asia and Other

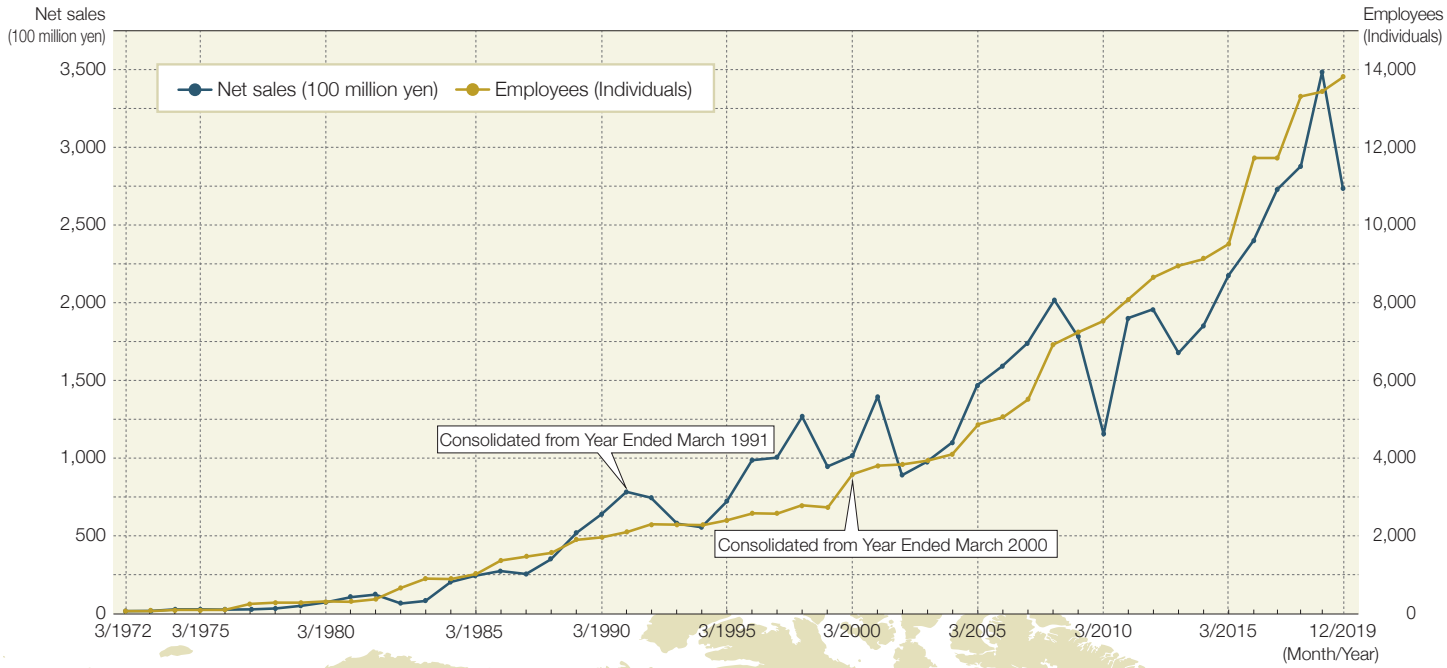
- THK TAIWAN CO., LTD. ●3 (Taiwan)
- THK LM SYSTEM Pte. Ltd. ●1 (Singapore)
- THK RHYTHM (THAILAND) CO., LTD. ●1 ▲1 (Thailand)
- THK MANUFACTURING OF VIETNAM CO., LTD. ▲1 (Vietnam)
- THK RHYTHM MALAYSIA Sdn. Bhd. ▲1 (Malaysia)
- THK India Pvt. Ltd. ●5 ▲1 (India)
- SAMICK THK CO., LTD. ●12* ▲5 (South Korea)

*In addition to the above, THK CO., LTD. has one representative (sales) office in South Korea.

China

- THK (CHINA) CO., LTD. ●29 ■1 ◆1
- THK (SHANGHAI) CO., LTD. ●1

Net Sales and Number of Employees



*The THK Group changed from a fiscal year end of March 31 to December 31, beginning with the 2017 fiscal year.
*The THK Group decided to adopt IFRS beginning with the 2019 fiscal year. For the purpose of comparison, the results for the 2018 fiscal year are also noted in accordance with IFRS.

Canada
5/1994
8/2015

USA
3/1981
8/1997

Mexico
—
2/2012

Brazil
10/1993
—

JAPAN
Net sales ¥109.4 billion

THE AMERICAS
Net sales ¥58.3 billion

- DALIAN THK CO., LTD. ▲1
- THK MANUFACTURING OF CHINA (WUXI) CO., LTD. ▲1
- THK MANUFACTURING OF CHINA (LIAONING) CO., LTD. ▲1
- THK RHYTHM GUANGZHOU CO., LTD. ▲1
- THK RHYTHM CHANGZHOU CO., LTD. ▲1
- THK MANUFACTURING OF CHINA (CHANGZHOU) CO., LTD. ▲1

Japan

- THK CO., LTD. ●29 ▲5 ■1
- THK INTECHS CO., LTD. ▲2
- TALK SYSTEM CORPORATION ●20
- THK NIIGATA CO., LTD. ▲1
- THK RHYTHM CO., LTD. ▲3
- NIPPON SLIDE CO., LTD. ▲1

The Americas

- THK Holdings of America, L.L.C. ◆1 (USA)
- THK America, Inc. ●6 (USA)
- THK Manufacturing of America, Inc. ▲1 (USA)
- THK RHYTHM NORTH AMERICA CO., LTD. ●1 ▲1 (USA)
- THK RHYTHM MEXICANA, S.A. DE C.V. ▲1 (Mexico)
- THK BRAZIL INDUSTRIA E COMERCIO LTDA. ●1 (Brazil)
- THK RHYTHM AUTOMOTIVE MICHIGAN CORPORATION ▲1 (USA)
- THK RHYTHM AUTOMOTIVE CANADA LIMITED ▲2 (Canada)

● THK CO., LTD. ● Consolidated subsidiaries
● Unconsolidated subsidiaries ● Affiliates
● Sales offices ▲ Production facilities
■ Development bases ◆ Management companies
▼ Financial subsidiary companies

Value Creation

Engaging with other social challenges

Continuous investment in business resources

Challenges Facing Society

- Environmental issues
- Disasters
- Compliance
- Labor shortages

Investment Capital

Financial capital
- Capital: ¥34,606 million
- Net worth ratio: 59.0%

Manufacturing capital
- Production facilities: 12 in Japan / 25 outside of Japan

Intellectual capital
- R&D expenses: ¥5,149 million
- R&D facilities: 1 in Japan / 2 outside of Japan
- Number of registered intellectual property rights: 775 in Japan / 1,468 outside of Japan
- Employees who passed Japan's National Trade Skill Test & Certification Grade 2 and above[1] Cumulative total: 1,287

Human capital
- Employees: 3,773 (Consolidated: 13,478)
- Female employees: 14.4% (Consolidated: 22.1%)
- Consolidated ratio of employees outside of Japan: 60.0%

Operating capital
- Sales offices: 43 in Japan / 75 outside of Japan

Environmental capital
- Annual renewable energy generated: 115,000 kWh
- Global environmental conservation costs: ¥250 million
- Resource recycling and conservation costs: ¥131 million
- ISO 14001 (Environmental Management System) certified facilities: 13 in Japan / 14 outside of Japan

(As of December 31, 2018[2])

Areas of Business

- Industrial machinery business
- Automotive and transportation business

Business Model

Efforts for environmental conservation
Conserving energy, managing hazardous materials, reducing waste
p. 36-41

Full-scale globalization
p. 10-11

Revolutionizing how we work
Human rights, diversity, health and safety, supporting development
p. 31-32

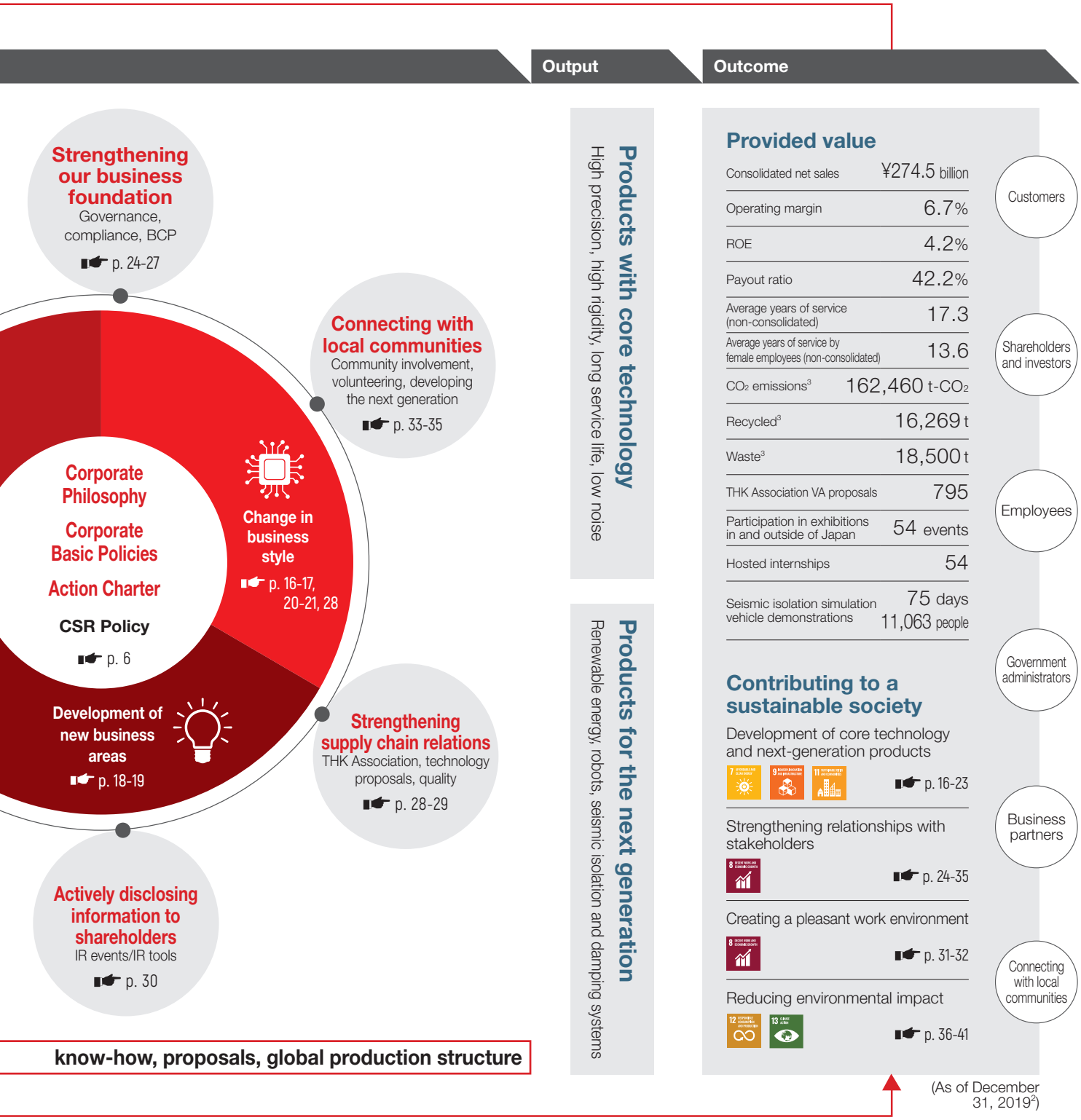
Features Core technology,

Value Chain
p. 22-23

Design	Procurement/Purchasing	Production
• Vying with competitors • Quality	• Stable material procurement • Cooperation with suppliers	• Workplace accidents • Environmental issues

As a company focused on creation and development, THK was the first company in the world to successfully develop the Linear Motion (LM) Guide. We now supply this essential core machine component and a variety of other products to the world. Currently, we are seriously addressing social issues around us by making use of the technical skills and ability to make proposals that we have cultivated since our founding, as well as our production system that extends to every corner of the world. In the future, we will make full use of the capital we hold, optimize the services we provide, and build a solid foundation for continued growth as a company that can satisfy all of our stakeholders.

