



# NTN Report 2015

for the year ended  
March 31, 2015

For New Technology Network

**NTN**<sup>®</sup>

NTN Corporation



# The NTN Group provides original technologies and services for various types of machinery to support the global industry and lifestyle.

## Corporate Philosophy

**“We shall contribute to international society through creating new technologies and developing new products.”**

## For New Technology Network

1. Creation of original technologies.
2. Offering the technologies for additional values and service that are suitable for each customer and end user.
3. Improvement of employees' standard of living, distribution of fair returns to stockholders, and contribution to society based on the steady growth of our business.
4. Promotion of globalization, and formation of management systems / corporate organization which are essential for NTN, as an international leading company.

Visiting customers with technical service units around the world

11

Technical training



## Aftermarket Applications

Meeting maintenance needs for industrial machinery and automobiles



MRO (Maintenance, Repair, and Overhaul) business



Technical support



Sale of automotive repair parts (auto parts)



Maintenance tools



## Forward Looking Statements

This report contains forecasts and projections regarding NTN's future plans, strategies, and business results. Please understand that actual business results may vary from the projections made herein by the Company.

## Editorial Policy

NTN believes the active disclosure of management plans and business results, as well as its basic policy for corporate social responsibility (CSR), CSR activities, and environmental preservation initiatives, among other information, will help garner the understanding and support of all stakeholders. This "NTN Report" which since the fiscal year ended March 31, 2010 has combined the "Annual Report" and the "CSR Report," is part of this active approach to information disclosure. This report has been edited with reference to the International Integrated Reporting Framework of the International Integrated Reporting Council.

## Outline (as of March 31, 2015)

Corporate name: NTN Corporation

Trademark: **NTN**

Date founded: March 1918

Head office: 3-17, 1-chome, Kyomachibori,  
Nishi-ku, Osaka-shi, Osaka  
550-0003, Japan

Representative: Hiroshi Ohkubo, President

Number of employees:

Consolidated: 23,360

Non-consolidated: 5,062

Fiscal term: March

Capitalization: 54.3 billion yen

Net sales:

Consolidated: 701.9 billion yen

Non-consolidated: 338 billion yen

(Fiscal year ended March 31, 2015)





Aerospace

4

Certified as a supplier to the  
major jet engine manufacturers

Medical equipment



## Industrial Machinery Applications

Enabling high performance of rotating parts in a range of industrial machinery



Construction machinery



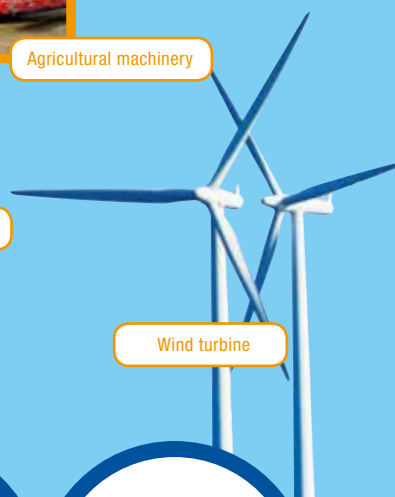
Agricultural machinery



Rolling stock



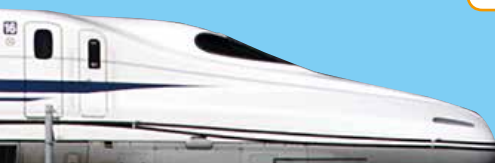
Machine tool



Wind turbine

Supplying rolling stock bearings in

10 countries

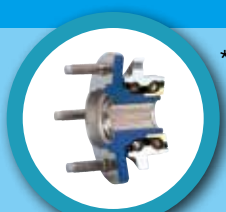


## NTN's Strengths

TRIBOLOGY

GLOBAL PRESENCE

VALUE CREATION



Hub Bearing World's No. 1



Driveshafts World's No. 2

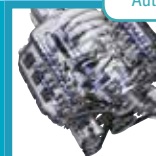
Automotive wheels



## Automotive Applications

Contributing to energy saving of automobile through more compact, lighter weight and lower torque

Automotive engine



Automotive transmission



\* Photos are cross-sectional models of products.

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## The NTN Group creates technologies developed around tribology for the future in the fields of global environmental conservation and new energy.

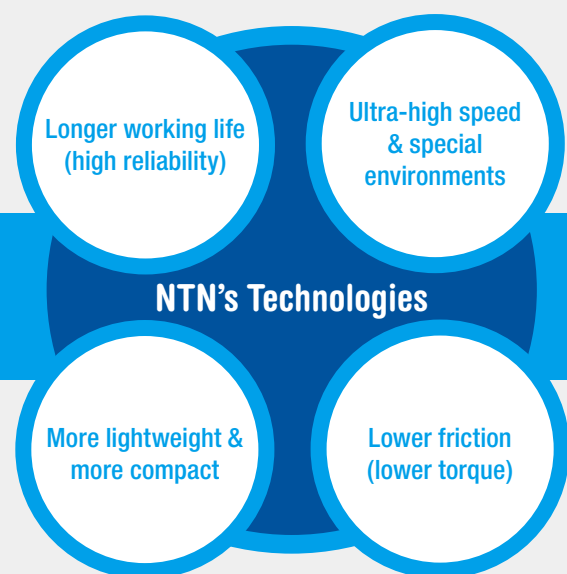
Since being established in 1918, the NTN Group has provided products and technologies to a wide range of fields, including automobiles as well as wind turbines, aircraft, machine tools, rolling stock, construction machinery, robots and agricultural machinery.



Linking the world with new technology

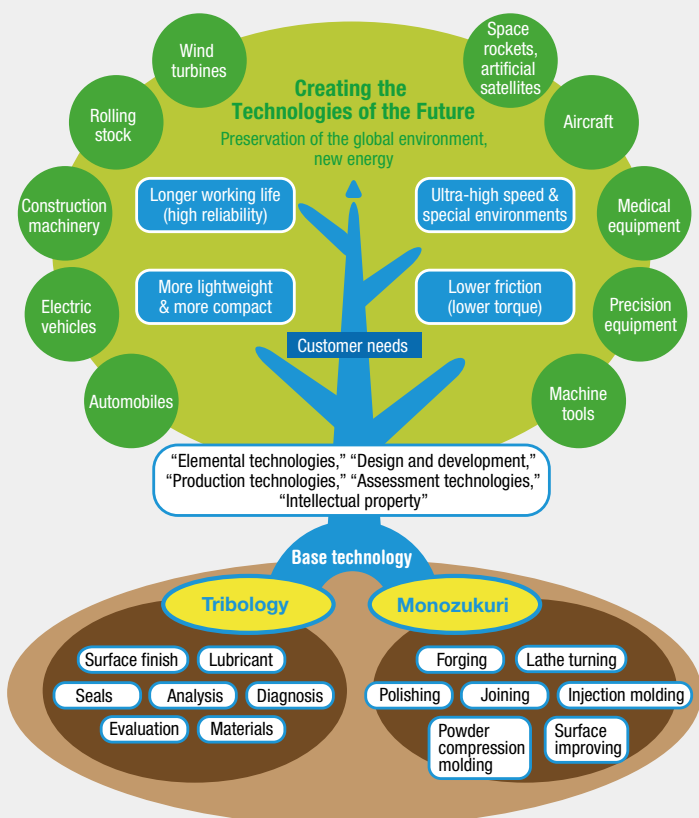
## TRIBOLOGY

A science and technology that includes the study and application of mechanisms of friction, wear and lubrication.



## R&D Policy

The NTN Group develops products such as bearings and driveshafts for the industrial machinery market, automotive market and aftermarket, takes an active approach to creating new technologies that maximize NTN's core competence of tribology technology and precision machining technology, and also develops new products that match the needs of global markets. It has always put the full force of its capabilities into developing advanced technologies, products and production technologies that are the best in the world and the only one unrivaled among competitors, and proposes technologies and products that form solutions to potential market ideas. This development has led to contributions to global industries, such as promoting energy saving. In addition to the Group's core bearing products, peripheral components and control technologies developed by the Group such as plastic and sintered molding and motors (drive circuits) are being combined with greater development of products aimed at modularization and systemization. Development of such products provides benefits back to the Group's customers by saving them design and assembly man-hours, or shortening development times.



The NTN Group's tribology technology continues to evolve in line with customer expectations. Module products that incorporated sensors and other peripheral technology were combined with mechatronics technology and control technology to create system products. The NTN Group is aiming to enter into the service solutions industry by providing condition monitoring technology and sensing technology for bearings.

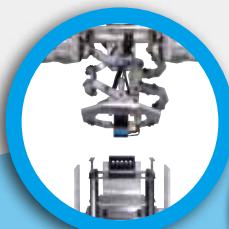
## Developments in the Industrial Machinery Field

By pursuing to develop greater reliability, lower torque, lighter weight products with more compact designs, we continuously meet market needs such as reducing environmental impact by using bearings. The NTN Group also focuses on development of elemental technologies and new products, as well as the development of products including bearing peripheral components.

Condition Monitoring System for Wind Turbines



Parallel Link High Speed Angle Control Equipment



Handy Type Failure Detection Device



IC Tag Integrated Bearing



Integrated Rotation Sensor Bearing

## Creation of Original Technologies



Rolling Bearings



Ultra Low Friction Hub Bearing

Driveshafts



Press Connect Spline Hub Joint



In-wheel Motor System



Mechanical Clutch Unit for Next-generation Steering

## Developments in the Automotive Field

The NTN Group is advancing development of new products aimed at supporting safety and reliability of vehicles, with greater reliability, lower torque, and a lighter weight with more compact design for existing core products such as bearings and driveshafts, as well as continual improvements made to the performance of module products that have recently started being mass-produced. For electric vehicles, research and development has focused on next-generation technologies such as the In-wheel Motor System and electromechanical brake as part of efforts to bring EV system products to market faster. The Group is working with system suppliers and other industry players for control systems to be commercialized.

\* Photos are cross-sectional models of products.

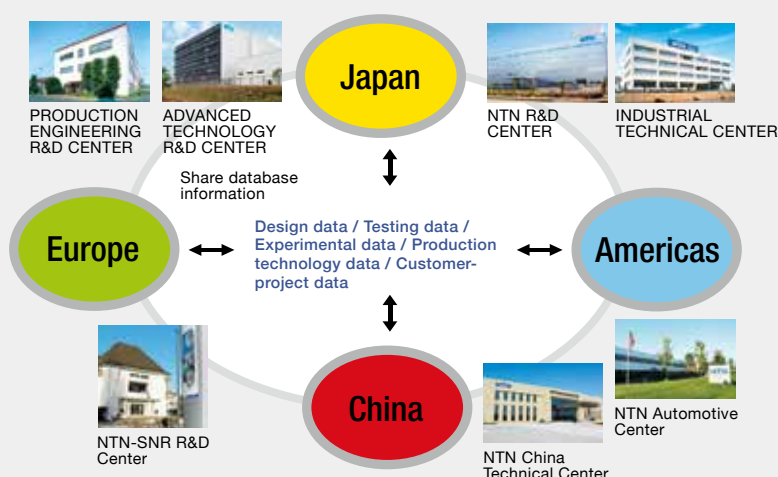
## Original technology supports worldwide industry, and provides people everywhere with safe, dependable, energy-saving lifestyles.