[1] Twelve plants in Japan
[2] As of 2017, THK calculates the fiscal year from January to December.
[3] Twelve production facilities in Japan: Yamagata, Kofu, Gifu, Mie, Yamaguchi, THK NIIGATA, THK INTECHS (Sendai and Mishima), NIPPON SLIDE, and THK RHYTHM (Hamamatsu, Inasa, and Kyushu)
Eight production facilities outside of Japan: TMA (USA), TME (France), TMI (Ireland), DALIAN THK (China), Wuxi (China), Liaoning (China), Changzhou (China), and TMV (Vietnam)



Efforts Toward the SDGs

As a company focused on creation and development, we play a part in the creation of a sustainable society by introducing the market to products that reflect the voices of our customers. Under the banner of leaving no one behind, we are revolutionizing the way we work and making other efforts toward the achievement of the international goals related to the environment and development championed by the SDGs (17 goals and 169 targets), but we cannot include our activities in every category in this report. The table below outlines the resulting material aspects identified by comparing our activities with the goals and targets. We will continue to actively work toward achieving our KPIs.

Material Issues	SDGs	THK's Approach
Development of core technology and next-generation products	 7. Affordable and clean energy	We use the rolling technology we have cultivated through the LM Guide to develop new products for the renewable energy field.
	 9. Industry, innovation, and infrastructure	We supply high-quality products with high added value to meet the needs of customers.
	 11. Sustainable cities and communities	We supply products that work to reduce damage caused by earthquakes and provide stability in people's lives by protecting homes and other property as well as historical buildings and other aspects of cultural heritage.
Creating a pleasant work environment	 8. Decent work and economic growth	We prohibit discrimination, child and forced labor, and other human rights violations. In addition, we maintain a work environment that is easy for people with disabilities to work in, and we promote the employment of diverse talent.
Strengthening relationships with stakeholders	 8. Decent work and economic growth	We provide forums to teach others about how enjoyable and meaningful it is to work in manufacturing.
Reducing environmental impact	 12. Responsible consumption and production	We cut down on energy use in our business activities and continually promote the reduction of energy consumption and greenhouse gas emissions.
	 13. Climate action	In addition to complying with environmental laws, we set self-imposed standards that are reviewed regularly to improve the efficiency and effectiveness of our environmental management.

The SDGs (Sustainable Development Goals) are an international agenda of 17 goals and 169 targets related to the environment and development for the world to achieve between 2016 and 2030. These goals are held in common by every national and local government, non-governmental organization, and non-profit organization, as well as by public corporations and individuals with the aim of facilitating sustainable livelihoods and societies under the banner of leaving no one behind.

THK's Activities	KPIs
We developed and released the Model WLS Low-Torque Shaft Unit, which provides sufficient strength and durability, guarantees a high level of safety, and conforms to 61400-2 international standards for wind turbines and Japan's JSWTA 0001 standards.	Expand existing wind turbine technology applications to hydroelectric power generation for irrigation channels
We cultivate our core technology centered on the LM Guide, ball screw, and other rolling technologies that provide energy savings in the manufacturing industry, and we develop new products and improvements.	Continue releasing new products to global markets and updating existing products
We developed and released seismic isolation systems based on the LM Guide, including the Linear Re-circulating Guide CLB for buildings and the Seismic Isolation Module Model TGS and Seismic Isolation Table Model TSD for equipment, and systems based on the ball screw, including the Viscous Damping System RDT and the Internal Rotary Damping Tube iRDT.	Develop products that fit the needs of previously untapped markets and expand the sale of seismic isolation systems
We implemented several systems to create a more accommodating workplace, including our rehiring program introduced in 2019 (which provides reemployment opportunities to former employees who want to return after having to leave for personal circumstances such as marriage, childcare, or elderly care, if they meet work history and other criteria).	Set targets for improving the percentage of women among new-graduate hires and accelerate the promotion of women to management and leadership positions
We launched the THK Education Outreach Program and developed learning materials to provide classrooms with educational opportunities to develop their students' cognitive, decision-making, and presentation skills through manufacturing.	Develop new educational materials and continue visiting middle schools in six local areas around our Japanese production facilities
We installed high-efficiency equipment, upgraded air conditioning units, and switched to LED lighting.	Reduce energy consumption rate by 1% from where it was at a baseline year specified by THK and each Group company
We purchase components in accordance with our Green Procurement Guidelines and reduce our use of PRTR substances and promote alternatives as we conform to regulations related to the management of chemical substances.	Comply with the RoHS Directive and other regulations and reduce PRTR substance use by 3% each year from where it was at a baseline year specified by THK and each Group company

Aiming to Predict the Times and Provide Services That Are One Step Ahead

Takashi Teramachi

Director and Senior Managing Executive Officer, Senior General Manager of Industrial Machinery Headquarters

1 Industrial Machinery Headquarters Business Overview

The Industrial Machinery Headquarters develops, manufactures, and sells machine components such as the LM Guide, ball screws, and cross roller rings for a variety of equipment and devices ranging from machine tools and semiconductor manufacturing machines to automobiles and robots. The primary feature of our mainstay LM Guide is that it is a rolling linear motion guide. In addition to drastically reducing wear and providing high precision and rigidity, the LM Guide is well-regarded for its high reliability and silent operation, and it has been adopted in a variety of fields extending beyond our traditional industrial machinery market, including robotic surgical systems, train platform doors, and motorized reclining seats.

2 Measures to Solve Social Challenges while Promoting the SDGs

We tirelessly work to develop products that serve markets aimed at solving various problems, collaborating with customers and society to fulfill our corporate philosophy of providing innovative products to the world and generating new trends to contribute to the creation of an affluent society. We believe that doing so will help promote the SDGs.

For instance, there is a higher demand for energy savings and renewable energy as global warming continues and societal structures change to eliminate our dependence on fossil fuels. THK provides wind and hydroelectric power generation systems based on the core technology we have fostered as a company focused on creation and development. When it comes to BCP measures, we developed seismic isolation systems to protect lives and property from major earthquakes, and those devices are now even being used to safeguard national treasures and other works of art. In addition, to address the issues caused by declining birthrates and aging societies in developed nations, we have developed robotic systems, including service robots, as part of the movement to create a society where robots exist alongside people.

As part of our effort to develop the next generation of creative manufacturing talent, we are also moving forward with a project to plan and create new educational materials for middle and high school students that involve problem-solving through teamwork. As another development, with our factory in India scheduled to begin operations this year, we have now expanded to production facilities in 37 locations in Japan and abroad, including those in our automotive and transportation division. In addition to serving as a BCP measure, this helps enable us to produce locally for local customers, advance industry in each region, and develop high-level talent. Furthermore, we take environmental concerns into consideration at each facility by obeying regulations, striving for zero emissions, and managing hazardous substances.

3 Business Development for the Next Decade

In terms of our business environment, several fields are starting to experience changes to their industrial structures in which new, creative products are being developed. For instance, while advancements in technologies such as social media, smartphones, and AI have made our lives more convenient, they have also given rise to personal information security concerns, fake news, and other new social challenges. THK is facing the trend of digitalization head-on, and we have begun our efforts in this area. As part of our DX (digital transformation) program, in our production division, we have begun working to use AI to predict market demand, avoid carrying excess stock, and prevent delivery delays caused by lack of parts. In addition, our IoT service “OMNI edge” has celebrated its official commercial launch. This product monitors the status of the THK components installed on customer equipment.

As the hardware, software, and data that together make up various systems become increasingly interlinked, we are currently seeing advancements in the creation of new value from data. Moving forward, we can expect to see a shift toward a business environment where various things become linked together by core “connected” technologies that are exemplified by the concept of CASE in the automotive industry. We also anticipate continual structural changes toward environments of growth, including the field of global warming mitigation. At THK, we will use our new IoT service to respond to our business environment and strive to create a new user experience. As a machine component manufacturer, we will continue to further our fundamental research to give us the ability to immediately respond to advancements in added value for hardware, and we will work to augment the features of core components and provide a stable supply of products for a variety of equipment. We will exert a diligent effort and devote ourselves to providing services that address the social challenges we will face in the future.

In this year's report, we will introduce some users of our seismic isolation and robot product lines.

Seismic Isolation Business

Details on p. 18

Protecting Customer Data to Keep Factories Running

In earthquake-prone Japan, there have recently been several earthquakes registering at a seismic intensity of 6 or higher, such as the Great East Japan Earthquake and Kumamoto Earthquakes. Amid concerns of an earthquake occurring directly beneath Tokyo, in the Tokai region, or in the Nankai Trough, there is demand for ways to minimize damage, protect assets and valuable information, and quickly resume normal operations in the event of an emergency. Our seismic isolation systems are used by many customers in diverse fields, ranging from seismically isolated floors used in data centers and operation centers to individual systems for medical, scientific, and precision equipment as well as works of art and cultural assets.

On the next page, FANUC's Hino branch discusses how they came to use our Seismic Isolation Module Model TGS for their servers.

https://www.menshin.biz/?q=eng

Seismic Isolation Table Model TSD

Features

- Works immediately once installed on the floor
- Expansion is possible (by connecting units horizontally)

Seismic Isolation Module Model TGS

Features

- Can be customized according to the story of the building and the weight of the load
- Can provide seismic isolation over a wide area and is suited to installation on floors (1 m^2 and wider)
- Can handle heavy loads (maximum of 3,000 kgf) (1 m^2 and wider)
- Includes damper

Robot Business

Details on p. 19

Developing Robots to Utilize Avatar Technology

THK develops and sells **SEED Solutions** service robot components and life-sized humanoid **SEED-Noid** robots. We have also worked on developing robots capable of acting as an emcee at exhibitions, and we currently have "Shiorin" and three other robots that meet the needs of our customers.

In May 2020, we developed a thermometric robot as a coronavirus countermeasure, and it measures people's temperatures at the reception desk of our headquarters every morning. It displays an employee's body temperature when their ID is placed over its face, and if the temperature exceeds a certain amount, the robot's arm will remain up and prevent the person from entering the building. Furthermore, this temperature information is stored in our servers as employee data and is used to monitor each person's health.

On page 19, RKB Mainichi Broadcasting Corporation explains how they are using our robot to enable a world of avatars. They discuss their current project and possible future developments.

https://www.seed-solutions.net/?q=eng

Shiorin

The thermometric robot keeps its left arm up when a body temperature exceeds a certain amount

Fulfilling Our Responsibility to Support Our Customers

FANUC CORPORATION

Hino Branch, Hino-shi, Tokyo, Japan
Headquarters : Oshino-mura, Yamanashi Prefecture

Norimichi Yoshida
General Manager
Domestic Service Division
Service Division

Yutaka Igarashi
Manager
Service IT Department
Domestic Service Division
Service Division

FANUC's Business

FANUC has been committed to factory automation since 1956, when it succeeded in the development of the servo mechanism for the first time in the Japanese private sector. FANUC's business is comprised of the three pillars of FA, Robots, and Robomachines. In addition, FANUC's flagship IoT product, "FIELD system," which is an open platform, has been introduced as a new business. FANUC also offers maintenance service, with a policy of continuing support of FANUC products as long as they are used by customers.

Through such activities, FANUC contributes to the development of the manufacturing industries in Japan and overseas by promoting automation and efficiency in customers' factories. FANUC also promotes activities aimed at the achievement of the SDGs (Sustainable Development Goals) through its lines of business.

Keeping Factories Running with the Spirit of Lifetime Maintenance

Our products are primarily used in manufacturing facilities. While being able to operate 24 hours a day is important, it is critical to earn our customers' trust by ensuring our products run without issue. Even in our maintenance and other services, we pursue high reliability and high performance. Regardless of location, our policy is to provide lifetime maintenance and continuous support of FANUC products as long as they are used by customers. Going one step further beyond ensuring that our customers do not experience problems when a machine stops, we continue to aim for stable service by considering how to prevent machines from stopping in the first place.

We are currently working on an IoT network that allows customers to monitor the status of their machines. Our goal is to construct a trusted service framework that will allow us to communicate smoothly with our customers regarding any problem.

Servers with the Seismic Isolation Module Model TGS installed

Installing Seismic Isolation Systems to Safeguard Important Data

Before the Great East Japan Earthquake, the Hino branch served as the main service center and was in charge of the people (engineers and call center staff), Parts, and information (data) belonging to all 24 Japanese service branches. However, we reevaluated our BCP (Business Continuity Plan) measures after the earthquake, and in light of our responsibility to support our customers, we have now distributed our main functions between two locations: the Hino branch for eastern Japan and the Nagoya branch for western Japan. In doing so, we will be able to continue operating our call center and maintenance warehouse even in the event of a disaster at one location, thereby minimizing the impact on our customers. Furthermore, in order to provide lifetime maintenance, it is vital to safeguard our servers that contain large volumes of technical and customer information that we have accumulated over the years. To preserve this information, we installed THK seismic isolation systems for those servers at both locations, which house the same data. When installing the system, we had THK perform a simulation of tremors at both locations in order to select the best equipment for us.

Though the Seismic Isolation Table Model TSD is already used for our core servers at FANUC Headquarters, we decided on the Seismic Isolation Module Model TGS for this project. We were impressed by how the Model TGS was able to conform to the height limitations in our server rooms, in addition to its structure that allows individual units to be connected., It also offers a damping function that suppresses earthquakes in a way the Model TSD does not. Furthermore, we have developed an unwavering faith in THK products over the many years through the use of LM Guide and other THK goods in our own products.

When we show customers around the Hino branch, we also bring them to the server room. Introducing them to the seismic isolation system installed for our servers reassures our customers of our service capabilities.

Aiming to Utilize the Avatar Technology Close at Hand

Takashi Yasumasu
Crossmedia Producer
Media Lab

RKB MAINICHI BROADCASTING CORP.
Sawara-ku, Fukuoka, Japan

RKB Mainichi Broadcasting's Activities

RKB stands for Radio Kyushu Broadcasting, and it originally started as an AM radio station. This station is now part of the Tokyo Broadcasting System network, and it broadcasts television and radio programs to about 7 million people mainly around the Fukuoka area.

As AI and VR have become buzzwords in recent years, the latest technology no longer feels like a distant concept. We wanted to show our audience how technology is evolving, so we began broadcasting our "Entertech: The Unexplored Digital World" late-night program, which airs every Wednesday at 12:55 a.m. THK's "Shiorin" appears on our program, and we introduce the current state and future prospects of avatar technology.

For example, avatars could be used to go shopping by people who have circumstances preventing them from leaving their house, bring scenery of far-off destinations to us from the comfort of our homes, or contribute to the evolution of telecommuting, which is already expanding rapidly. However, for those of us in the press, on-the-ground reporting is an indispensable part of our work, even if it means going to the scene of a disaster or an area of conflict. If we can make use of robot-enabled avatar technology in those life-threatening situations, the robot can be remotely controlled and act as a veritable stand-in for the reporter. We see this as something that brings forth possibilities that could dramatically affect Japan's work-style revolution.

Shiorin Demonstrates the Height of THK's Robot Technology

We visited many trade shows to look for a robot that fit the concept of our program. Then, in February 2019, we encountered THK's Shiorin at Events & Amusement Expo. The robot is made out of several actuators, but the components are smaller, and the finished body is shaped more delicately than other companies' robots. We were struck by how it seemed suited for television, since it can be operated remotely and does not have an overbearing presence when around people. The joints are skillfully designed, so it can nearly replicate the movements of a human hand. We marveled at this robot fabrication technology that makes the users' desires a reality.

Every year, we hold a two-day RKB Radio Festival at the plaza in front of our company building, and we invited Shiorin to act as a reporter during the event. Deftly weaving through the crowds, Shiorin successfully carried out the important mission of performing its avatar functions and handing out promotional goods. Even though the program has a midnight time slot, many people are familiar with it, and it has a growing following.

I hope that THK will get even closer to replicating human-like movements. I would like to pursue the interesting possibilities for a new kind of society that uses avatar technology and lets us engage with our audience through a more personal lens.

Shiorin mid-interview

Becoming One Part of the Work-Style Revolution

Aiko Tagawa

Nagatsuka Business Unit, Business Development Department, Engineering Division, Industrial Machinery Headquarters

When I take my children to and from preschool, I sometimes hear people around me say they wish they could work remotely. I firmly believe that robots with precise remote controls can be part of the work-style revolution once we develop them. Through this effort to create a new society with RKB's avatar, I will put forth my best effort as a robot developer.

Providing Environmentally Friendly and Safe Automotive Components

Nobuyuki Maki
Director and Senior Managing Executive Officer,
Senior General Manager of Automotive & Transportation Headquarters

1 Automotive & Transportation Headquarters Business Overview

The Automotive & Transportation Headquarters is largely split into three business areas. The first is our L&S (Linkage and Suspension) business. The Group companies THK RHYTHM and TRA (THK RHYTHM AUTOMOTIVE) cover the development, manufacture, and sale of these components for our primary customers: automotive and truck manufacturers in Japan, China, other parts of Asia, North America, and Europe. Our products support tire systems and include critical safety parts[1] such as steering arms and joints.

Our second line of business is our AMC (Automotive Mechanical Components) division, which develops, manufactures, and sells ball screws for automatic brakes and electric parking brakes. Demand has increased for these products, since they serve as essential brake components for self-driving vehicles, and they help reduce accidents.

Our third pillar of business is the development of electric actuators incorporated directly into automobiles to further improve the ride experience and safety performance as self-driving cars become more prevalent.

One thing that all our divisions share is our intent to provide a variety of products and refine our technology to meet the various requirements demanded by the market.

2 Requirements for Automotive Components to Achieve a Sustainable Society

Nowadays, automobiles are required to be environmentally friendly and safer to ride in than ever before. It is our job to propose and consistently provide products that meet this requirement. We design our L&S components to be lightweight and long-lasting so they are environmentally friendly. In addition, we believe we can make cars even safer by offering products with high added value, such as our ball screws that are used in automatic brakes and our electric actuators that adapt other types of THK's core technology. We firmly believe that the knowledge we have accumulated since our founding as a company focused on creation and development, and the things we develop with that technology, are in alignment with future societal needs such as self-driving cars and reducing traffic accidents involving elderly drivers, and our expertise and products will lead to the creation of a sustainable society.

3 The Future of the Automotive Industry and THK's Direction

The automotive industry is undergoing a major revolution that is being labeled as a paradigm shift. It is difficult to predict how things will change for automotive makers, the supply chain, and even car buyers, so the situation right now is one of repeated trial and error. While the direction things go will certainly be in alignment with the aforementioned push for environmentally friendly and safer automobiles, the reality is that there are many methodologies that can lead us there. Nevertheless, it is clear that our L&S products, which have long been used as automotive components, will need to demonstrate even greater safety and quality. To soundly respond to these requirements, we will continue to refine our fundamental designs and bring even higher quality craftsmanship to our production processes.

Furthermore, the transition to CASE[2] is currently our main concern alongside environmental and fuel efficiency regulations. In particular, the lightweight advantage of our products will be used to improve mileage through electric-style vehicles. The ball screws that we started developing, producing, and selling as new products have become essential components for the automatic and air over hydraulic brake systems used in CASE self-driving technology. As the Japanese Minister of Land, Infrastructure, Transport and Tourism has announced that all new cars manufactured in Japan must have automatic brakes beginning in November 2021, we will set up a stable mass production framework. Much of the linear motion technology we have developed over many years, such as for automatic steering, vehicle height control, and active suspension, can be utilized for self-driving technology. By working on unit products and other future efforts, we will strive to expand our business to further improve the value of automobiles.

[1] Critical safety part: Component of a unit connected to the basic car functions of driving, turning, and stopping, the obstruction of which can lead to major accidents.
[2] CASE stands for Connected, Autonomous, Shared & Services, and Electric.

Our Products for Automotive and Transportation Equipment

As the main pillar of our vehicle business, we design, propose, manufacture, and sell original linkage and suspension components (mainly suspension links, ball joints, tie rod ends, and stabilizer links) to many automotive and component manufacturers. These products support the basic functions of cars: going, turning, and stopping. Because of this role they play in driving, our suspension links, ball joints, and tie rod ends are also classified as critical safety parts. The specific function of each component is outlined below.

Suspension links/Ball joints

Similar to joints in a human body, these products handle the vertical and horizontal movements of the car.

Tie rod ends

These products transfer power to the tires to rotate properly in the direction the driver turns the wheel.

Stabilizer links

These products are connected between the stabilizer bar and suspension arm to reduce force and keep the car from tilting when it turns a corner.

Ball screws

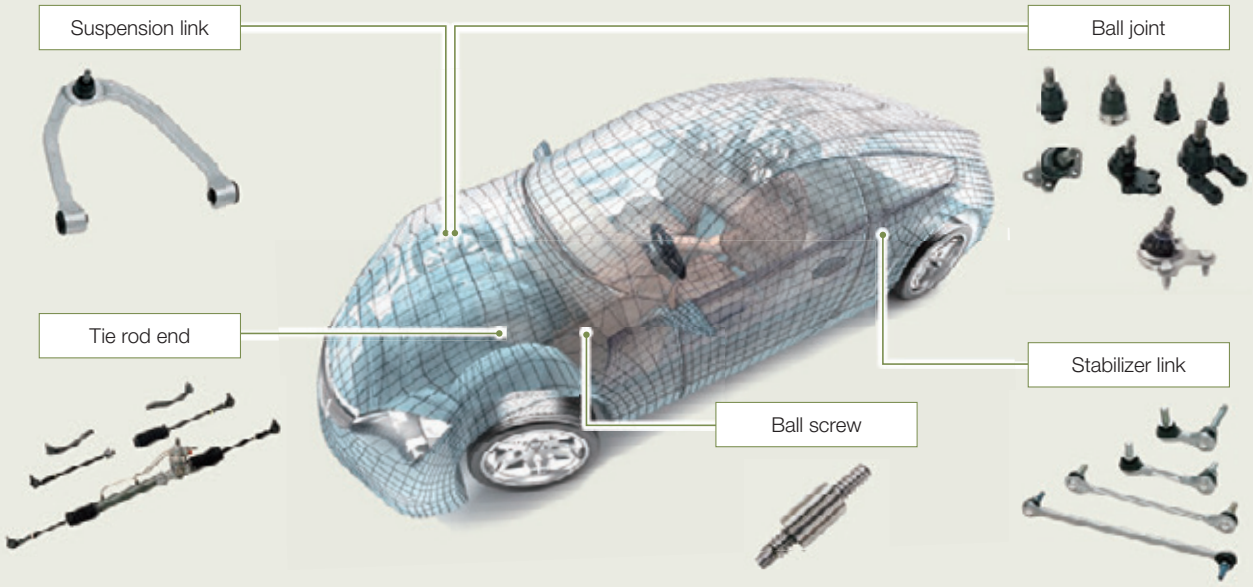
These products attach to motors and help enable electric and self-driving cars because they can very efficiently convert rotary motion to linear motion with low torque.

As recent years have seen cars with reduced fuel consumption and a switch to electric motors, these products are required to be lightweight. To respond to this need, we propose solutions to customers with the new aluminum forging and casting technologies we have adopted. Covering not just general passenger vehicles, but commercial vehicles like trucks and buses, agricultural and construction equipment, railways, motorcycles, dune buggies, golf carts, and more, we offer a lineup of products ranging from the size of a little finger to a size too large to be held in a human hand, all based on the customer's application and needs.

Promoting the development of an integrated production and sales structure with facilities and operations close to centers of demand, we have established production facilities[1] in Japan, China and Asia, North and Central America, and Europe to meet customer needs. Furthermore, we have development facilities in Japan, Europe, and North America, where we propose and provide solutions to customer requirements in every region.

In the future, the automotive industry will demand product compatibility with new technologies related to self-driving cars and CASE. Accordingly, in addition to our linkage and suspension lineup, we will propose and supply linear motion components such as the LM Guide and ball screws.

[1] Production facilities:
Japan: THK RHYTHM (3)
China and Asia: THK RHYTHM (2 in China, 1 in Malaysia, and 1 in Thailand)
North and Central America: THK (1 in USA)
THK RHYTHM (2 in USA, 2 in Canada, 1 in Mexico)
Europe: THK RHYTHM (1 in Germany, 1 in Czech Republic)



THK's Value Chain

We strive to use customer information and other data sources from every region of the world to understand market needs and develop the products our customers demand. In every step of the process from development to post-sales support, we confront social challenges as we strengthen our ability to improve our added value and not merely identify, but also solve, problems in our internal processes—in other words, our value chain. In accordance with our CSR policy of contributing to society through our business, we will continue to bolster our value chain in order to achieve the creation of a sustainable society.

01 Design

Hiroyuki Kishi

Head of Research and Development Section III, Research and Development Unit I, Engineering and Development Department, Industrial Machinery Headquarters

Developing Products That Meet Customer Needs

We strive to select environmentally friendly materials as we develop our mainstay LM Guide, ball screws, ball splines, and new products that make use of our existing core technology, such as renewable energy solutions and seismic isolation systems that deflect earthquake tremors.