The NTN Group is ramping up global expansion of business.

To achieve this, the Group is strengthening its ties with companies and people around the world, including local production and sales bases, customers and employees.

### Global Four-region System

The NTN Group conducts research and development on a global scale at four regionally independent, self-contained R&D bases. At R&D bases in Japan and Europe, the Group conducts elemental technology and other basic research, as well as research into cutting-edge technologies. At the same time, so that we can quickly respond to customer needs in various regions, the R&D bases are self-contained centers that can carry out independent technological services such as development of individual products, assessment for certification, surveys, and analysis.



## GLOBAL PRESENCE

### Various initiatives undertaken around the world

#### JAPAN

##### “Hitozukuri” to Increase Worksite Capabilities

Techniques and skills developed at mother plants in Japan are passed on to bases around the world in order to raise the level of techniques and skills throughout the entire group. The “NTN Technical Skills Competition” invites young to mid-career technicians and engineers of tomorrow from around the world to compete and share their outstanding techniques and skills. The “Global QC Circle Convention” is also held by inviting teams that work to improve quality at group companies around the world to Japan to present improvement case studies and results of their activities. These activities are aimed at improving safety, quality and productivity in regions around the world, as the NTN Group establishes a globally standard quality assurance system.



A scene from “NTN Technical Skills Competition”

#### AMERICAS

##### Establishing a Stable Supply System

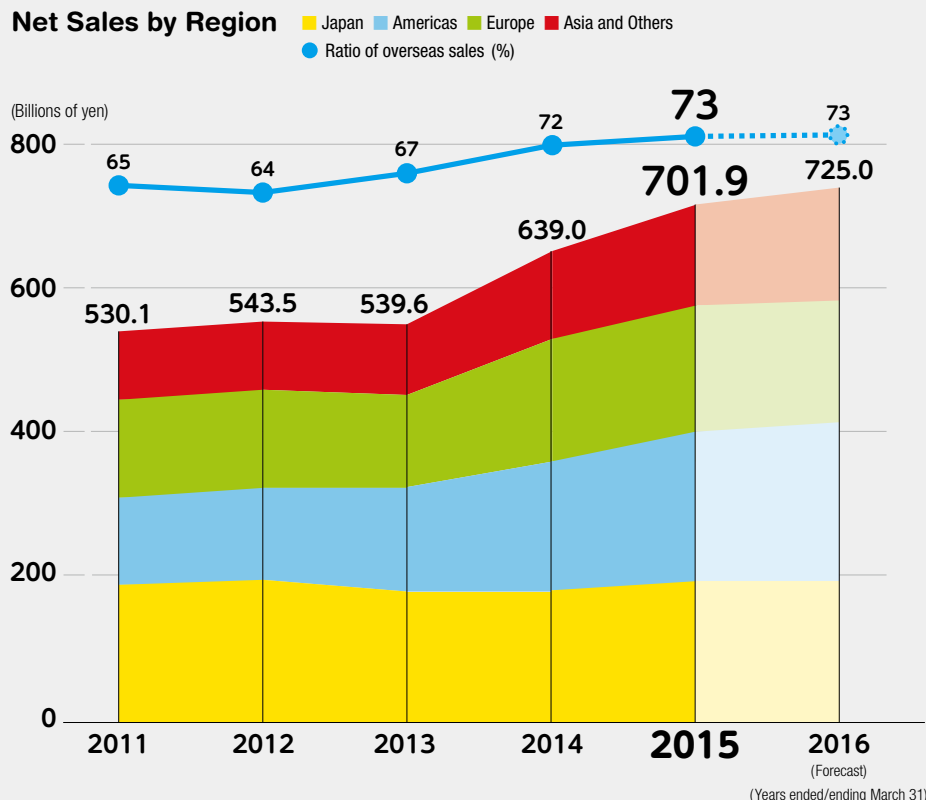
The NTN Group is aiming to establish a stable supply system in the North American region, where automotive production is increasing. In Mexico, where numerous car makers are moving into, mass-production is planned to begin from October 2015 at NTN MANUFACTURING DE MEXICO, S.A. DE C.V. (NTN MANUFACTURING DE MEXICO). The new base is designed to meet increasing demand, and also cover supply to the North American region as part of efforts to spread risk and level out production loads. Such local production systems will continue to be strengthened to accelerate global expansion.



The appearance of NTN MANUFACTURING DE MEXICO (Aguascalientes, Mexico)



## Net Sales by Region



Contributing  
to the world with  
value-added  
technology and  
services

## EUROPE

### Strengthening Engineering Capabilities

In the anticipated growth markets of central and eastern Europe, the NTN Group is strengthening its engineering capabilities and expanding business. In Poland, NTN-SNR Polska Sp. z o.o. (NTN-SNR Poland) opened a technical training center for distributors, which holds various types of training related to product knowledge and professional technology. Increasing the engineering capabilities of distributors helps them to establish a strong relationship of trust with local customers, leading to greater sales.



A scene from technical training for distributors

## ASIA and OTHERS

### Strengthening the Driveshaft Production System

Demand for driveshafts is increasing in line with the sudden increase in production figures in China, the world's largest market for automobiles. In response to this increase and to further enhance the NTN Group's production system, Xiangyang NTN-Yulon Drivetrain Co., Ltd. (Xiangyang NTN) was established in 2014 as a new production base, with mass-production starting in April 2015. Production of driveshafts was increased at this new base located in inland in Xiangyang City that has an immense labor pool available, as part of efforts to strengthen the supply system for car makers producing vehicles in China.

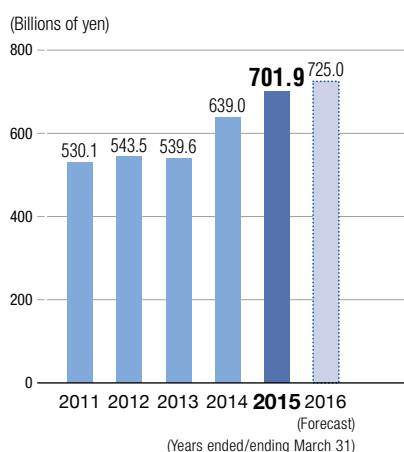


The appearance of Xiangyang NTN (Hubei, China)

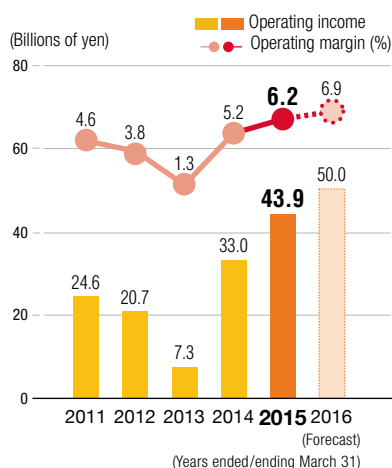
## Closing-related Indices

### Improving profits to improve margins

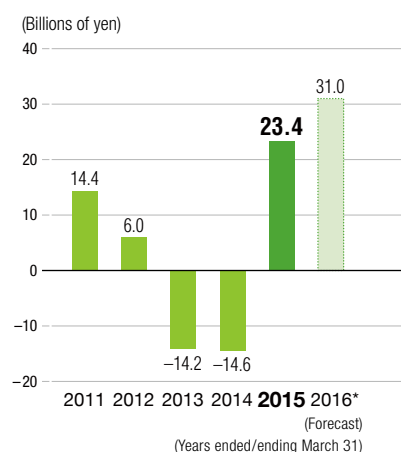
#### Net sales



#### Operating income, Operating margin



#### Net income (loss)



\* In year ending March 31, 2016 "Net income" means  
"Net income attributable to shareholder (parent company)"

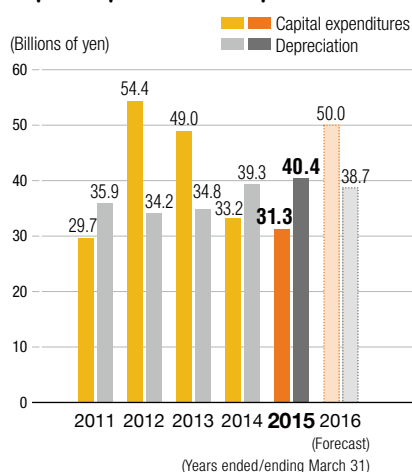
## VALUE CREATION

NTN is making sound capital expenditures  
capital efficiently with the goal of delivering

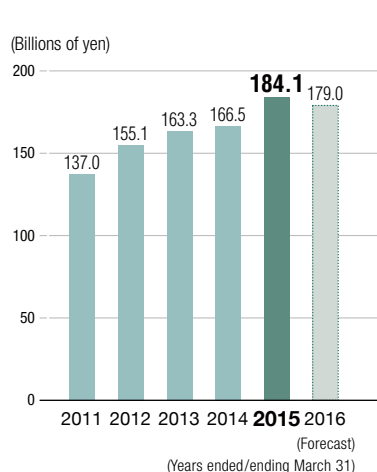
## Investment-related Indices

### Strengthening profit control and focusing on improving asset efficiency

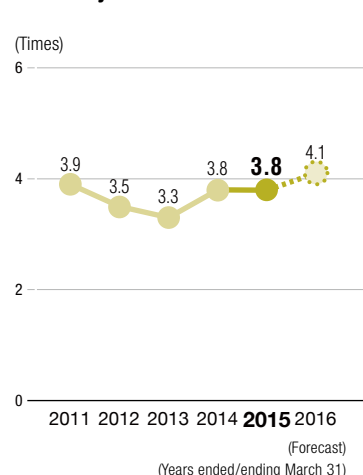
#### Capital expenditures / Depreciation



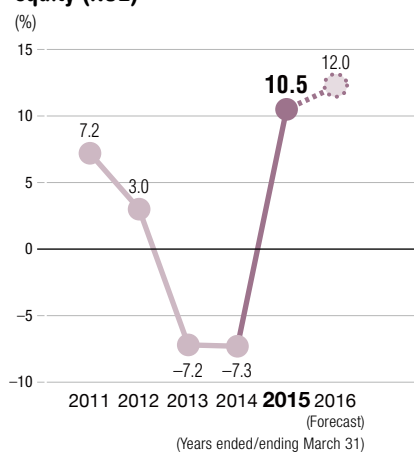
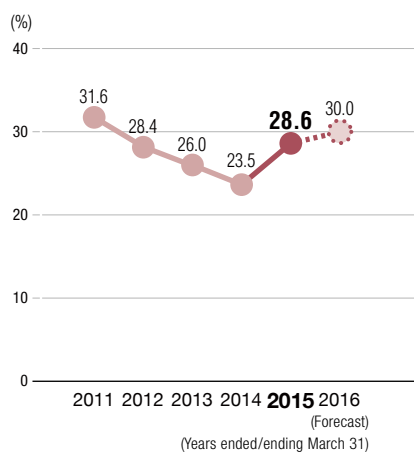
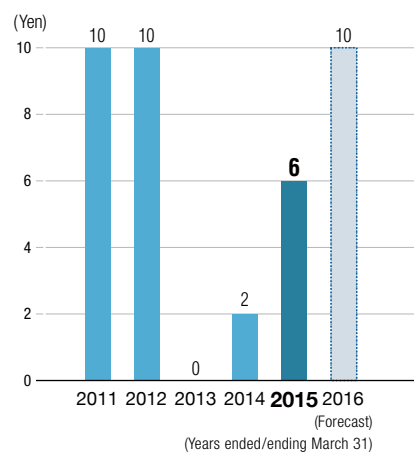
#### Inventories