Risks (Challenges)	Opportunities (Advantages)
Vying with competitors	Working with Sales to develop new products that serve customer needs
Quality	Establishing a global structure for sharing quality information

05 Sales

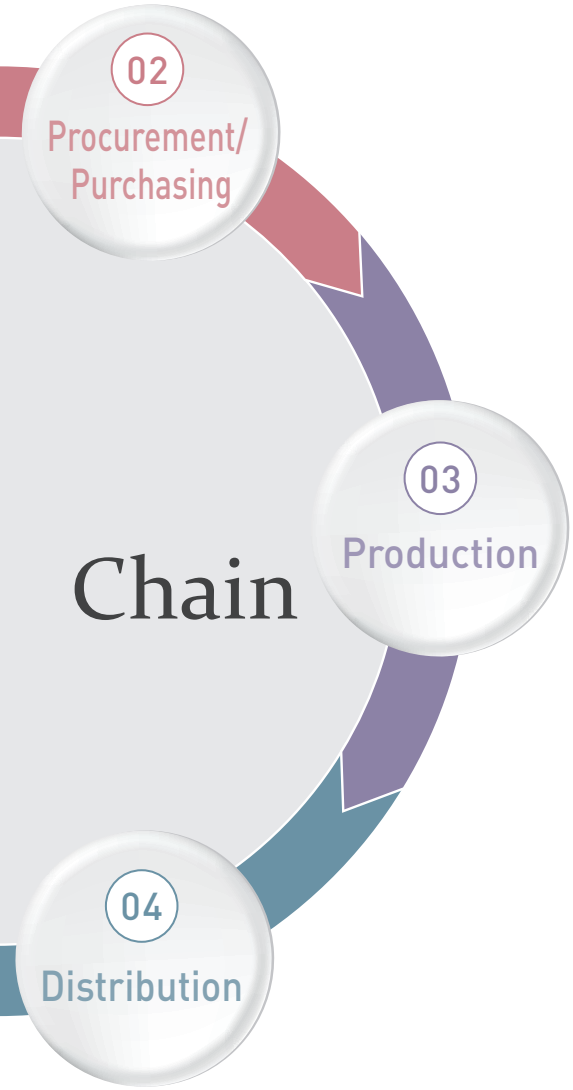
Yuuya Aoyama

Head of Sales Section I, Tokyo Sales Unit I, East Japan Region Sales Department I, Sales Division, Industrial Machinery Headquarters

Striving to Propose Solutions to Problems the Customer Has Not Realized

We use THK's unique sales methods in order to establish long-term relationships of trust with our customers. Valuing customer participation above all, we work together to identify problems and challenges and then offer solutions. We share the market feedback with the engineering division.

Risks (Challenges)	Opportunities (Advantages)
Vying with competitors	Effectively using Omni THK, OMNI edge, and other sales tools that utilize IoT technology and are unique to THK
Understanding transaction details	Holding seminars led by the Legal Section to teach Sales personnel about contract contents



02 Procurement/Purchasing

Takeharu Fukami

Head of Material Purchasing Section I, Material Purchasing Unit, Global Procurement Department, Production Division, Industrial Machinery Headquarters

Striving to Keep the Next Process in Mind

We coordinate closely with the production facilities in each region and strengthen our supply chain networks in order to establish a production structure that delivers THK products consistently to our customers.

Risks (Challenges)	Opportunities (Advantages)
Stable material procurement	Leveraging global procurement networks and managing inventory through RPA[1]
Cooperation with suppliers	Creating a forum to exchange ideas through the THK Association and working with suppliers to refine technology

[1] RPA stands for "robotic process automation," which is technology that automates routine work processes.

03 Production

Michiyoshi Shigemoto

Head of Quality Assurance Section, Yamaguchi Plant, Production Division, Industrial Machinery Headquarters

Aiming for Zero Workplace Accidents

We perform operation management (PDCA) to achieve our annual targets for ISO 14001 (Environmental Management System) and ISO 45001 (Occupational Health and Safety Management System). We also perform audits (cross-checks) of our internal controls with other production facilities and ensure processes are being performed according to the procedure.

Risks (Challenges)	Opportunities (Advantages)
Workplace accidents	Promoting automation, installing safety devices on every machine, and expanding accident prevention measures to other facilities
Environmental issues	Improving existing equipment to reduce CO_2 emissions and working alongside business partners to reduce plastic waste

04 Distribution

Keisuke Nagaoka

Head of Yamaguchi Distribution Center, Logistics Management Unit, Sales Support Department, Industrial Machinery Headquarters

Striving to Deliver Products to Customers When They Need Them

We store finished products and make delivery plans in alignment with the customer's wishes. When we ship products, we check the shipping information and arrange trucks based on weight and packaging sizes. We keep load efficiency in mind and constantly endeavor to reduce our CO_2 emissions.

Risks (Challenges)	Opportunities (Advantages)
Environmental issues	Calculating the optimal arrangement of trucks based on shipping data and actively using returnable containers
Legal compliance	Staying in close contact with shipping companies to reduce driver waiting times in order to comply with Japan's new system of accountability for freight owners

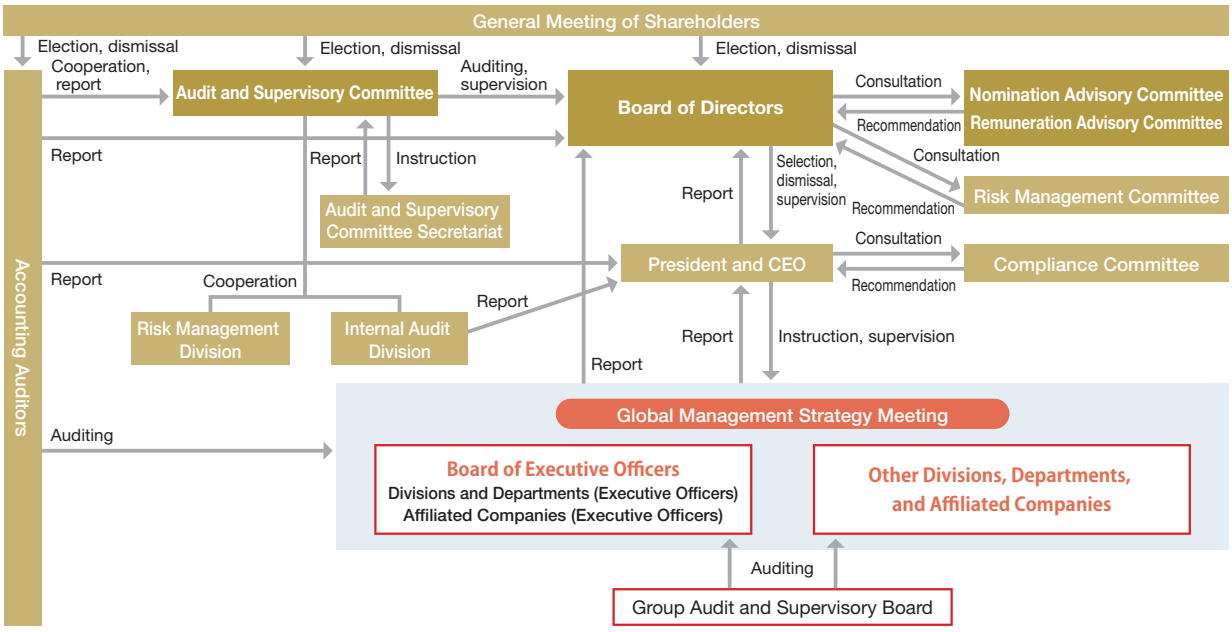
Corporate Governance and Tax Matters

Corporate Governance Framework

With the aim of maximizing THK's corporate value, we strive to make medium- to long-term improvements to our corporate value by bettering our corporate governance.

For our institutional design, in conjunction with our establishment of an Audit and Supervisory Committee, we instituted a non-mandatory Nominee Advisory Committee and a Remuneration Advisory Committee to act as advisors to the Board of Directors, and half of the members of both committees are outside directors. We have also introduced an executive officer system. In doing so, THK has strengthened the auditing functions of the Board of Directors in addition to bringing greater speed and efficiency to management-related decision-making and the management of corporate affairs. As of June 2020, four of the eleven directors are independent outside directors (three of whom are Audit and Supervisory Committee members), which enhances the neutrality and objectivity of management.

Governance Structure



Tax Matters

Basic Policy

The THK Group appropriately files tax returns and pays taxes in accordance with both international tax regulations and the laws of each country and region in which it does business.

Tax Risks

In addition to closely reviewing any transaction that may incur tax risks, we handle such matters appropriately by seeking advice from outside experts and consulting with the relevant tax authorities. Furthermore, we seek to control tax risks by utilizing advance pricing agreements (APA).

Our Relationship with Tax Authorities

The THK Group strives to maintain a relationship of trust with tax authorities by disclosing required information in good faith.

Ensuring Transparency

The THK Group appropriately discloses information in accordance with each country's laws and disclosure standards. Furthermore, we submit a Master File as well as a Country-by-Country Report in accordance with Japanese tax rules.

Internal Audit, Internal Controls, and Information Security

Internal Audit

As a matter of basic policy, we conduct internal audits that contribute to management and the departments being audited. Internal auditors monitor the business activities of each department as a group directly reporting to the CEO that is independent from any other department.

The Internal Audit Department carries the dual responsibilities of conducting internal audits and evaluating internal controls.

During internal audits, the business activities of each department and Group company are audited. These audits are generally performed on-site every year, and the results are summarized in an internal audit report and distributed to both management and the departments under audit. In 2019, a total of 73 locations and departments were audited in and outside of Japan.

During evaluations of internal controls, internal controls related to financial reporting are evaluated based on the Financial Instruments and Exchange Act. With the release of internal control reports, management evaluates the effectiveness of internal controls and undergoes an audit by accounting auditors on an annual basis. In 2019, the overall internal controls were evaluated at 20 locations, and the internal controls related to business processes were evaluated at 12 locations.

Internal Controls

We have established and properly enforce our internal control policy to ensure that each THK employee complies with laws and the articles of incorporation as we maintain sound and transparent operations and achieve our corporate philosophy. We have established the “Regulations for Internal Control over Financial Reporting” to comply with the internal control reporting system, which is based on the Financial Instruments and Exchange Act. In accordance with the basic framework outlined in the Financial Services Agency standards, we have established and enforce the “Regulations for Internal Control over Financial Reporting,” and we improve them as necessary.

Furthermore, the internal evaluation performed in 2019 found no critical deficiencies requiring disclosure. The final evaluation results were summarized in the internal control report submitted and disclosed to the Prime Minister (Kanto Local Finance Bureau) in March 2020.

Information Security

Policy **Establish, instill, and maintain the THK Group information security structure.**

Information Security Management

The standing Information Security Committee, chaired by the CEO, convenes four times per year. This committee, which is attended by outside directors and legal counsel, makes decisions concerning policies related to the establishment of an information security system and discusses responses to information security concerns. In recognition of the importance of utilizing data, as the number of cloud and other new services has grown in recent years, several activities were conducted to strengthen our information security structure in 2019.

Complying with Laws Protecting Personal Information

When the GDPR (General Data Protection Regulation) entered into force in May 2018, we set up a fixed structure that included the establishment of a privacy policy and internal regulations that comply with the GDPR. As other legislation protecting personal information continues to be enacted in various countries and regions, we will properly manage personal information by confirming which laws apply to our Group and amend our privacy policy to establish a structure that safeguards personal information around the world.

Compliance and Intellectual Property

Compliance Structure

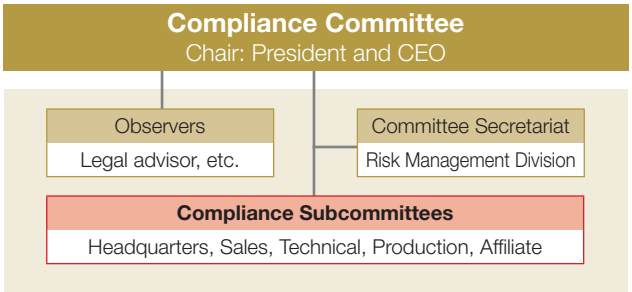
Policy **Thoroughly instill compliance awareness and create a work environment that does not allow wrongful acts.**

To thoroughly instill compliance awareness, we maintain structures and conduct various programs with the aim of complying with laws, internal standards, and ethical norms.