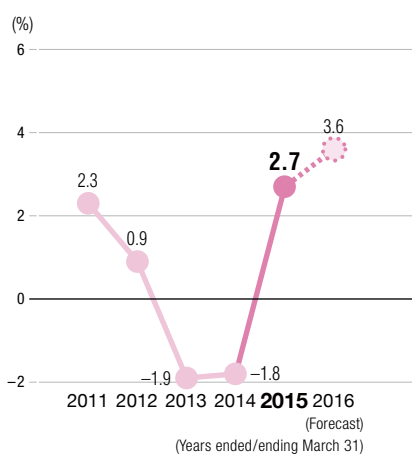
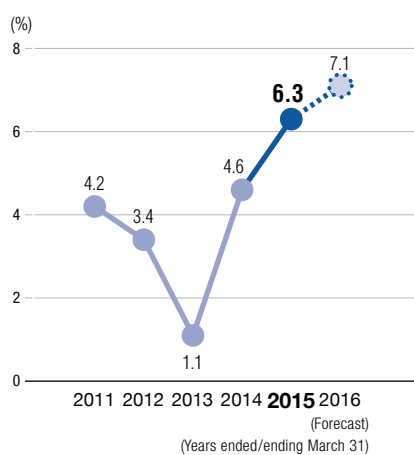
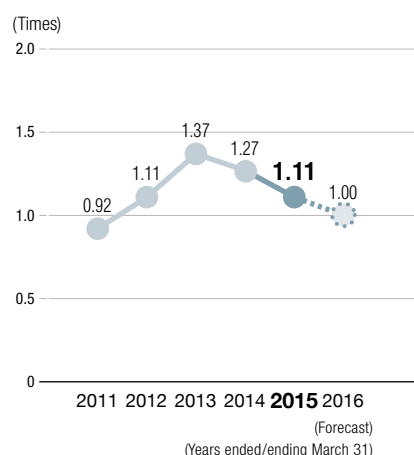
#### Inventory turnover ratio





**Net income / Average shareholders' equity (ROE)****Equity to capital ratio****Cash dividends**

and R&D expenditures, and is utilizing its financial major returns to shareholders.

**Net income / Average total assets (ROA)****NTN-ROI\*****Net D/E ratio**

\* NTN-ROI = Net operating income after tax / (Inventories + tangible fixed assets)

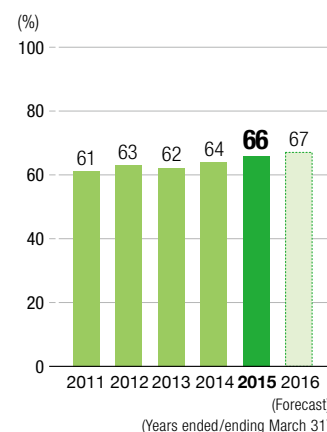
NTN contributes to build a sustainable society by taking its business activities as creation of a diverse range of value through a diverse range of capital investment.

In addition to contributing to society with its final products and services, the NTN Group aims to achieve management that takes into account the global environment and human resources, as well as the local community through all its business processes, from R&D through to sales.

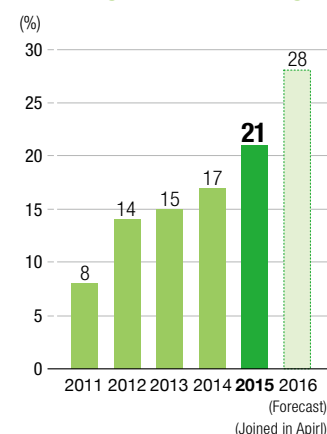
## VALUE CREATION

### Human Capital

#### Percentage of employees overseas

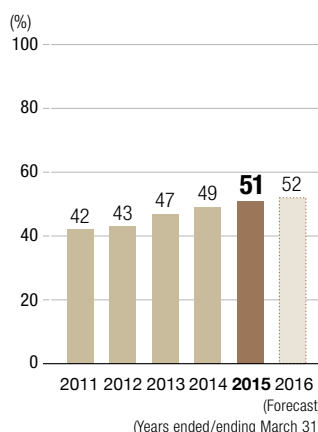


#### Percentage of hired female graduates

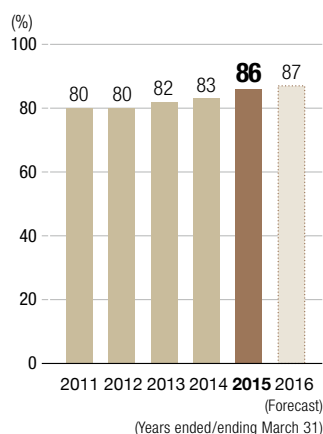


### Manufacturing Capital

#### Ratio of overseas production



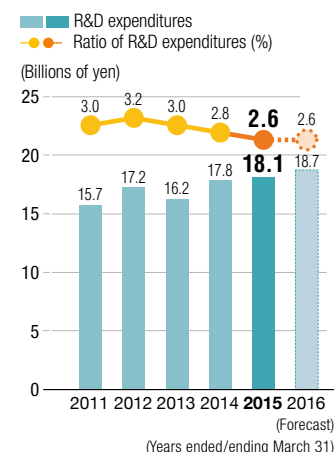
#### Ratio of local procurement



\* Overseas production has been calculated based on U.S. \$1 = ¥110, EURO €1 = ¥130

### Intellectual Capital

#### Ratio of R&D expenditures to net sales

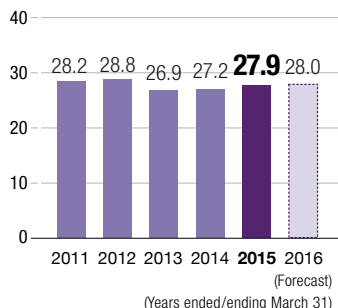


## Natural Capital

### CO<sub>2</sub> emissions

[NTN Group companies in Japan]

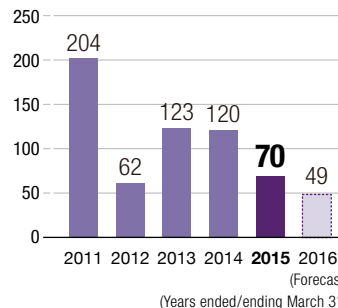
(10,000 tons)



### Landfill waste

[NTN Group companies in Japan]

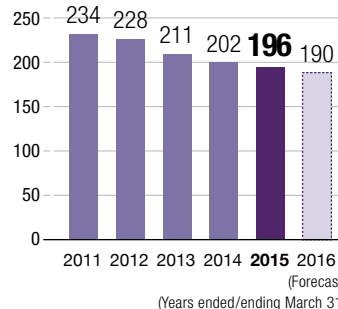
(Tons)



### Water usage

[NTN Group companies in Japan]

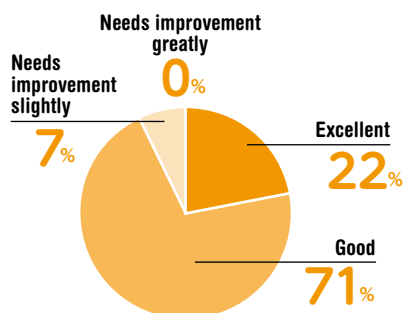
(10,000 m<sup>3</sup>)



## Social Capital

### Customer Satisfaction Surveys

(As of year ended March 31, 2015)



## Minimizing energy loss caused by friction

The coefficient of friction for bearings is generally 0.001 to 0.005, which allows a 1,000 kg object on a surface to be moved with the pulling force of an object of approximately 1 kg. Bearings themselves are "eco-products" that help reduce environmental impact, and using products with such characteristics contributes to reductions in energy consumption and CO<sub>2</sub> emissions worldwide.



## Helping to keep turning machinery that needs to rotate

Bearings are used to help the rotation of a wide range of machinery, including transportation machinery such as automobiles, high-speed trains and aircraft that may have an impact on human life if they stop operating, or machinery and equipment that allows mass-production. The NTN Group enables the safe and reliable operation of machinery that cannot be allowed to stop, with the globally standard quality assurance system that it has established, as well as its engineering services.



## Contributing to NVH\* improvements for automobiles

Driveshafts, which transmit the engine's rotation to the tires, played a major role in increasing the uptake of front-wheel drive vehicles. Continuous technical development has resulted in a greater steering wheel angle, reduction in vibrations transmitted to the steering wheel and better ride comfort, which in turn contributed to a reduction in fatigue levels of drivers around the world.

\*NVH: Noise, Vibration, Harshness



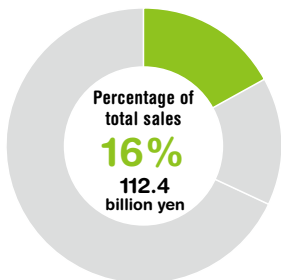


## At a Glance

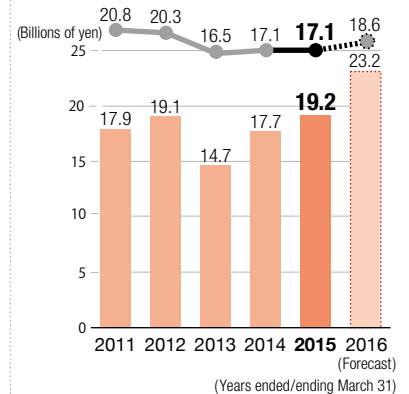
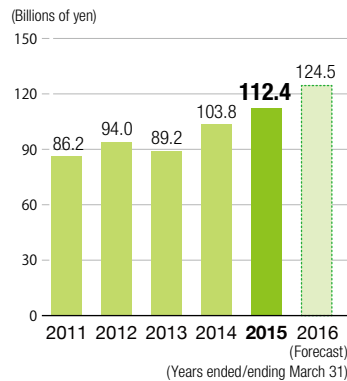
### Net Sales

### Operating Income Operating Margin (%)

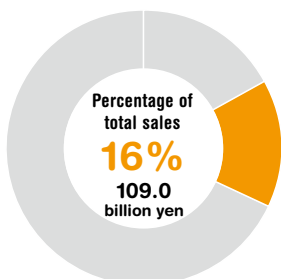
## Aftermarket Applications



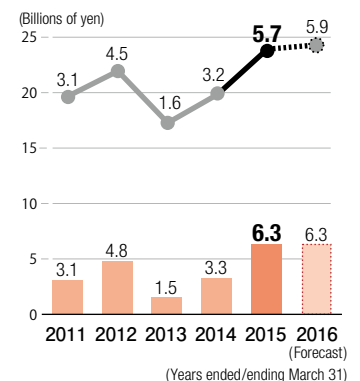
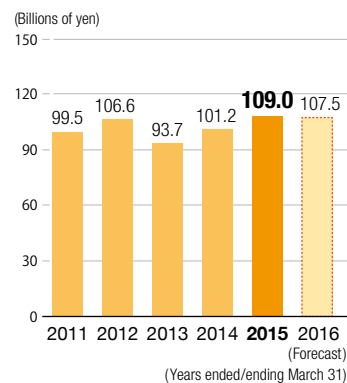
This business covers aftermarket bearing sales for general machinery through distributors, the aftermarket for mining, paper and steel machinery, as well as the aftermarket for automotive repair parts (auto parts). The NTN Group provides an increasing range of bearings of all types to customers around the world.



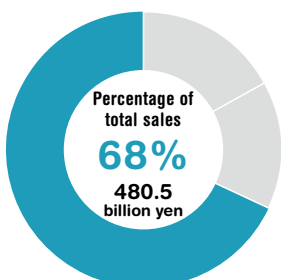
## Industrial Machinery Applications



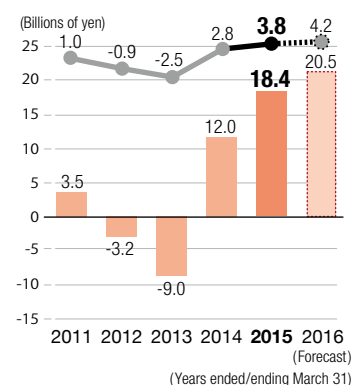
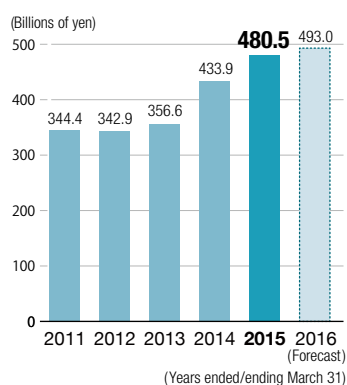
This business covers a range of industrial machinery sectors, including wind turbines, rolling stock and machine tools. The NTN Group is working to expand sales by integrating new technologies into all sizes of bearings.



## Automotive Applications

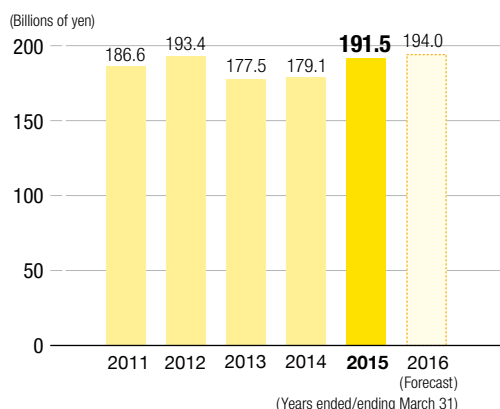


This business covers the automotive and automotive-related market. With the main products of hub bearings, driveshafts, and needle roller bearings, the NTN Group provides the world's automotive and automotive related companies with new technologies and products.



## Reference: Net Sales by Region

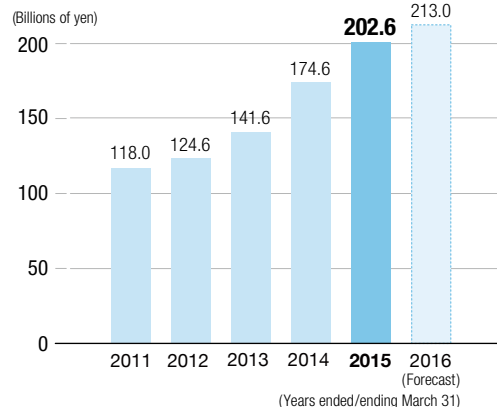
## Japan



## Results in the Fiscal Year Ended March 31, 2015

There was an increase for the aftermarket applications due to increased customer demand for the industrial machinery aftermarket, as well as an increase in the industrial machinery applications due to growth for general machinery and aircraft. The automotive applications increased due to factors such as an increase in customer demand.

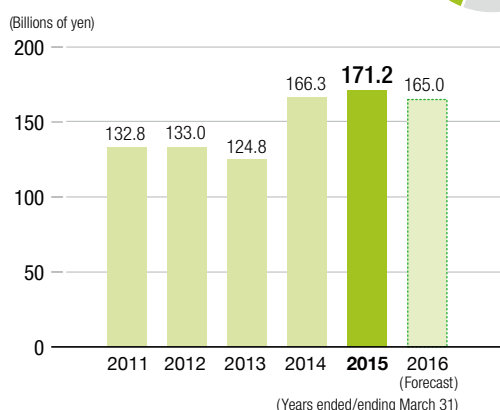
## Americas



## Results in the Fiscal Year Ended March 31, 2015

There was an increase for aftermarket applications due to an increase in customer demand for the automotive aftermarket. The industrial machinery applications increased due to factors such as construction machinery, and the automotive applications also increased due to mass-production of new orders and increased customer demand.

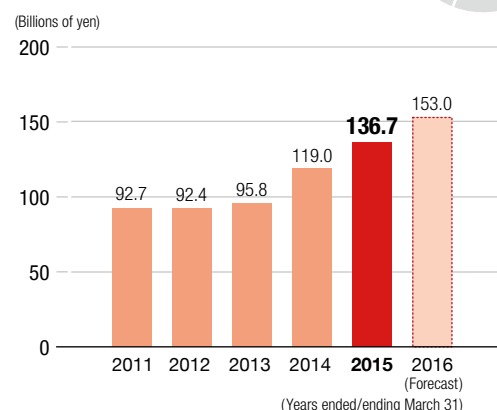
## Europe



## Results in the Fiscal Year Ended March 31, 2015

There was a decrease in the aftermarket applications, however the industrial machinery applications increased due to products including wind turbines and aircraft. The automotive market increased due to an increase in customer demand.

## Asia and Other areas



## Results in the Fiscal Year Ended March 31, 2015

There was an increase for aftermarket applications due to increased customer demand for the industrial machinery aftermarket, as well as the industrial machinery applications increased due to factors such as wind turbines and rolling stock. The automotive market increased due to factors such as mass-production of new orders and increased customer demand.



### President's Message

My name is Ohkubo, President of the NTN Group. The fiscal year ended March 2015 was the final year of the previous Medium-term Management Plan "Revival 2014." I was pleased to announce performance results that exceeded initial plans thanks largely in part to the positive business environment in terms of exchange rates.

The fiscal year ending March 2016 is the first year of the new Medium-term Management Plan "NTN 100." The entire group will be focused on efforts to create a more robust management foundation in the lead up to the company's 100th anniversary in 2018.



# Achieving NTN's 100th Anniversary and Sustainable Growth for the Next 100 Years

## NTN's Accomplishments and Challenges

During the fiscal year ended March 2015, the Japanese economy continued to experience a moderate recovery despite some impact of the increased rate of consumption tax. Looking at overseas economies, the U.S. economy continued to recover and the European economy continued to pick up. However, the rate of expansion in the Chinese economy slowed, while other emerging countries saw a gradual slowdown in economic conditions.

In this environment, the NTN Group has promoted various initiatives to expand sales in highly profitable Aftermarket and Industrial Machinery markets, and improve the profitability of its automotive and other business with the aim "reforming the business structure to generate profit" as defined in the two-year Medium-term Management Plan "Revival 2014", which started in April 2013. As a result of these initiatives, the NTN Group succeeded in recovering results beyond initial forecasts.

Building on the results of the previous Medium-term Management Plan "Revival 2014," the NTN Group will pursue a new Medium-term Management Plan "NTN 100" for the three-year period from April 2015 to March 2018. "NTN 100" stands for "NTN Transformation for Next 100," and the three-year period is regarded as a period for transformation and building foundation that will allow realization of "Our Vision," so that the Group can celebrate its 100th anniversary in March 2018 and achieve continuous growth for the next 100 years.

To achieve "Our Vision," three basic policies have been set forth and will be implemented: "Manage Growth" to focus management resources (personnel, materials and cash) on strategic areas; "Manage Profitability" to reform the business structure to pursue value without relying on scale; and "Manage Foundation" to strengthen the company's management and financial foundations.

## Growth Efforts

We will be implementing a range of efforts aimed at attaining medium- and long-term growth in line with our corporate philosophy. I consider it is important to ensure ongoing profits by further increasing business profitability and efficiency of assets, and to strengthen the financial structure that is essential for ensuring stable returns to all stakeholders. As a company established around the concept of Monozukuri, NTN will always create original technologies and will back these actions up with specific developments in Monozukuri and hitozukuri (personnel development). Social responsibility, such as compliance with legal standards and conservation of the global environment, forms the backbone of a global company, and will be strengthened even further as the foundation of the Group's management.

The NTN Group would like to take this opportunity to ask for the continued support of our stakeholders.



**Hiroshi Ohkubo**  
President

# Interview with the Top Management

## About “NTN 100”

In the new Medium-term Management Plan “NTN 100,” the NTN Group will build foundations for the next 100 years under the three basic policies—“Manage Growth,” “Manage Profitability” and “Manage Foundation.”

### Q1: What was overall performance in the fiscal year ended March 2015?

**A1** Since we recorded the highest net sales ever and increased profit, we have decided to increase dividends.

Net sales for the fiscal year ended March 2015 were up year-on-year by 10% to 701.9 billion yen, making it the highest figure for two consecutive terms. Operating income was also up year-on-year by 33% to 43.9 billion yen, and the operating margin was 6.2%. Performance was the best for 4Q in particular, with an operating income of 14.5 billion yen, making it the

highest ever quarterly financial result. Net income for the year was also 23.4 billion yen, taking us back to surplus for the first time in three years.

Based on these financial results, we increased the dividends for fiscal year ended March 2015 by 1 yen over the initially planned figure to 3.5 yen, making the annual dividend payout 6 yen.

### Q2: What were the results of the previous Medium-term Management Plan “Revival 2014?”

**A2** Not only achieving the target figures, we achieved numerous results including implementing “structural reform” and developing new businesses.

“Revival 2014” was a two-year management plan with “reforming business structure to generate profit” as the basic policy. The 701.9 billion yen in net sales and 43.9 billion yen operating income for the fiscal year ended March 2015 far exceeded the 600 billion yen in net sales and 40 billion yen operating income initially forecast under this plan.

With “Revival 2014” we implemented the “emergency measures” of “reducing personnel and fixed expenses,” “limiting capital expenditure” and “reducing inventories.” As a result, investments into capital were conducted efficiently while limiting expenditures to the scope of depreciation and amortization over the past two years, by actions such as utilizing existing facilities that were left idle. While the amount of inventories increased due to factors such as strengthening the aftermarket business, the inventory turnover rate increased 0.5 points to 3.8, from the rate of 3.3 for the fiscal year ended March 2013.