Compliance Committee

The Compliance Committee is headed by our CEO and convenes four times a year. This committee, which is attended by outside directors and a legal advisor, properly approves the annual activity plan and reports on the execution of those activities, as well as on the handling of compliance violations by employees and other matters reported internally.

Compliance Structure



THK Group Helpline (Internal Reporting System)

The THK Group Helpline was established to prevent compliance violations and to enable quick and appropriate action in the event of an employee committing a violation. There are two internal contacts (the Risk Management Division and Audit and Supervisory Committee) and one external contact (our legal advisor) for reporting. Reports can be made anonymously, and we faithfully enforce our rules ensuring confidentiality regarding their contents and prohibiting unfavorable treatment on the basis of having made a report. There were seven cases reported in 2019, and we worked with the necessary divisions to handle each case appropriately.

Distribution of the “Fundamentals for the THK Group Employees” Booklet

With the aim of helping employees always properly execute their duties without losing sight of our mission, “Fundamentals for the THK Group Employees” contains the materials that constitute our CSR policy: our Corporate Philosophy, Corporate Basic Policies (creating value and contributing to society, being customer-oriented, and compliance with laws and regulations), and The THK Group Action Charter. This booklet is available in a total of 12 languages and is distributed to all employees.

Intellectual Property

Policy **THK values and promotes the creation and full utilization of its intellectual property to continue contributing to the creation of an affluent society through the development of innovative products.**

Based on our growth strategies, we are developing new business areas on a daily basis and conducting intellectual property activities at a matching pace. Our activities include the following:

1. In concurrence with globalization, we promote the timely filing of patent applications and early acquisition of patent rights overseas in order to secure an advantageous business position and reduce business risk.
2. When entering new markets, we maintain the integrity of our brand name by reviewing the areas in which we have trademark rights and increasing new applications for trademarks.

In addition, we are strengthening our control over imitation products and strive to mitigate the negative effects if customers purchase counterfeit products by mistake.

Through the activities discussed above, in order to create intellectual property that can contribute to our business, we will continue to promote expanded intellectual property activities both in and outside of Japan, such as establishing new evaluation criteria when applying for patents and encouraging utilization of patents that have not been put into practice.

Risk Management Committee and BCP

Risk Management Committee

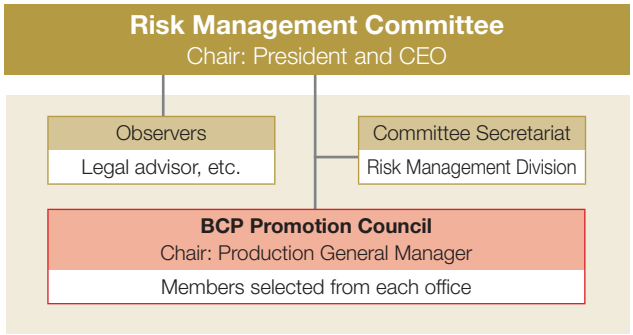
Policy **We facilitate assertive governance with elements of bold risk-taking.**

We maintain a forward-looking risk management structure that actively involves management in order to support appropriate risk-taking by executive staff.

Risk Management Committee

The Risk Management Committee convenes annually and is headed by the CEO. The committee, which is attended by outside directors and legal counsel, approves the annual activity plan and works to establish, promote, and maintain the risk management structure by controlling risks throughout the entire Group.

Risk Management System



2019 Activities

Activity	Description
BCP Promotion Council	The BCP Promotion Council established under the Risk Management Committee in 2018 was restructured so that the Production Division will take the lead in its promotion.
	To quickly assess the status of our supply chain when a natural disaster such as an earthquake or heavy rain occurs, we adopted Rescue Web Map, which determines which suppliers are in affected areas.
Reviewing risk assessments	A review of THK and its domestic and international Group companies was conducted to uncover, identify, categorize, analyze, and evaluate the risks of which each company and department is aware, and the results were reported to the Board of Directors.
Other	The medium- to long-term financial sense and future outlook of primary cross-held stocks were verified.

BCP

Policy **As a company that supports industry around the world, it is our essential social responsibility to minimize any negative impact on society by fulfilling our responsibility to supply parts even in the event of unforeseen disasters.**

As a component manufacturer, we are responsible for supplying parts to customers, no matter the situation. We have formulated a BCP (business continuity plan) to minimize damage and ensure a rapid business recovery in the event of a disaster, such as a large-scale earthquake (an earthquake registering at least 6 Lower on the seismic intensity scale, or one that brings about significant destruction).

In November 2019, the second BCP promotion meeting was held to raise the awareness of the BCP Promotion Council members at each production facility. At the meeting, Yasuhiro Ueda, Officer in charge of Technology Policy and Relations at Sony Corporation, gave a lecture on the damage caused by the Kumamoto Earthquakes, the countermeasures taken, and lessons learned in the aftermath.

Recently, in order to minimize damage caused by unforeseen events in addition to earthquakes, including other natural disasters, cyber attacks, and new viruses, we have continued to promote BCM (business continuity management) practices such as the establishment of alternative production systems, supply chain management, and risk transfer through insurance.

BCP Strategies for a Large-Scale Earthquake

Activity	Description
Servers	• Maintaining main and backup servers in separate data centers • Practicing switching to backup servers in case main servers were to go down (once per year)
Earthquake-proofing	• Production facilities: installing equipment to prevent toppling of shelves that hold components, fixtures, and tools • Sales offices: installing equipment to prevent toppling of printers, cabinets, etc.
Emergency supplies	• All production and sales facilities: potable water, food, sanitary items, emergency supplies, and rescue equipment
Safety drills	• Annual drills at all locations • Annual satellite phone test

BCP Promotion Council

Together with Our Customers, Together with Our Suppliers

Sales Activities

Our company name incorporates three principles: Toughness (tough, durable products), High Quality (the world's top-quality products), and Know-how (expertise for our customers). Under these principles, we conduct our daily sales activities with a customer-focused approach where we think, act, and verify results from the customer's perspective.

Currently, we have established an integrated production and sales structure with 122 sales offices and 37 production facilities close to centers of demand in order to produce and sell locally in four regions: Japan, the Americas, Europe, and Asia. In addition, we have enhanced the functions of Omni THK, the customer communication platform we have been expanding. Furthermore, we ran booths at 22 exhibitions in Japan and 32 overseas in 2019 to introduce more customers to our products. Besides participating in exhibitions, we also occasionally hold private shows and technical seminars as venues to explain our offerings directly to customers.

In December 2019, we began taking orders for our OMNI edge service, which has networking capabilities that include predictive failure detection and monitoring of lubrication status for LM Guide products. By attaching sensors to components and creating a visualization of their status, OMNI edge makes maintenance more efficient, reduces inventory management costs, and improves machine operating rates.

OMNI edge with networking capabilities

Together with Our Suppliers

Material Purchasing Policy

1. **Global procurement**
   Optimize procurement locations
2. **Accelerated ordering**
   Develop purchasing system that incorporates AI
3. **Active proposals**
   Double communication with business partners to promote value analysis and production innovation

Our daily operations are performed in accordance with our policy to manufacture products in the optimal location and to conduct our business and improve our technology in a way that meets the needs of our customers.

Throughout our supply chain, from design to sales, we strive to adhere to social norms and be environmentally conscious in order to create a sustainable society. In accordance with the revised RoHS directive effective in 2021, companies will no longer be able to ship steel, aluminum alloys, or copper alloys that contain lead to Europe. After conducting a survey of our suppliers, we are continuing to work with them to consider a change to lead-free products.

THK's Supply Chain

Design
- Long-term maintenance-free operation
- Low noise, low dust generation
- Develop grease that can be used in the food industry

Purchasing/Procurement
- Check for presence of environmentally hazardous materials
- Comply with the Act against Delay in Payment of Subcontract Proceeds, Etc. to Subcontractors
- Reject dealings with criminal organizations

Production
- Comply with the Energy Conservation Act
- Pursue zero emissions
- Reduce impact on the environment
- Maintain safe working environment

Distribution
- Reject dealings with criminal organizations
- Security declarations for air shipments
- Reduce waste via reusable containers

Sales
- Collect and reuse packaging materials
- Enforce safe driving practices
- Fair and proper transactions

Quality Assurance

Quality Assurance Structure

Policy **We implement quality assurance activities that ensure we always deliver products that will satisfy our customers and earn their trust.**

We have established a quality assurance system in which each production facility both in and outside of Japan is certified with the ISO 9001 Quality Management System. We provide a quality assurance system for the industrial machinery business that produces machine tools, semiconductor manufacturing equipment, medical devices, robots, and seismic isolation and damping systems. With this as our base, we obtain certifications in quality standards adapted for new fields such as the automotive and transportation business and the aerospace industry.

Furthermore, we perform regular quality audits based on the quality management systems at our business partners and suppliers, and we work to maintain and improve product quality on a daily basis with a thorough quality assurance structure.

We have also established a system that allows quality data to be shared globally. In addition to gathering feedback from customers in each region, analyzing it, and providing rapid and appropriate service, we endeavor to develop products that meet market needs and improve quality.

Quality System Overview

Quality Management System Certification Status (Facilities)

	ISO 9001	JIS Q 9100 Aerospace Industry	IATF 6949 Automotive Industry
Japan	11	1	4
Outside of Japan	13	—	7
Total	24	1	11

Quality Management Process

1. Development and Design
- Pursue function, performance, and solutions

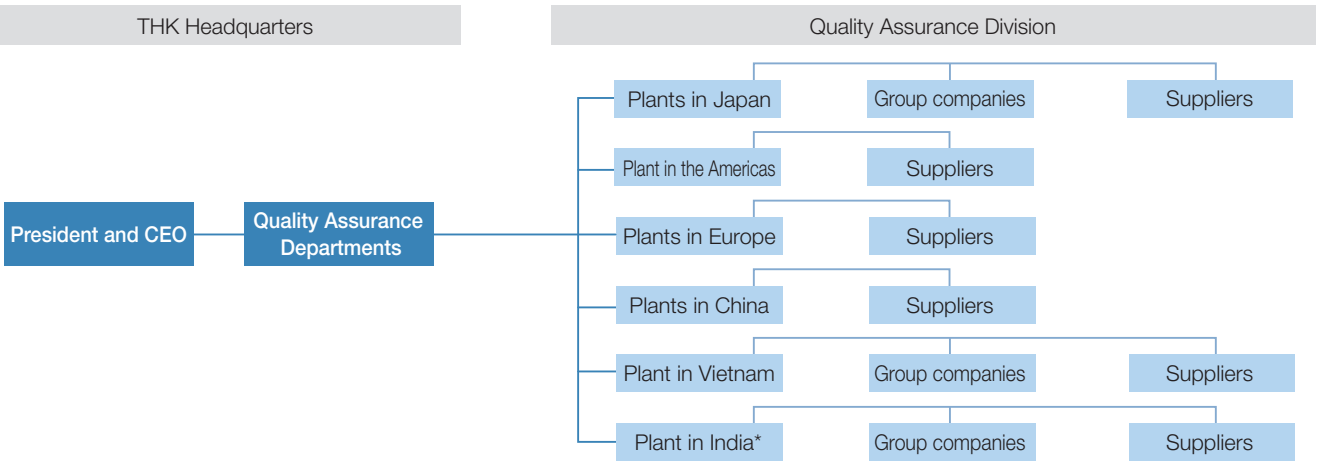
2. Testing and Investigation
- Design review
- Mass production approval

3. Purchasing, Production, and Inspection
- Pursue uniform quality all over the world
- Establish process capability

4. Providing Service and Gathering Quality Data
- Improve customer satisfaction

5. Analyzing Quality Data and Providing Feedback
- Analyze quality improvements and market needs

Global Quality Assurance Structure



* The plant in India is scheduled to begin operation in 2020.

Together with Our Shareholders

Together with Our Shareholders

We engage in IR activities in an effort to disclose information in a manner that is fair, impartial, expedient, accurate, and easy to understand. We strive to provide more thorough and valuable information through IR events such as financial results briefings and IR tools such as our investor relations website and Annual Report.

Primary IR Activities

IR events	IR meetings	Interview around 500 analysts and institutional investors annually
	Roadshows outside of Japan	Hold IR meetings led by the president for institutional investors outside of Japan
	Financial results briefing	Post presentation materials and videos on the IR website mid-year and at year end
	General Meeting of Shareholders	Scheduled on a Saturday during a period when few shareholder meetings are scheduled, accompanied by an exhibition
IR tools	IR website	Publish various IR tools and content oriented towards individual investors
	Annual Report	Compile company overview, management targets, and medium- to long-term strategies
	Investor information (fact book)	Compile detailed financial data

The IR Website

IR Library

In addition to documents related to financial statements, including investor information compiled from summaries of financial results and detailed financial data, the library also includes Annual Reports and CSR Reports.