From a business perspective, we also implemented “centralization of management resources.” In the aftermarket business, we achieved a number of results, including securing MRO (Maintenance, Repair and Overhaul) projects by rolling out technical services on a global level, and expanding the autoparts

business. In the industrial machinery business, we expanded sales in fields featuring high-end technology, such as aircraft, wind turbines and rolling stock. Revenue increased in the automotive business after we implemented various policies aimed at improving profits, resulting in the operating margin for the automotive business increasing to 3.8%, from -2.5% in the fiscal year ended March 2013.

We also implemented “structural reform.” In Japan, we offered early retirement options to 600 employees, with 420 employees eventually applying for it. The rest of almost 200 employees were reassigned to the aftermarket business as more employees were required there. We established new plants in China and Mexico in order to accelerate overseas production. Xiangyang NTN-Yulon Drivetrain Co., Ltd. (China) already began mass-production in April 2015, and mass-production is planned to start at NTN MANUFACTURING DE MEXICO, S.A.DE C.V. in October this year. These new plants will play a major role in the NTN Group's future global production system. Meanwhile, selection of businesses resulted in us establishing a new logistics subsidiary and withdrawing from the precision equipment business.



### Q3: What areas of “Revival 2014” do you need to reflect on?

**A3** While the exchange rate had a positive impact on business performance, there are issues remaining with how we should “reform business structure to generate profit.”

“Revival 2014” was the management plan that we announced in February 2013. Compared with the forecast operating income of 7.5 billion yen for the fiscal year ended March 2013 announced as part of the initial plan, we achieved an operating income of 43.9 billion yen for the fiscal year ended March 2015, which is an increase of 36.4 billion yen over two years. Yet if we have a closer look at the breakdown, the exchange rate was a major factor that led to this increase. The reduction in proportional costs was somewhat affected by policies such as local procurement, however we were unable to achieve our initial plans due to the increased cost in covering exports from Japan to meet the sudden increase in demand in America.

For factors that reduced profit, we were able to minimize the drop in selling price levels through efforts such as limiting price reductions against planned figures and raising the price of unprofitable models, however personnel expenses and costs increased beyond the figures we had budgeted.

So while the policies of “Revival 2014” were successful, this two-year period can also be viewed as riding on the back of the weaker yen. Accordingly, issues still remain with the basic policy of how to “reform business structure to generate profit,” while we could find out new issues to ensure future growth.

#### Main Management Indices of “Revival 2014”

(Years ended March 31)

	2015 (Target)	2015 (Results)
Net sales (billion yen)	600.0	701.9
Operating income (billion yen)	40.0	43.9
Operating margin	6.7%	6.2%
Net income (billion yen)	20.0	23.4
Inventories (billion yen)	145.0	184.1
Inventory turnover ratio (times)	4.1	3.8
Net income/Average total assets (ROA)	2.6%	2.7%
Net income/Average shareholders' equity (ROE)	10.5%	10.5%
Net D/E ratio (times)	1.24	1.11
NTN-ROI*	6.4%	6.3%
Exchange rates	\$:¥85 €:¥110	\$:¥109.8 €:¥138.7

\* NTN-ROI = Net operating income after tax/(Inventories + tangible fixed assets)



#### Q4: As the President, what were your thoughts while developing the new Medium-term Management Plan “NTN 100”?

**A4** We are aiming to achieve “Our Vision” for the NTN Group in the lead up to the company’s 100th anniversary.

This Medium-term Management Plan began in April 2015, and will run for three years through to March 2018. The NTN Group will celebrate its 100th anniversary in 2018. To develop this management plan, we first considered “Our Vision” to summarize 100 years from foundation and achieve sustainable growth for the next 100 years. “NTN 100” is a name consisting of the initials of NTN Transformation for Next 100, and embodies both our 100th anniversary as well as the transformation and foundations that will be required to achieve “Our Vision.”

To better clarify “Our Vision,” we defined our long-term vision covering the next 10 years to highlight the position of the NTN Group, before we actually started developing “NTN 100.”



Poster of “NTN 100”

#### Q5: Can you tell us more about this long-term vision?

**A5** We will have employees around the world coordinate together to achieve “Our Vision.”

##### Long-term Vision: “Our Vision”

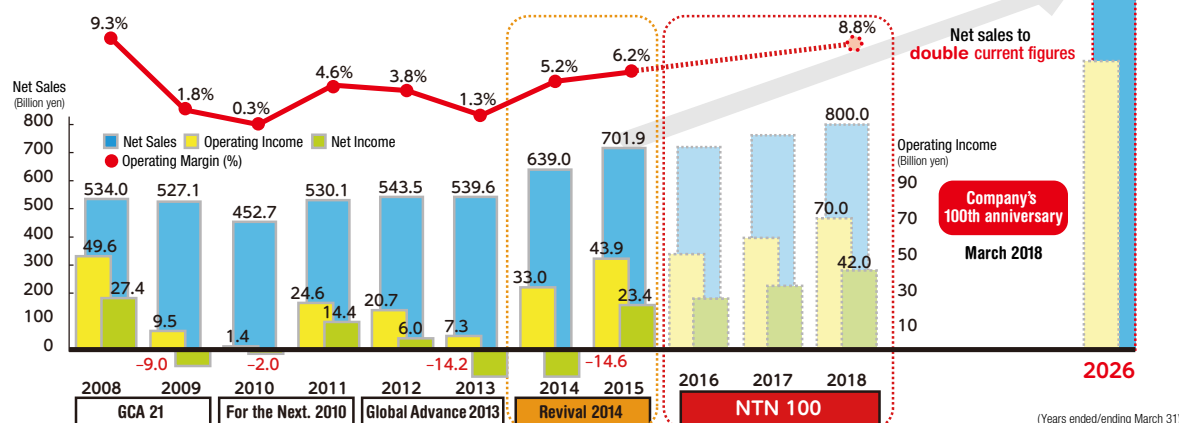
1. A company where its corporate philosophy is understood by all employees around the world and where all employees think and act for themselves
2. A company with original new products and services, appreciated for its high quality and functions, and has a global presence
3. A company where everyone involved with NTN has pride in the “NTN” brand

Our first vision is to become a company where all employees around the world behave in accordance with the corporate philosophy, comply with regulations and contribute to the local community. I want to see the NTN Group become a company that grows daily, and where each and every employee can think and act for themselves. As the NTN Group is an

entity that represents Japanese “Monozukuri,” our second vision is to become a company that has technologies that are useful globally more than ever, that is always seeking a high level of quality and technology, and that is always looking for the next challenge. And the third is to become a company where not just our employees, but all stakeholders, including shareholders, customers and business partners, have pride in the “NTN” brand.

These are not just qualitative targets - we have also set ourselves quantitative targets. The target for the fiscal year ending March 2026, in 10 years time, will be to double our current net sales and achieve an operating margin of 10 to 15%. While these are definitely ambitious goals, I believe that we can achieve them if I actually outline the goals to our employees, so that it increases the motivation of employees around the world and that they all work together to achieve them.

## Company-wide Targets of “NTN 100”



### Q6: Can you provide an overview of “NTN 100”?

#### A6 We will be building on our net sales and improving our operating margin based on the three basic policies.

For “NTN 100” we have adopted the three basic policies of “Manage Growth,” “Manage Profitability” and “Manage Foundation” and developed a three-dimensional business strategy for each of business axis, with the regional axis covering Japan, the Americas, Europe, China and ASEAN, the business axis covering the aftermarket, industrial machinery and automotive sectors, and the product axis covering bearings and driveshafts\*. Using these as a springboard, we will implement main policies for our business foundation.

If I was to outline areas that we need to reflect on from the previous medium-term management plan “Revival 2014” that ended in March 2015, it would be the number of issues that are still remaining regarding the profitability of the NTN Group, as while we achieved our numerical targets, the increase in our profit ratio was largely affected by exchange rates. And to ensure that the NTN Group continues to grow and expand, we

urgently need to create new businesses, in addition to focus on our range of existing products and business.

The main policies that will be implemented as part of “NTN 100” will be further expansion of the profitable aftermarket business, increasing profits of products in the automotive business, particularly driveshafts, and developing new business fields that follow on from bearings and driveshafts. I believe that the NTN Group will be able to successfully build a foundation for the next 100 years by overcoming these issues.

Target figures in three years include 800 billion yen in net sales, 70 billion yen operating income, an operating margin of 8.8% and a net income for the year of 42 billion yen. This represents an approximate 14% increase in net sales and a 2.6 point improvement to the operating margin.

\* Called “Constant Velocity Joints (CVJ)” until the NTN Report 2014.

#### Main Management Indices of “NTN 100”

(Years ended/ending March 31)

	2015 (Results)	2018 (Target)
Net sales (billion yen)	701.9	800.0
Operating income (billion yen)	43.9	70.0
Operating margin	6.2%	8.8%
Net income (billion yen)	23.4	42.0
Inventories (billion yen)	184.1	180.0 or less
Inventory turnover ratio (times)	3.8	4.5
Equity to capital ratio	28.6%	30.0% or more
Net D/E ratio (times)	1.11	1.0 or less
Net income/Average shareholders' equity (ROE)	10.5%	14% or more
Exchange rates	\$:¥109.8 €:¥138.7	\$:¥110 €:¥130

## Q7: Can you provide information on the three basic policies?

### A7 We have developed specific main policies to achieve the targets of “NTN 100.”

The “Manage Growth” main policy involves intensively allocating management resources (personnel, materials and cash) to strategic areas. More specifically, the major themes are “Develop Businesses in New Areas” and “Expand the Aftermarket Business.”

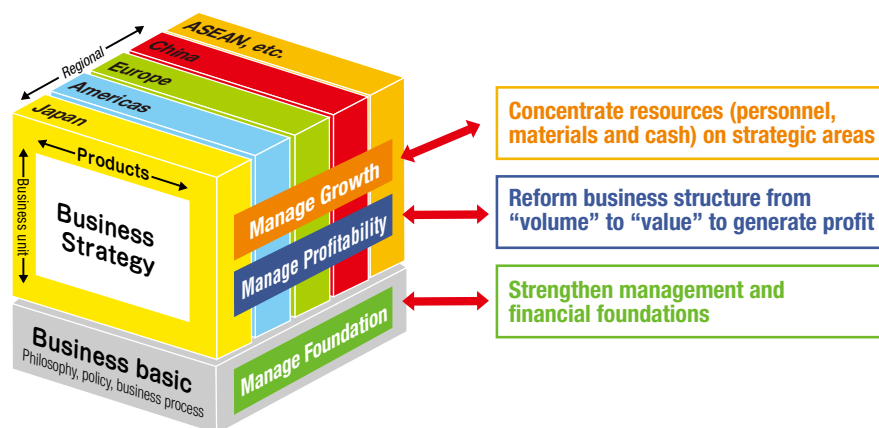
“Manage Profitability” involves reforming business structure from “volume” to “value” to generate profit. More specifically, main policies cover “Structural Reform of the Driveshaft Business” and “Monozukuri with Next-generation Technology.”

“Manage Foundation” includes strengthening the management and financial foundations.