IR Information E-mail Delivery Service (RIMSNET)

This service sends an electronic newsletter announcing financial results and other news releases to registrants.

(Only available in Japanese)

Register at:
https://rims.tr.mufg.jp/?sn=6481

* The IR Information E-mail Delivery Service is managed by Mitsubishi UFJ Trust and Banking Corporation.

General Meeting of Shareholders

For Our Individual Investors

Since 1998, we have held our General Meeting of Shareholders, which is based on the concept of an open meeting, on Saturdays during periods when few shareholder meetings are scheduled. We provide seats for observers so that many people, including business partners, can participate.

We also hold an exhibition after the meeting for participants, where we introduce the various fields where our products are utilized, such as machine tools, industrial robots, automotive and transportation equipment, and seismic isolation systems.

* The 50th General Meeting of Shareholders was held on March 20, which was a national holiday. In addition, as a precaution for the coronavirus, there were no seats for observers or a product exhibition.

Health and Safety

Management Structure

Policy **Create a pleasant work environment with zero work-related accidents or illnesses.**

We consider occupational safety and health activities to be the foundation of corporate management and one of our highest priorities. Maintaining a safe and comfortable place that is easy to work in is our basic principle, and we promote activities to achieve this goal.

Our company acquired ISO 45001 Occupational Health and Safety Management System certification at our five production facilities in Japan, and we practice the PDCA cycle as we engage in related efforts. At the beginning of the year, the Production Division's Health and Safety Committee formulates its policy and target. After this, each production facility develops activities based on these themes, and the progress is reported at the quarterly committee meetings. As part of the new standards (ISO 45001), each factory plans and conducts external audits of suppliers.

Also, the Health and Safety Committee members perform audits of other production facilities twice a year to check the progress of their activities. These reciprocal audits make each plant's major issues and priorities clear, and we manage the progress of the activities at each facility and expand implementation to other locations.

2019 Occupational Health and Safety Activities in the Production Division

Objective	No.	Activity
1. Allow occupational health and safety management system (ISO 45001) to reach all employees	1	Implement risk assessments and workplace safety training
	2	File and provide information pertaining to relevant regulations (chemical substance risk assessments)
	3	Prepare and perform internal audits (reciprocal audits)
	4	Conduct management reviews
2. Revitalize health and safety committee activities	5	Promote disaster prevention
	6	Implement traffic safety activities (achieve zero traffic accidents)
	7	Conduct workplace safety patrols
	8	Promote 5S (6S) activities
3. Eliminate workplace accidents	9	Achieve 3.1 million hours without any accidents (class 1 accident-free record) Prevent workplace accidents from occurring (zero accidents) • Promote submission of proposals to prevent near misses (production: 1/month per group, support: 1/month per department) • Promote KYT activities (production: 1/month per group, support: 1/month per department)
	10	Ensure employees confirm machines have completely stopped
	11	Train new employees (temporary and mid-career hires) thoroughly
	12	Provide instruction to business partners who work on site and visitors
4. Enhance health management	13	Perform regular and special health checks
	14	Promote mental health
	15	Perform stress checks
	16	Implement illness prevention activities
	17	Make improvements based on occupational physician recommendations

Supporting Development

We have been working to support the development of our employees in order to empower individuals. In addition, we are currently promoting specific measures to accomplish this goal in alignment with our three growth strategies.

Empowering individuals in alignment with our growth strategies

1. Full-scale globalization
Developing talent that can succeed globally

2. Development of new business areas
Conducting the 66 Project and our basic technical training program

3. Change in business style
Developing talent that utilizes data to quickly adapt to a digital society

Specific Activities

Developing talent that can succeed globally

In 2018, we launched a program for employees in Japan who joined the company hoping to gain experience abroad, in which employees spend several months working in another country. A total of five employees have participated in this program. The Cross-Border Trainee Program, in which participants spend a year at an overseas facility, was established in 2016 based on feedback from employees, and there have been a total of nine participants.

The 66 (“Six-Six”) Project

This project began with six employees creating six cross-departmental teams within the Engineering Division, and these teams conduct research activities to lead to new market expansion for THK products. The results of this research are presented once a year, and some have led to ideas that are currently in development and almost ready to become new products.

Basic technical training

To impart technical knowledge that will aid the development of innovative new products and to improve the quality of developed products, lectures are held for new employees entering with technical degrees. We have also developed an internal engineering test and certification program for employees to broaden their knowledge and explore their areas of specialization more deeply as engineers.

Developing talent that utilizes data

To make tasks that use data more sophisticated and increase their added value, we began a three-level training program in 2019 that covers basic, intermediate, and advanced skills.

Basic

- Using data for one’s area of responsibility
- Aggregating and visualizing data, analyzing a root cause, and developing a solution based on an understanding of the entire picture shown by the data and basic methods of visualization and analysis (statistics, etc.)

Intermediate

- Promoting the use of data in each department
- Using data analysis to execute the entire process of identifying a departmental challenge, conducting the analysis, and solving the challenge

Advanced

- Promoting company-wide data use as an expert, advising others on data utilization, and conducting training sessions to develop talent
- Using data analysis to solve inter-departmental or even more complex challenges

Supporting New Employees

New employees in Japan continue their development through on-the-job training at their assigned departments after completing their new hire orientation and a period of practical training at various production facilities. Beginning in 2017, to see if new hires are staying motivated, understand their workload and any concerns they may have, and quickly resolve any issues, we have been conducting monthly online check-ins with those employees.

THK Education Outreach Program

THK Education Outreach Program

Now in its fourth year, the THK Education Outreach Program began in 2017 as a special project in anticipation of our 50th anniversary in 2021 and with the desire to introduce children to the joy of manufacturing. The objective of this project is to use manufacturing education to foster talent that can create and develop, thinking about issues with classmates and arriving at solutions.

In 2019, members of our headquarters engineering division and six production facilities (Kofu, Yamaguchi, Yamagata, Mie, Gifu, and THK NIIGATA) visited a total of seven middle schools to give a lesson on manufacturing. Furthermore, we invited teachers around the Kanto region to our headquarters in August to let them experience the program themselves. The valuable feedback we gained from these instructors will be put to use as we develop future learning materials.

In addition, teams from 30 schools applied for the 3rd Science Castle* Grant THK Prize. Among the top ten topics selected, the Best Development Prize was granted to Higashi-Katsushika High School in Chiba Prefecture.

We continued our school trips and the Science Castle Grant THK Prize in 2020, and we are also developing new learning materials based on topics that were selected from an internal competition.

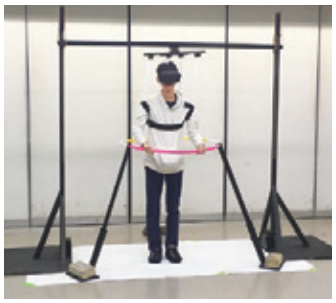
Group photo after the lesson at Yasuda Junior High School in Agano, Niigata Prefecture

* Science Castle is a conference that Leave a Nest Co., Ltd. holds for junior high and high school students.

Higashi-Katsushika High School: Winner of the Science Castle Grant THK Prize for Best Development

In October 2018, we participated in a work-study program at a general hospital near our school, and we saw many patients going through physical therapy. In response to the future aging of our society, we thought we could reduce healthcare costs if patients were able to comfortably recuperate at home, so we challenged ourselves to come up with our own walking rehabilitation device. To motivate people to do their exercises by showing them pleasant scenery so they are not just walking in place, we took inspiration from old movies, especially memorable Spielberg films, and decided to use VR.

Our initial concept was to use the motion of the LM Guide to achieve movement in all four directions as well as rotary motion, but we were not successful. We intended to present a device that supports the waist at our school festival in September 2019, but even though we only put up a poster, there was a big response. That gave us the confidence to develop a new device, and we settled on our current mechanism (see photo). An LM Guide is installed on the support columns for both arms, which are used for squatting motions. When the user crouches, the elasticity of the rubber returns them to their original position. The LM Guide enables the bar to move smoothly, which drastically reduces the stress on the hips and knees.



VR-equipped rehabilitation device

Development is still ongoing as we work to accurately link the user's movements with the VR. We are considering the design from the patient's point of view to investigate ways to make this device more pleasant to use.

Higashi-Katsushika High School winners of the Best Development Prize (Director Teramachi on left)

Local Communities

THK's Approach

As a good corporate citizen, THK actively contributes to society.

Our activities include:

1. Establishing a basic philosophy of contributing to society through our business activities
2. Identifying areas to prioritize our efforts and using our corporate resources to promote specific contributions based on our corporate philosophy
3. Coordinating and cooperating with various stakeholders, including NPOs, NGOs, local communities, governments, and international institutions
4. Supporting employees' own community contributions and involvement
5. Participating in the social efforts of the industry and business community

In 2019, we provided financial support for numerous causes, including relief for multiple natural disasters in and outside of Japan. To introduce young people to the joy of manufacturing, we also welcomed a total of 54 interns at 7 production facilities around the world.

Charitable Contributions

Date	Purpose	Recipient
1/2019	Japan Science Foundation support/membership dues	Japan Science Foundation
10/2019	The Disaster Relief Fund for Victims	Central Community Chest of Japan
11/2019	Typhoon Hagibis relief	Japanese Red Cross
11/2019	Typhoon Faxai relief (Chiba Prefecture)	Japanese Red Cross

Offering Local Manufacturing Education

The manufacturing skills gap has a great impact on recruiting and retaining employees, and many students are unaware that there are career paths in safe, stable manufacturing environments. In response, TMA began hosting its Kakushin program for local high school students in 2018.

The program's goal is to inspire young minds to learn about manufacturing and Japanese culture. Three weekly sessions include topics like Japanese culture and language, programming, and production. Students learn Japanese phrases and how to use chopsticks to move candy into a bowl. They also learn basic programming with Edison robots.

Survey responses from students reveal Kakushin's positive impact. One student said, "I liked the experience. You will see me in five years."

Several students returned to learn about career paths, resume writing, and job interviews. In 2019, TMA expanded the program and partnered with various educational institutions to promote manufacturing careers through other outreach efforts.

Kakushin program participants from Lakewood High School

Supporting Future Professional Baseball Players

On weekends, the THK RHYTHM headquarters and Hamamatsu plant opens the ballpark on its grounds to the local Hamamatsu Little League team for practice and public games.

The ballpark the team used before was converted to a solar power plant, so they approached our facility to ask if they could use the space, and their request was granted.

As the spirited cries of Little Leaguers fill the air on the weekends, the energy of those players is passed on to our employees. We hope that some of these children grow up to become successful professional players.

A Hamamatsu Little League practice

Award for Contributions to the Promotion of RT-Middleware

In December 2019, the Japan Robot Association's Robot Business Promotion Council awarded THK the 5th Award for Contributions to the Promotion of RT-Middleware for our notable success at promoting the use of RT[1] Middleware[2] robotic systems in industrial factories through the "SIGNAS" autonomous movement control system developed by the Robot Unit in the IMT (Innovation Mechatronics Technology) Division.

[1] Robotics Technology
[2] Software that acts as a bridge between the operating system (OS), which performs basic computer operations, and the application software that processes various tasks

Autonomous Movement Control System "SIGNAS"

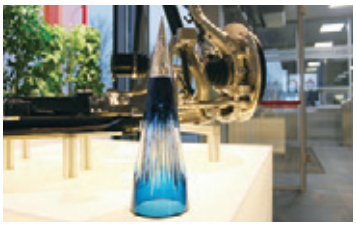
Japan Association for Safety of Hazardous Materials Chairman's Award

In June 2019, the THK RHYTHM headquarters and Hamamatsu plant was recognized as a superior business related to hazardous materials, receiving the Chairman's Award from the Japan Association for Safety of Hazardous Materials. The commendation was awarded on the basis of the facility's efforts to prevent disasters, including the regular incorporation of fire and disaster prevention awareness campaigns as well as legal compliance in the workplace.

Japan Association for Safety of Hazardous Materials Chairman's Award

Health-Promoting Business Award

Every year, as part of its efforts to promote employee health, TRA CZECH performs activities such as hosting a lecture on a healthy diet and bringing in medical specialists for people to consult with about therapy and obesity. June 2019 marked the third year in a row that this facility has been recognized as a health-promoting business by the region of South Bohemia.



Health-Promoting Business Trophy

THK Group Business Activity Environmental Impact Overview[1]

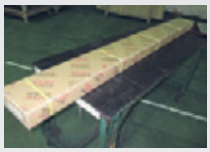
INPUT

Product design

Endurance testing

Main raw materials (Metal materials)

Main indirect materials (End caps)



Packaging materials

	2018[2]	2019[2]	Change
Main raw materials (t)	114,579	67,243	-41.3%
Main indirect materials (t)	4,105	1,430	-65.2%
Packaging materials (t)	7,079	6,137	-13.3%

Development

- Development of products with reduced environmental impact
- Components for the renewable energy field

Material Procurement

- Green procurement
- CSR procurement

OUTPUT

E³ Concept
(Endless, Ecological, Economical)

Caged products

Components for vertical-axis wind turbines

	2018[2]	2019[2]	Change
Production volume (t)	102,801	66,995	-34.8%

	2018[2]	2019[2]	Change
Air emissions of PRTR substances[5] (kg)	2,353	1,249	-46.9%

Waste

	2018[2]	2019[2]	Change
Total waste (t)	21,359	18,500	-13.4%
Recycled (t)	18,568	16,269	-12.4%
Disposed (t)	2,047	1,812	-11.5%

Environmental Targets[4]

No.	Item		Results
1	Conserving energy and resources	CO_2 emissions rate (t-CO_2)	THK's target for reducing our CO_2 emissions is defined in terms of CO_2 emissions per production volume in yen. With the decrease in our production, the amount of CO_2 emissions (absolute emissions) from our 12 production facilities in Japan in 2019 increased 37.0% compared to the previous year, so we were not able to achieve our emissions rate goal of 0.70.
2	Recycling and reducing waste	Zero emissions rate (%)	Target was less than 0.50. Result was 0.41. (Target achieved.)
3	Green procurement	PRTR substance use (kg)	Target was 70,826. Result was 38,293. (Target achieved.)

[1] The overview of our environmental impact and environmental accounting data is based on the following production facilities:
Twelve production facilities in Japan: Yamagata, Kofu, Gifu, Mie, Yamaguchi, THK NIIGATA, THK INTECHS (Sendai and Mishima), NIPPON SLIDE, and THK RHYTHM (Hamamatsu, Inasa, and Kyushu)
Eight production facilities outside of Japan: TMA (USA), TME (France), TMI (Ireland), DALIAN THK (China), Wuxi (China), Liaoning (China), Changzhou (China), and TMV (Vietnam)

[2] Data covers the period from January to December for each fiscal year.

[3] Data was collected from five production facilities in Japan: Yamagata, Kofu, Gifu, Mie, and Yamaguchi.

[4] These are the target values for the 12 production facilities in Japan.

[5] Data was collected from the 12 production facilities in Japan.

Mishima Plant
THK INTECHS CO., LTD.
Solar power generation

Energy Input

	2018[2]	2019[2]	Change
Bunker A fuel oil (kL)	4,250	2,489	-41.4%
Liquefied natural gas (t)	240	225	-6.3%
Propane (t)	1,047	1,343	28.3%
Kerosene (kL)	14	11	-21.4%
Electricity (MWh)	275,271	255,181	-7.3%
Water (1,000 m[3])	811	643	-20.7%

	2018[2]	2019[2]	Change
Solar power generated (MWh)	115	111	-3.5%

	2018[2]	2019[2]	Change
Gasoline[3] (kL)	70	60	-14.3%
Diesel[3] (kL)	1,983	1,602	-19.2%

Production

- Energy conservation
- Resource conservation
- Hazardous material management
- Global warming prevention
- Zero emissions

Air Emissions (Production)

	2018[2]	2019[2]	Change
CO_2 emissions (t-CO_2)	183,598	162,460	-11.5%

Logistics

- Green logistics
- Streamlining shipping methods
- Low-pollution forklifts
- Packaging material improvements

Air Emissions (Logistics)

	2018[2]	2019[2]	Change
CO_2 emissions[3] (t-CO_2)	5,385	4,285	-20.4%

Activities Aimed at Achieving Environmental Goals

No.	Item	Main Initiatives for 2019
1	Conserving energy and resources	1. Conserve energy on existing equipment 2. Improve system for energy use 3. Upgrade air conditioning 4. Replace light fixtures
2	Recycling and reducing waste	1. Sort and recycle waste 2. Reduce material use
3	Green procurement	1. Reduce PRTR substances 2. Review solvents used 3. Reduce frequency of shipments

Environmental Policy

The THK Group contributes to both society and the economy through our pioneering role as manufacturers of the Linear Motion Guide and other products. We also believe that it is a company's social responsibility to leave the global environment in a healthy state for the next generation, which is why we are promoting the following initiatives to continually decrease our environmental impact and to sustain and improve the natural environment.

THK Group's Basic Environmental Policy

1. We consider conservation of the environment to be a major management challenge, and we are striving to accurately understand how our business activities, products, and services impact the environment. All divisions set appropriate environmental goals to address this challenge.
2. In addition to complying with environmental laws, we have set self-imposed standards that are reviewed regularly to improve the efficiency and effectiveness of our environmental management.
3. We will continually promote the development of products that help reduce environmental impact.
4. We will cut down energy use in our business activities and continually promote the reduction of energy consumption and greenhouse gas emissions.
5. With a particular focus on the reduction and recycling of waste, we will not only continue to promote the saving and recycling of resources, but also strive to prevent pollution.
6. We recognize the impact our business activities have on biodiversity, and we will actively work toward the conservation of all life on Earth.
7. To achieve greater collaboration with regard to our environmental activities, we provide guidance and support to our affiliate companies and business partners, and also strive to work in cooperation and harmony with the community.
8. This basic environmental policy is disseminated to all divisions in the group through education, training, and awareness campaigns, and we facilitate the timely release of information on the environment both within and outside the Group.

(Revised on August 21, 2019)

Environmental Initiatives

We believe that it is a company's social responsibility to leave the global environment in a healthy state for the next generation. We are promoting the following initiatives to continually decrease our environmental impact and to sustain and improve the natural environment.

1. Revising the Basic Environmental Policy
   - Added efforts toward preserving biodiversity (April 2018)
   - Expanded the promotion of waste reduction and recycling from our manufacturing division to all departments (August 2019)

2. Convening the Environmental Committee
   - The Environmental Committee convenes four times a year and is headed by the CEO. The committee approves environmental goals and reports on the status of energy conservation activities, hazardous material management, and other initiatives related to environmental issues.

3. Convening the General Meeting for Environmental Measures
   - The General Meeting for Environmental Measures convenes twice a year, is headed by Vice President Teramachi (CIO), and is attended by representatives involved in environmental response at each department. Participants share information and present the details of their department's efforts towards reducing their environmental impact.

4. Obtaining ISO certification
   - We have obtained ISO 14001 certification at our domestic and international production facilities.

Conserving Energy and Preventing Global Warming

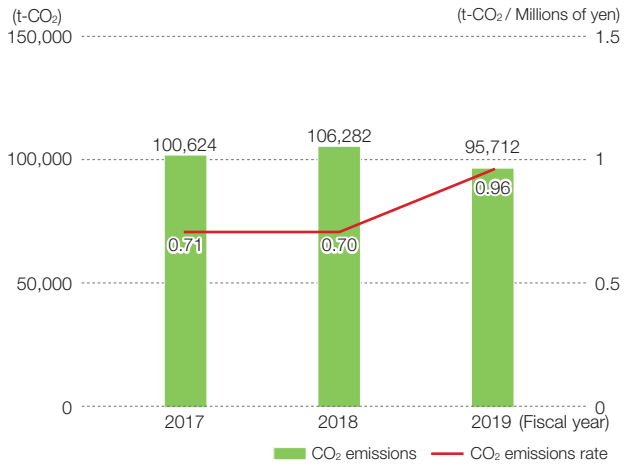
Energy Conservation Initiatives

In an effort to prevent global warming, we are enacting Group-wide initiatives to reduce CO_2 emissions. Our target for reducing our CO_2 emissions is defined in terms of our emissions rate (CO_2 emissions per production volume in yen). Emissions (absolute emissions) from our 12 production facilities in Japan in 2019 were 95,712 tons. However, our emissions rate was 0.96, so we were not able to achieve our goal of 0.70. Furthermore, in an effort to reduce energy use at our production facilities, we have done the following:

1. Upgraded to LED lighting (converting lighting at production facilities in Japan to 100% LED in 2020)
2. Installed or upgraded equipment for higher efficiency
3. Installed renewable energy equipment
4. Actively utilized existing renewable energy equipment
5. Implemented various creative energy conservation activities
6. Monitored our usage of air conditioning and lighting

Please visit our homepage for more information about each production facility's initiatives.

Changes in CO_2 Emissions



The data collection period was from April to March for the 2017 fiscal year and from January to December for the 2018 fiscal year and beyond.

LED Upgrade Results

We established a plan to upgrade to LED lighting where needed in our five Japanese THK production facilities by the end of December 2020. The following table shows the status and results of the LED lighting upgrades in all Group companies in Japan during the 2019 fiscal year.

Plant	Location	Time frame	Bulbs replaced	Reductions	
				Electric power (kWh)	Crude oil equivalent (kL)
Yamagata Plant	Factory 1	10/2019	Fluorescent: 1,339	78,000	20.0
	Factory 2	10/2019	Fluorescent: 289	35,000	9.0
Kofu Plant	Factory 3 Factory 4	9–11/2019	Fluorescent: 993 Mercury: 41	118,277	30.4
Gifu Plant	Chubu Distribution Center, Gifu Plant	9/2019	Fluorescent: 324 Mercury: 3 Ceramic metal halide: 3	52,567	13.5
Mie Plant	Factory building Office building	9–11/2019	Fluorescent: 585 Mercury: 125	200,369	50.0
Yamaguchi Plant	Entire factory	9–12/2019	Fluorescent: 377 Mercury: 217	218,950	56.3
THK NIIGATA	Entire factory	12/2019	Fluorescent: 48	37,393	3.9
THK RHYTHM Hamamatsu	Cold-forging factory Machine factory Welfare building	12/2019	Fluorescent: 144 Fluorescent: 350 Fluorescent: 104	204,817	529.0
THK RHYTHM Kyushu	Office building Factory 2 (New factory)	5/2019 11/2019	Fluorescent: 195 New: 300	34,593	89.0

Conserving Resources, Achieving Zero Emissions, and Green Distribution

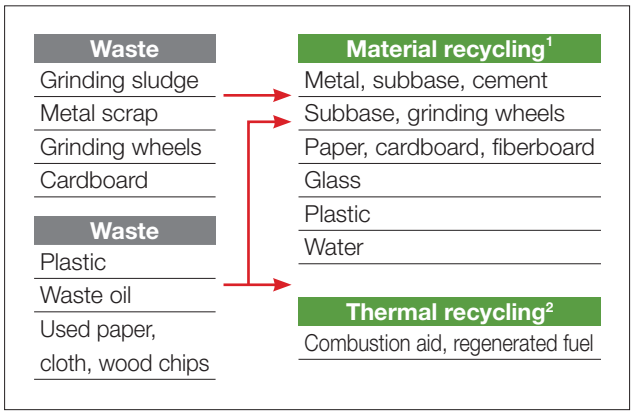
Conserving Resources and Achieving Zero Emissions

The aim of zero emissions is to recycle waste generated during production processes, switch to beneficial materials that can be put to other industrial uses, and get as close to discharging zero waste as possible. We promote zero emissions activities through controlling the use of direct and indirect materials, emissions and final waste, and reusing and recycling.

The waste produced by our business activities includes metal scrap, oil and liquid waste, grinding sludge, packaging, and plastic waste. By thoroughly separating our waste, we reuse or transform waste into usable materials, such as by turning steel scrap into steel-making material, sludge with grinding wheel dust into cement material, and oil and plastic waste into fuel.

As we work to conserve resources and promote zero emissions, we achieved an emissions rate (volume of waste disposed/total discharged) of 0.41% in 2019, once again reaching our annual target of less than 0.50%.