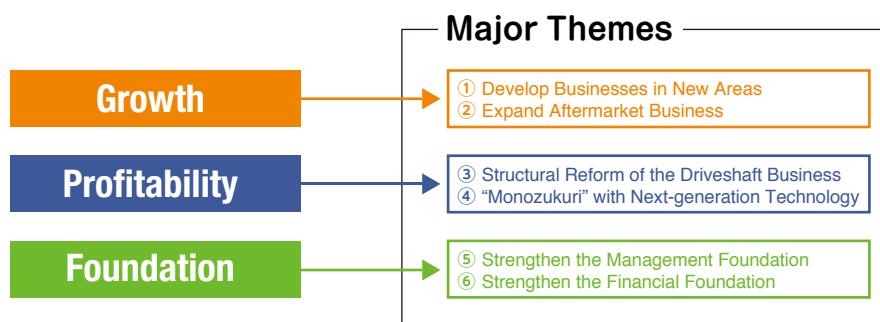
To implement these policies properly, “NTN 100” includes strengthening cross-functional management, chiefly by clarifying roles and responsibilities in the regional axis, and additionally the business axis and functional axis (functions such as finance, human resources and procurement).

### Basic Policies of “NTN 100”

Implement main policies based on 3 Basic Policies to become a co-creative partner company for customers



### Main Themes of “NTN 100”







#### Q8: What are your thoughts on strengthening the management system?

**A8 We urgently need to build the management foundation on a global level.**

Details are provided in "Manage Foundation" (P29 to 30), however for an increasingly global company like ours, it is important to ensure that the corporate philosophy is adopted worldwide, and that efforts are made for thorough compliance. Another key will be to ensure diversity by employing a greater number of

local personnel and women. And of course we are looking at enhancing other global initiatives, such as taking a more environmental approach by utilizing natural energy sources, and conducting grassroots activities that contribute more to local communities.

#### Q9: Please provide a message to your shareholders.

**A9 We are aiming for a ROE beyond 14% and a dividend payout ratio of 30%.**

With "NTN 100," we will be both developing a sound balance sheet and improving asset efficiency. We will make efforts to reduce the net D/E ratio to 1.0 or less, and increase ROE beyond 14%. We are aiming

for annual dividends for the fiscal year ending March 2016 of 10 yen, and I want to improve the shareholders' equity ratio to 30% while "NTN 100" is in action.

# ① Develop Business in New Areas

### Targets

- Search for ideas for new business instead of being limited to existing areas
- Utilize accumulated technology and knowhow, as well as strengthen external links to fuse technology with ideas
- Target new markets expected to grow in the future with unique technology

## ①-1 Energy Business Using Natural Energy

The NTN Group will engage in power generation and energy storage in the natural energy field by utilizing an innovative and highly efficient “blade” technology. This “blade” technology capable of converting even weak wind to rotational energy at high efficiency was developed by Global Energy Co., Ltd. Using unique and thick cross-sectional shape of blade, large lift power is generated without wind noise.

This unique shape allows weak wind to be swiftly captured compared to conventional wind turbine for both the horizontal and vertical axis wind turbines, and keeps rotating for a while after the wind stops. In addition to the blade technology, we also successfully differentiated our power generation efficiency widely from other compact wind turbines by applying our Group's unique rolling bearing technology and magnetic material technology. We also apply this technology to our micro hydro turbines.

Already we have started endeavors to commercialize these turbines, with plans to start full-scale development, production, and sales from the fiscal year ending March 2017. We aim to achieve net sales of 50 billion yen for the fiscal year ending March 2026.



Horizontal Axis Wind Turbine



Vertical Axis Wind Turbine



Micro Hydro Turbine

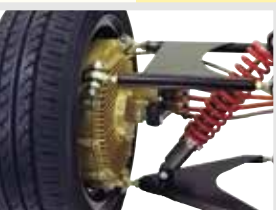
## ①-2 EV Business Electrifying Automobiles, Revolutionizing Safety

Themed on the electrifying automobiles and revolutionizing safety, the NTN Group's EV Business proposes products which support the electrification of “driving”, “turning”, and “stopping”. These products apply our machine elemental technology that contributes to more compact and lightweight advantages, and control technology that includes motors and inverters. We believe that we will contribute enormously to improve safety by increasing the control response through electrifying automobiles.

For “driving” technology, we offer In-wheel Motor System which directly drives car tires by a motor. By developing a unique small-size reduction drive, we achieved to downsize the product.

For “turning” technology, we have established a unique variable mechanism using Steer-by-wire System that separately changes the orientations of each tire. For “stopping” technology, we have also succeeded in miniaturization, by developing a unique screw which can hold the brake pad in Electromechanical Brake Systems with Parking Brake which brake each tire individually.

Our electric actuator units for electromechanical brakes and next generation steering mechanical clutch units which are already being mass produced are also included in this business area. We are aiming at net sales of 30 billion yen for the fiscal year ending March 2026.



In-wheel Motor System



Electromechanical Brake System with Parking Brake

The NTN Group boasts the world's No. 1 share of hub bearings and No. 2 share of driveshafts, and is strong in the fields of precision bearings and large bearings for aircrafts, rolling stock, and wind turbines. In "NTN 100", we will develop business in new areas fusing the technologies and knowhow that we have accumulated as a group.

Moreover, in the search for new business ideas, we will also strengthen ties with external organizations such as universities, other companies, government agencies and research institutions to fuse their technologies and ideas and expand new businesses in growing markets.

### ①-3 Robot-related Business Working and Living with People

In our robot-related business, we are applying our Group's unique technology as seeds for developing products which match those seeds to new needs and expand these products on a global scale.

Already we are globally expanding our linear modules which employ the NTN-SNR ROULEMENTS high precision positioning technologies. Our plan is to apply to this robot business technologies such as small-size ball screw actuators, etc. which are being mass produced for automotive electric hydraulic brakes. Furthermore, our proprietary developed parallel link mechanism that is capable of tracking hemispherical surfaces like the human wrist and boasts high precision and high moving speed already has

been used in the industrial robot fields, and we hope to expand its application to other robots.

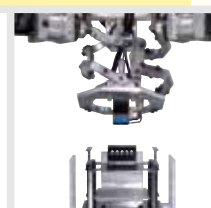
We are aiming at net sales of 20 billion yen for the fiscal year ending March 2026 for this business.



Linear Module



Electric Actuator



Parallel Link High Speed Angle Control Equipment

### ①-4 Service, Solution Business Utilizing Big Data

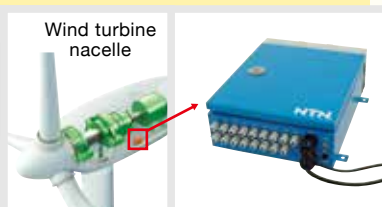
By employing our Group's technology of condition monitoring, diagnosis and sensing for bearings, we plan to expand our Group business which focused mainly on providing "things" to one that provides service and solutions to achieve corporate growth. Our bearing diagnosis technology is currently under demonstration test for Condition Monitoring System (CMS) for Wind Turbines in a joint project with NEDO\*. We aim to further sophisticate these technologies and expand sales. The Handy Type Failure Detection Device developed has a function which sends measured vibration data to our Group's server via the customer's smartphone, and returns analysis results to customers.

We hope to expand these sensor and data analysis technologies to technology for sensing structural degradation, as well as to systems for monitoring the degradation of social infrastructures such as tunnels and bridges.

\* New Energy and Industrial Technology Development Organization



Handy Type Failure Detection Device



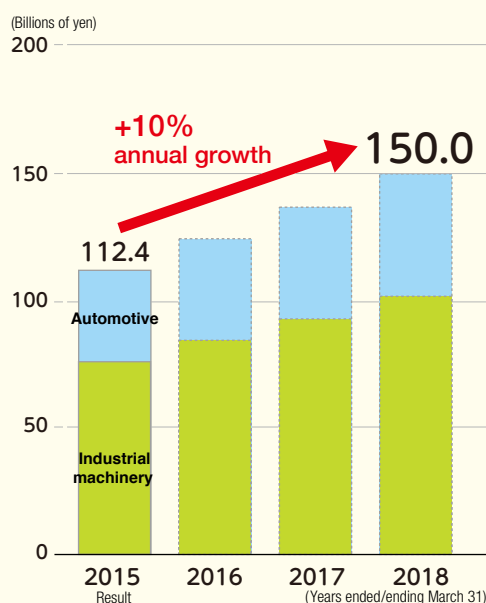
Condition Monitoring System for Wind Turbines

# 2 Expand Aftermarket Business

### Targets

- Excellent product lineup and shorter lead-time from ordering to delivery
- Expand engineering services
- Approach growth markets and specific industries

### Sales Plan of Aftermarket Business



Until now, the NTN Group has focused on strengthening the aftermarket business. In particular, the Aftermarket Business Headquarters was established during the previous medium-term management plan “Revival 2014,” and engineering services were started at customer worksites where equipment is operating. The aftermarket for automotive repair parts (auto parts) takes on knowhow from NTN-SNR ROULEMENTS. An issue that needs to be addressed in the future is to further increase the presence in emerging markets and expand sales in the fields where the Group’s strengths are not utilized to their fullest extent.

The NTN Group will aim to become the “world’s No. 1 customer satisfaction level with product lineup and engineering services” by providing a better product lineup and shortening the lead-time from ordering to delivery, further expanding engineering services that are leading to positive results over time, and strengthening the approach taken to growth markets and specific industries.

## 2-1

### Enhance Product Lineup and Shorten Lead-Time

The NTN Group’s Aftermarket Business features a system that is capable of providing the No.1 product lineup within the Japanese market, however is still seen as lagging when considering global markets. Addressing this issue by increasing the aftermarket product lineup will be effective for storing inventory more efficiently, increasing the consolidated base inventory turnover rate, increasing sales and shortening the lead-time.

A quick response is extremely important in the aftermarket business. The lead-time from receiving an order to delivering the product differs depending on each product model type, however the target of “NTN 100” is to shorten the average lead-time of all products to half the current time. A delivery system is already in place in Japan, Europe and the Americas where products can be shipped out within 24 hours, and this system will be expanded to emerging countries and other regions on a global scale.



A Warehouse for Aftermarket



## 2-2 Strengthen MRO Activities



Technical Service Unit



Aftermarket Academy

MRO is short for Maintenance, Repair and Overhaul, and is a type of agreement that covers all maintenance work for equipment operating at customer worksites. The NTN Group currently operates a total of 11 technical service units in Japan, the Americas, Europe and China, and they have become a major driving force for this business. These technical service units will be used more extensively and deployed to emerging countries in ASEAN as well as India, central and southern America and Russia.

In Japan, the Aftermarket Academy was established for engineers at distributors, and has delivered stunning success. This program will be rolled out globally with the aim of increasing the competitive capabilities of the NTN Group. The Academy mainly runs courses related to bearing technology and offers technical guidance on bearing diagnosis methods and other topics, with participants completing the courses provided with a certificate. This mode of communication is being used to strengthen partnerships with distributors, and will also be linked to the development of a database for aftermarket projects.

## 2-3 Strengthen Approaches to Target Markets

"NTN 100" is targeting four markets (regions) in the aftermarket business.

### North American market

Products and services will be enhanced to cover the targeted MRO industries of mining, steel manufacturing, oil and gas, machine tools, food processing and paper production. Plans are in place to strengthen and expand sales of automotive aftermarket products, such as the parts kit for trucks that was released in 2013, and the hub bearing parts kit for passenger vehicles that went on sale from 2014. Agreements are already in place with numerous distributors in North America, and the main strategy will be to strengthen relationships with the major leading distributors.

### Chinese market

Products and services will be enhanced to cover the targeted MRO industries of mining, rolling stock and power generation. The Chinese market differs to that of North America, and the main focus will be expanding the distributor network there. Automotive-related distributors in particular will be increased 1.5-fold over current numbers.

### Russian market

The market has currently stagnated due to reasons such as political instability, however plans are in place to double the current sales figures by intensifying sales and service activities.

### Central and South American market

A system will be developed to strengthen the partnership in place with NTN-SNR, to enhance engineering services to visit customer worksites.



Japan



U.S.A.



Canada



France



China



Korea

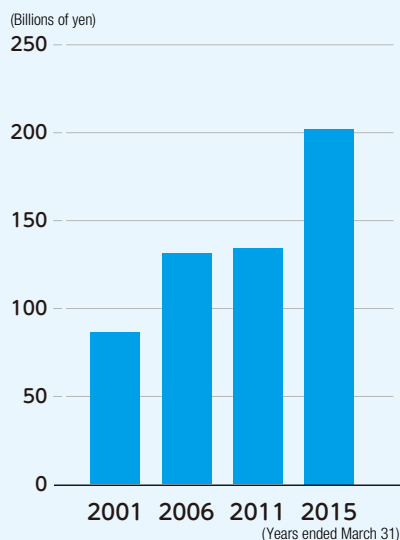
**Technical Service Units Active Around the World**

### ③ Structural Reform of the Driveshaft Business

#### Targets

- Expand profits of the driveshaft business
- World's No. 1 customer satisfaction level for quality, cost, delivery and technical aspects

#### Driveshaft Sales



As a result of efforts to increase sales of our Group's driveshaft business to expand market share, NTN has successfully increased not only net sales significantly but also the number of leading car makers to whom we supply to. Furthermore, we have also established production systems in demand areas so that we can supply products to customers all over the world.

On the other hand, the rapid increase in share has led to dropping selling prices. And with the rising prices of materials and personnel expenses in recent years, the manufacturing costs of driveshafts are also on the upward trend.

One of the most important themes of “NTN 100” is expanding profits of our driveshaft business. Aiming to be “NTN driveshafts' achieving World's No. 1 customer satisfaction level,” we are committed to strengthen our infrastructure in terms of quality, costs, delivery and technology and will reform business structure.

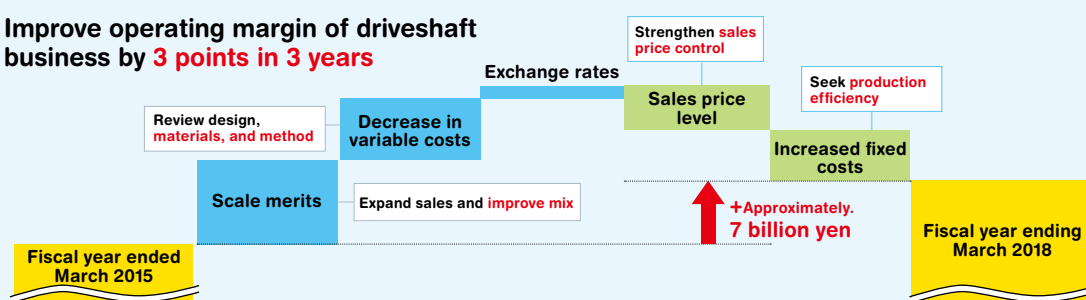
#### ③-1 Expand Profits of Driveshaft Business

In our company's automotive business, the “NTN 100” endeavor targets improvement of the operating margin from the present 4% to 6% in three years. Particularly important is the improvement of the profits of our driveshaft business, and out of many factors, we aim to focus efforts in reducing proportional costs and expanding high value-added products.

To reduce proportional costs, we will further accelerate local procurement. In addition, we will promote our near net shape processing method which eliminates all unnecessary materials to the maximum and material reduction measures which may even require changing parts design. In the future, we also hope to expand our lineup of high value-added products for premium cars including products with features such as high functions, high efficiency, ultra-light weight, and ultra-high angle, improve product mix and improve the margin with increased profits.

On the other hand, we anticipate reduced selling price levels and increased fixed costs as a factor of decreased profits. We will therefore continue efforts to control discount and raise the prices of low-profit items, as well as pursue production efficiency by adjusting production load between production bases to enable use of excess man-hours, review production methods, and also reduce equipment costs by introducing new manufacturing technologies.

#### Improve operating margin of driveshaft business by 3 points in 3 years



## 3-2

## Strengthen Global Quality Control and Supply System

In recent years, quality of automotive parts has been drawing increasing attention. NTN's driveshafts are important safety-related parts supporting the underside of automobiles. Given that they are directly related to human life, quality problems must never occur. As the NTN Group's production bases continue to expand all over the world, we will establish a quality assurance system with consistent "Made by NTN" global standard.

In the U.S., local plants are lacking production ability to meet the sharply growing demands. Presently, we are able to realize stable supply by exporting products from Japan. However, we are considering reinforcing production capacity in the U.S. based on future demand trends. To build up even more stable supply capacity, we are currently striving to increase the capacity of production bases around the world. We are focusing efforts to achieve early stable operations of our two new production bases in China and Mexico, and we will adjust production load between production bases through these two bases.

In this way, by establishing a system which enables stable supply from anywhere in the world, production and delivery time risks can be avoided. The construction of efficient supply systems is also effective for holding down investments. Research and development systems are also important for promptly reflecting local needs in products. NTN believes that in the future, there will be a need to build development systems in five regions in the world, namely the present Japan, U.S., France, and China, added with other Asian region.

For products, we will work on developing our next generation driveshaft module and offering them in a series. NTN is a manufacturer of both driveshafts and hub bearings. Making use of our strengths, we will line up a new series of module products that integrate hub bearings and driveshafts applying Electron Beam Welding (EBW) and Press Connect Spline (PCS).



### ④ “Monozukuri” with Next-Generation Technology

#### Targets

- Introduce innovative manufacturing technologies
- Global standardization of “Monozukuri”
- Strengthen global “Hitozukuri (personnel development)”

Today, the work environment is changing drastically around the world. The declining birth rate and aging society continue to get worse in Japan, and personnel expenses are increasing in emerging countries where production is increasing. Long-term plans are required to ensure a stable source of labor. As production of the NTN Group’s bearings and driveshafts expand overseas. It is important to build a system that does not cause any quality problem.

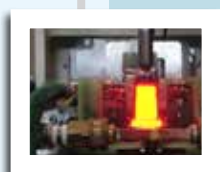
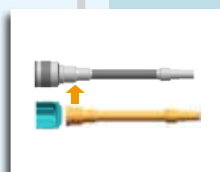
Until now, the NTN Group has focused on “Hitozukuri (personnel development)” and worked on passing on the specialist technical skills. To create a foundation for the next 100 years, plans under “NTN 100” include introducing innovative manufacturing technologies, increasing cost competitiveness, reducing equipment unit costs, shortening lead-times, compressing stock in process, and achieving energy and resource efficiency. A quality assurance system with a consistent “Made by NTN” global standard will be established for global standardization of “Monozukuri”. Efforts will also be made to strengthen global “Hitozukuri” in order to speed up a launch of mass-production at new plants as well as enhancing the supply system so that other plants can respond swiftly if there is any type of change in demand.

The NTN Group will be innovating “Monozukuri” methods for the next 100 years.

#### ④-1

### Develop and Introduce Innovative Manufacturing Technologies

#### Innovative manufacturing line (Image)



The first step of innovative manufacturing methods is the quick introduction of Grow-Up lines. A Grow-Up line is a manufacturing line that can expand (grow-up) from semi-automatic to automatic equipment machinery by combining transportation and robot technology. These lines will be developed and rolled out to regions overseas. Driveshafts will be manufactured with grinding-free or combined machining methods to streamline and centralize processing, while precision joint technology such as electron beam welding (EBW), and near net shape and other manufacturing techniques that reduce materials wastage to a minimum will be introduced where possible to reduce costs, increase yields and unify product models.

New mass-production technologies will be introduced for hub bearings, including developing flexible production lines through the modularization of equipment and utilization of robots. This will allow NTN to strengthen product capabilities, utilize facilities effectively, and respond in a flexible manner to the employment environment in production regions.

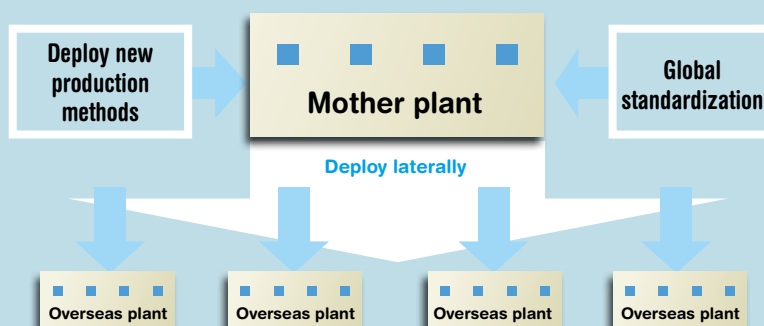
For various bearing types, shortening the lead-time, compressing stock in process and enhancing work on multi-product small-lot production by incorporating processes that had been separated into production lines, as well as introducing combined machining and developing consistent production lines starting with materials.



## 4-2

## Promote Global Standardization of "Monozukuri"

The NTN Group is developing new standard systems for "Monozukuri" and will roll them out at "mother plants" in Japan first to create training programs and manuals. These systems will then be deployed laterally to overseas plants to establish a quality assurance system with a consistent "Made by NTN" global standard as quickly as possible for all products.



## 4-3

## Continual "Hitozukuri" to Increase Worksite Capabilities

In addition to global standardization of "Monozukuri" the NTN Group will expand its training programs for technicians and engineers around the world using techniques and skills developed at "mother plants" in Japan to suit. A system will be developed to pass down NTN's specific "Monozukuri" and special machining techniques over a long span to bases around the world, in addition to those in Japan.

Together with training globally-capable human resources, the NTN Group has also focused on providing technical skills training to technicians and engineers working around the world, as well as implementing diversity. As part of these efforts, NTN has organized the "NTN Technical Skills Competition" where young to mid-career technicians and engineers of tomorrow from around the world compete against each other with great skills and share NTN's unique techniques and skills among them. The "Global QC Circle Convention" is also held where teams that work to improve quality at group companies around the world are invited to Japan to present improvement case studies and results of their activities.

The NTN Group will focus on making further improvement to these activities, and is also planning to expand the "NTN Monozukuri School".