Waste Recycling Methods



[1] Material recycling: Reusing waste as raw material for another product
[2] Thermal recycling: Using waste as combustion material

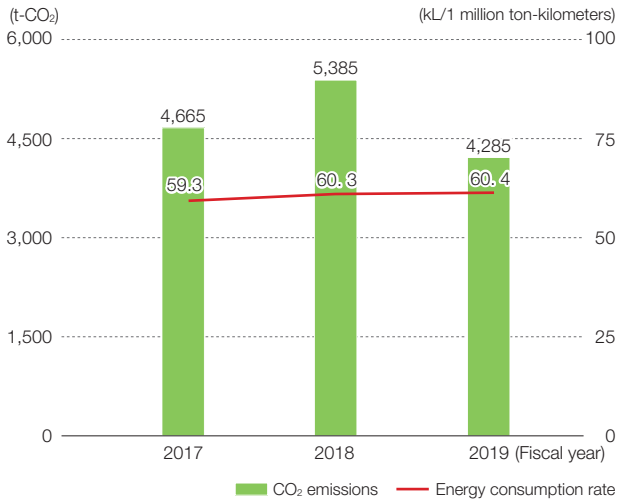
Initiatives for Green Distribution

Distribution departments at three of our distribution centers (Tokyo, Chubu, and Yamaguchi); two of our factory centers (Yamagata and Kofu); and other production facilities (INTECHS Mishima, INTECHS Sendai, THK NIIGATA, RHYTHM Hamamatsu, RHYTHM Inasa, RHYTHM Kyushu, and NIPPON SLIDE) have done the following:

1. Reducing CO_2 emissions: modal shifts (switching from trucks to rail or sea transportation), consolidation of transportation trucks, and improvement of transportation efficiency
2. Reducing environmental impact: transitioning to eco-friendly forklifts
3. Reducing waste: initiating a Green Distribution Plan that includes utilizing returnable containers and reusing packing materials

In 2019, the amount of CO_2 released by our transportation activities was 4,285 tons, a 20% decrease in comparison to the 5,385 tons released in 2018. Our energy consumption rate (ratio of energy use to freight transport in ton-kilometers) increased by about 0.2%, from 60.3 in 2018 to 60.4. Please visit our homepage for details about the initiatives at each production facility.

CO_2 Emissions and Energy Consumption from Transportation



The data collection period was from April to March for the 2017 fiscal year and from January to December for the 2018 fiscal year and beyond.

Hazardous Material Management and ISO 14001

Hazardous Material Management Activities

Environmentally hazardous materials are defined as materials that may be harmful to the human body or ecosystems when contained in a product. In principle, we prohibit the use of such materials in our components and raw materials. For hazardous substances that may be present as impurities, we have established tolerances and handle such materials accordingly.

With regard to the Restriction of Hazardous Substances Directive (RoHS)[1] and REACH Regulation[2] in the EU and the Administrative Measure on the Control of Pollution Caused by Electronic Information Products[3] in China, we have adopted our Green Procurement Guidelines at our production facilities in and outside of Japan and provide information necessary to meeting our customers' requirements. In addition, we submit REACH reports to the relevant authorities as required.

We stringently manage chemicals specified in the PRTR Law[4] and are working to switch to products that do not contain such substances. Our goal is to reduce our handling of these chemicals by 3% each year, and we achieved a dramatic reduction last year, going from 62,608 kg in 2018 to 38,293 kg in 2019. Please visit our homepage for details about our initiatives at each production facility.

[1] RoHS Directive: Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations

[2] REACH (Registration, Evaluation, Authorisation and Restriction of Chemicals): A regulation that requires almost all chemicals sold in the EU to be evaluated for safety and to be registered

[3] Administrative Measure on the Control of Pollution Caused by Electronic Information Products: A law, also called "China RoHS," that requires disclosure when certain hazardous substances are present in electronic information products and components

[4] PRTR Law: Law Concerning Reporting, etc. of Releases to the Environment of Specific Chemical Substances and Promoting Improvements in Their Management

PRTR Substance Amount and Air Emissions (kg)

Substance	Amount	Air Emissions
Xylene	1,789	250
Toluene	3,329	604
Ethylbenzene	505	91
Benzene	151	21
Methylnaphthalene	28,044	17
Other	4,475	341
Total	38,293	1,324

ISO 14001-Certified Facilities

Japan

Production Facility	Country	Certifying Body
Yamagata Plant, Kofu Plant, Gifu Plant, Mie Plant, Yamaguchi Plant, THK NIIGATA	Japan	JQA
THK RHYTHM Headquarters, Hamamatsu Plant, Inasa Plant, Kyushu Plant		JIA
THK INTECHS Headquarters, Mishima Plant, Sendai Plant		ClassNK

The Americas

Production Facility	Country	Certifying Body
THK Manufacturing of America	USA	SAI GLOBAL
THK RHYTHM NORTH AMERICA		SQA
THK RHYTHM AUTOMOTIVE MICHIGAN		DQS
THK RHYTHM AUTOMOTIVE CANADA (Tillsonburg)	Canada	DQS
THK RHYTHM AUTOMOTIVE CANADA (St. Catharines)		DQS

Europe

Production Facility	Country	Certifying Body
THK Manufacturing of Europe	France	AFAQ
THK RHYTHM AUTOMOTIVE GmbH	Germany	DQS
THK RHYTHM AUTOMOTIVE CZECH	Czech Republic	DQS

Asia

Production Facility	Country	Certifying Body
THK MANUFACTURING OF CHINA (WUXI)	China	CQC
DALIAN THK, THK MANUFACTURING OF CHINA (LIAONING)		TUV
THK RHYTHM CHANGZHOU		BUREAU VERITAS
THK RHYTHM GUANGZHOU		SGS
THK RHYTHM MALAYSIA	Malaysia	DQS
THK RHYTHM (THAILAND)	Thailand	URS

Third-Party Opinion

I was also given the opportunity to express my thoughts on last year's report, but I now present my third-party opinion on the 2020 THK Sustainability Report (hereinafter referred to as "this report").

Coronavirus Response

As the issue of the coronavirus has persisted and intensified, the first four pages of this report are rich with information and very worthwhile to read. They provide the reader with a condensed explanation of how your basic coronavirus response strategy has been, as the subtitle says, "Protecting employees and their families, maintaining business activities and upholding responsibilities as a supplier, and working toward a new era."

It deserves to be noted that your new technologies such as the Omni THK digital communication platform and the productivity-boosting IoT tool OMNI edge, which you developed and launched for customers even before this pandemic, are and will be highly effective tools both during and after the coronavirus era. Furthermore, your contactless robots are another good example of how you have adapted to the new needs of customers during the pandemic.

All of these are instances of you fulfilling your corporate philosophy of providing innovative products to the world and generating new trends to contribute to the creation of an affluent society. On the other hand, to evaluate these efforts from a sustainability perspective, they fall under the SDGs, including goals 3 (health and well-being) and 9 (innovation), and CSV (creating shared value) as well.

You should consider incorporating these examples in the "Value Creation" and "Activities Related to the SDGs" sections in next year's report.

Major Challenges: Activities Related to Employees, the Supply Chain, and the BCP

As the subtitle to the opening section of this report suggests, the coronavirus pandemic has brought renewed attention to the importance of stakeholders, especially employees and suppliers, as well as BCP activities in enabling many businesses to maintain operations and fulfill their responsibilities as suppliers. The opening section of this report covers, among other things, remote work and the establishment of the coronavirus response task force and teams essential to maintaining business operations. The rest of the report also contains relevant information in the "BCP," "Together with Our Suppliers," "Health and Safety," and "Supporting Development" sections.

In next year's report, I would like to see how each of your activities in response to the aforementioned major challenges has evolved during and after the coronavirus era.

Transitioning from CSR to Sustainability Management

In the following areas, I have identified your evolution from CSR management to sustainability management. The items marked with asterisks were also improved from last year based on the third-party opinion.

- Signing the UN Global Compact
- The "Value Creation" section
- Setting KPIs for activities related to the SDGs*
- Identifying risks and opportunities in the value chain*
- Employee comments that generate financial and non-financial value*

When it comes to evaluating corporations on their ESG investing, rather than looking at a short-term time scale of a few years, the tendency is to assess a company's long-term efforts in anticipation of the 2030 and 2050 agendas for the SDGs. Therefore, it is critical to have a more long-term grasp of sustainability management and disclose information accordingly.

Masatoshi Ikari | Representative, Sustainability Consulting
Part-Time Teacher, Seikei University

Profile: Born in 1957. Graduated from the Department of Engineering at Tohoku University and joined Mitsubishi Materials Corporation in 1982. After working at MS&AD InterRisk Research & Consulting, Inc., has held current position since April 2018.

Public office held: Member of the 6th through the 23rd Environmental Communication Award Working Group (2002–2019) held by the Ministry of the Environment.

Publications: *Evolutional Strategy on Environmental Risk for Financial Institutions* (coauthor, Kinzai Institute for Financial Affairs, Inc.), *Practical Guidance on SDGs for Corporate Environmental Staff* (coauthor, Nikkan Kogyo), and many more.

Editor's Note

We had initially intended to publish this report in September, and we sincerely apologize that it was delayed until December due to the coronavirus.

As was mentioned in the introduction, as of this year, the previous title of "CSR Report" has been changed to "Sustainability Report." This report has thoroughly examined our initiatives towards achieving a sustainable society, including our signing of the United Nations Global Compact, and it represents a first step towards sustainability management. We also invite you to visit our homepage, where we provide details about the activities of each of our facilities and our affiliates.

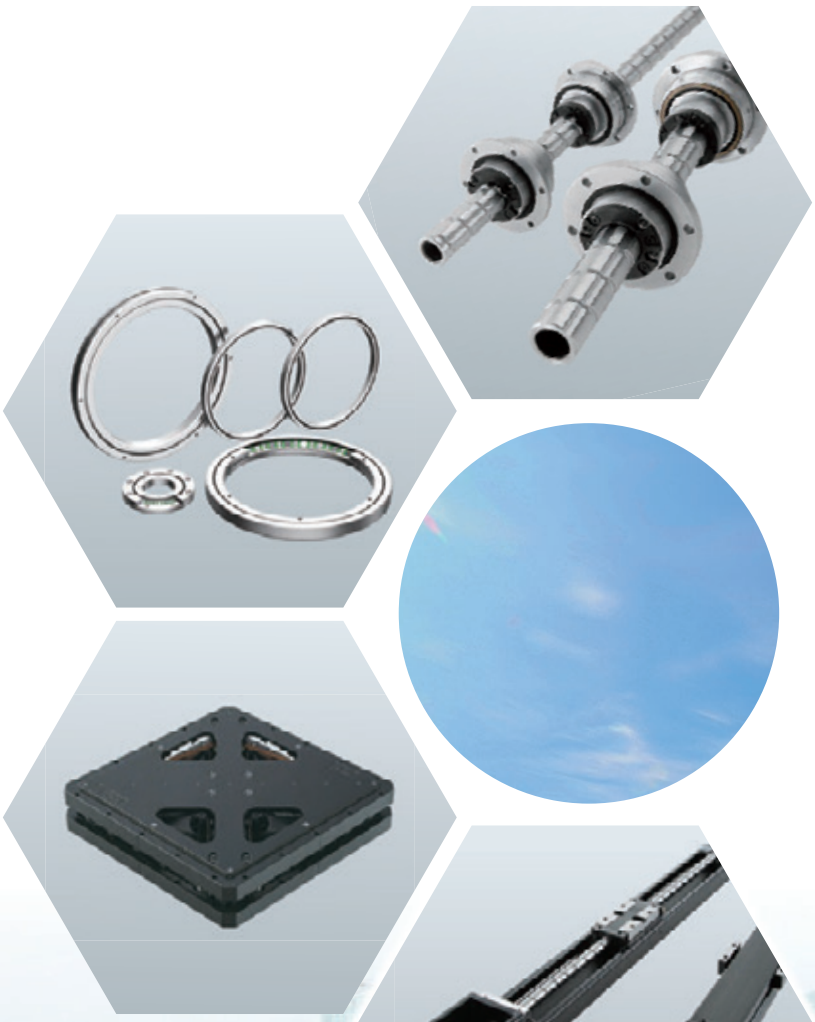
We will continue to pursue initiatives that will earn the trust of our stakeholders and disclose that information in a suitable manner. To that end, we would like to hear your thoughts about this report. Your opinions are valued and will guide us in our future CSR endeavors and the creation of future reports, so please use the attached survey or the website below to send us your honest thoughts and opinions.

URL:
www.thk.com/eng/csr/a2020

Access from your smartphone or tablet here ▶

CSR Project Office

(The next edition will be published September 2021.)



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