Global QC Circle Convention



NTN Technical Skills Competition

## ⑤ Strengthen the Management Foundation

### Targets

- Ensure all NTN Group employees are aware of the “Corporate philosophy” as a globally common code of conduct
- Ensure compliance and strengthen efforts for a better approach to governance and diversity as a global company
- Contribute to local communities and environment conservation to become a company admired throughout the region
- Establish the "on local site with local materials by local personnel" system

As a result of proceeding with globalization over many years, the ratio of overseas sales of the NTN Group for the fiscal year ended March 31, 2015 was 73%, with overseas production and employee numbers increasing to 51% and 66% respectively. With this increase, applying NTN’s code of conduct, the “Corporate Philosophy” to all employees around the world and transformation to the company where all employees think and act for themselves is a major management topic.

Enhancing training for compliance by employees globally is also considered extremely important, while training and globally capable human resources and encouraging more active roles to female employees in Japan is also a management issue of the NTN Group.

Targets of “NTN 100” include applying the “Corporate Philosophy” to all NTN Group employees as a globally common code of conduct, and ensuring compliance, strengthening governance and providing a better approach to diversity as a global company. Additionally, in the field of CSR activities that is of growing importance, the NTN Group is focusing on contributing to local communities and environmental conservation in all regions that it operates in to become a company admired throughout the region.

### Strengthen control of the NTN Group companies

The corporate philosophy is being instilled into the NTN Group companies that are expanding around the world. Employee training and follow-ups are conducted globally by the CSR Headquarters, while efforts are also being made to strengthen the internal control system in every region around the world. In Japan, the stewardship code of institutional investors and corporate governance code of companies are also being taken into account as part of ever increasing efforts to ensure the appropriate and timely disclosure of information and transparency as a global company.

### Strengthen risk management

Regarding various risks surrounding its business the NTN Group will precisely manage risk prevention and take prompt action when risk occurs.

More than simply risks to NTN, these are considered issues affecting the entire supply chain, and the NTN Group is approaching this with the entire global supply chain, including business partners such as suppliers, as well as sectors related to logistics.

### Conserve the global environment and promote social contribution activities

The NTN Group is already active in using wind turbines and solar power generation, and will promote “using natural energy” for both its business development as well as utilizing inside the Group through the development of products such as compact wind turbines and micro hydro turbines. To help reduce the Group’s environmental impact, the entire global supply chain will be the focus of enhanced management.

### Train global personnel

In the past, employees were generally sent from Japan to overseas, however a greater effort will be made to increase employee interaction from overseas to Japan, as well between other overseas regions. As a global company, training will be strengthened for young personnel and management personnel, regardless of nationality. The NTN Group is aware that the number of women in management positions is an issue in Japan, and is planning to double the current 20 people to 40 in three years.

A diverse range of employees is vital, with people with disabilities as well as different nationalities and genders hired to increase diversity amongst the Group’s human resources.

## ⑥ Strengthen the Financial Foundation

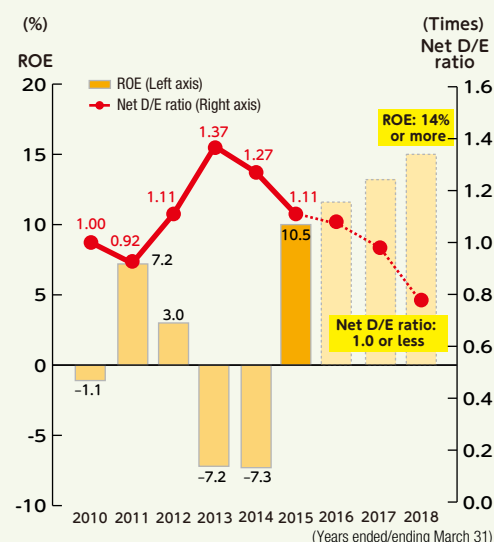
### Targets

- Improve equity to capital ratio to 30% or more, reduce net D/E ratio to 1.0 or less
- Increase ROE 14% or more
- Achieve 30% dividend payout ratio

The equity to capital ratio and net D/E ratio, which are figures that indicate the soundness of the NTN Group's balance sheet, have tended to show poor results over the past several years. Returning the balance sheet to a sound level is one of the targets of “NTN 100”. Various measures will be implemented in order to achieve these targets, including strengthening of profit control and improvement to asset efficiency.

Efforts will be made to improve the equity to capital ratio to 30% or more, and reduce net D/E ratio to 1.0 or less.

A ROE of 14% or more will also be targeted with better earning capacity, with sufficient free cash flow (FCF) to be generated in line with policies to achieve 30% dividend payout ratio.



### Financial actions to improve asset efficiency

The NTN Group is planning to reduce interest-bearing debt by approximately 60 billion yen during the three years of “NTN 100”. This reduction of 60 billion yen will come from the approximately 35 billion yen generated with improvements to FCF over the three-year period, combined with the current balance of approximately 25 billion yen. Asset compression will improve the current inventory turnover ratio of 3.8 to 4.5 to generate a large amount of FCF. To achieve this, the proper stock standards will be clarified for each plant, and a system capable of cross-functional flow will be established, covering each region and each business headquarters, as well as head office departments. Other portfolio assets, including shares and other assets, will be sold off where possible to improve FCF further.

In addition to the reduction in interest-bearing debt a reduction in obligations for retirement benefits will also be enacted. During the three years of “NTN 100,” pension assets are planned to be built up by at least 7 billion yen. If FCF is improved beyond planned figures or if funds acquired from selling off assets are greater than expected, a further buildup of assets will be considered. Assets of 5 billion yen have already been built up at the end of March 2015.

### Financial actions to improve net income to net sales

The most important factor for improving net income to net sales is improving the net operating margin at each business sector. The highly profitable aftermarket business will be expanded in line with the “NTN 100” business strategies. The industrial machinery business is suffering from lower margins due to a slowdown in demand for applications including construction machinery and agricultural machinery, with the low operating ratio of production plants leading to an increase in fixed costs. Sales will be expanded over the next three years to raise the operating ratio of plants and improve margins. In the automotive business, efforts are being made to focus on improving profits of driveshafts, which is part of the “Manage Profitability” policy.

Standards for making investment decisions will be reviewed to improve capital efficiency. Investment decisions will be made with a focus on priority fields in line with “NTN 100” strategies.

### Returns for shareholders

The NTN Group will provide ongoing long-term and reliable returns of profits to shareholders. Improvements to FCF will ensure sufficient funds for dividends, and a 30% will be considered the baseline of dividend payout ratio. The dividends for the fiscal year ending March 31, 2016 is planned to be 10 yen, however, we will aim for 30% dividend payout ratio swiftly.

## Review of Operations

### Aftermarket Academy Initiatives

NTN established the Aftermarket Academy and runs technical courses for end users and distributors with the aim of increasing sales in the aftermarket applications. Bearing professionals use their knowledge and knowhow to provide practical suggestions to resolve any concerns and questions raised by end users. Participants of the

course provided positive feedback, stating that “the course was designed with the end user’s worksite in mind, and it was extremely valuable.” NTN will continue to develop the Academy’s course content, with the aim of becoming a trusted supplier through greater communication with customers.

## Aftermarket Applications

Increasing presence further in emerging markets to cater to a broader range of customer industries.

### Results in the Fiscal Year Ended March 31, 2015

Net sales in the aftermarket applications were 112.4 billion yen, up 8.6 billion yen (8.3%) over the previous fiscal year. During the year, demand for industrial machinery aftermarket slowed in Europe due to the worsening economic situation in countries including Russia and the Ukraine, however sales increased in Japan, China and Asia. Of particular note was the increase in number of MRO (Maintenance, Repair and Overhaul) projects in Japan as a result of mobile activities, as well as an increase in technical services in China and Asia leading to increased sales.

Operating income increased by 1.5 billion yen (8.5%) to 19.2 billion yen thanks to the effects of increased sales and positive exchange rate effects.

### Overview of the Fiscal Year Ending March 31, 2016

Plans are in place during the fiscal year ending March 31, 2016 to expand business growth, particularly in the Americas, where sales are anticipated for industrial machinery aftermarket and automotive aftermarket. In Asia, profits will be enhanced by increasing sales from MRO projects and securing distributors.

### Medium- and Long-Term Strategies

The NTN Group is targeting the world’s No.1 level of customer satisfaction by responding to requirements in the MRO business, in line with “Expand the Aftermarket Business,” one of the strategies to “Manage Growth” in the new Medium-term Management Plan “NTN 100”. In addition to the strategy of “Enhance product lineup and shorten lead-time,” efforts will be made to “Expand sales for MRO demand” in growth markets and specific industries, and the NTN Group will increase its brand presence by steps including development of aftermarket business in emerging countries as a way of taking a more active attitude to growth markets and specific industries. The product lineup in the automotive aftermarket sector, including the parts kit, will be increased to expand sales.

Major increases in sales are planned for the industrial machinery aftermarket by strengthening partnerships with major distributors and automotive aftermarket in the Americas market. A greater level of service will be provided in the central and southern American region by building on the partnership with NTN-SNR ROULEMENTS.

In Europe, aftermarket business has been developed in Russia, while sales will be boosted in Asia and China by providing engineering support to major distributors, as well as with MRO projects.



## Comments of Director in Charge

We are aiming for sales in the Aftermarket Business of 150 billion yen for the fiscal year ending March 2018, which is in three years, based on the slogan “the world's No. 1 level of customer satisfaction with product lineup and engineering services”.

To achieve this goal, we will focus on expanding our engineering services, increasing the product lineup and shortening lead-times. We will also expand the aftermarket product lineup to develop a system capable of immediate delivery. We opened the Aftermarket Academy and took other initiatives to better approach growth markets and specific industries, and will aim to improve our service system and quality to better meet the characteristics of regions and customers.

**Fukumatsu Kometani**  
Executive Director



## P R O D U C T S

\* Photos are cross-sectional models of products.



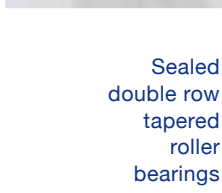
Steel



The rust guard series spherical roller bearings



Sealed four row tapered roller bearings



Sealed double row tapered roller bearings



Super large-sized split spherical roller bearings



\*



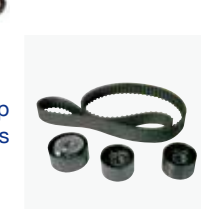
Auto Parts



Parts kit for trucks



Extensive lineup of parts kits



Oil and Gas



Angular contact ball bearings



Mining

Bearing units



Sealed spherical roller bearings



## Review of Operations

### Enormous Contribution to 50 Years of Tokaido Shinkansen History

On October 28, 2014, NTN received a "Tokaido Shinkansen's 50th Anniversary Certificate of Appreciation" from JR Tokai. Tokaido Shinkansen has transported 5.6 billion passengers in those 50 years, and during this time, it has evolved enormously, boasting safety of zero fatal passenger accidents and reduction of energy consumption during traveling by 51%.

NTN's bearings have been used in all successive generations of Shinkansens, from the first generation 0 series launched in 1964 to the most

recent model N700A. The journal bearing adopted by the latest N700A is about 70% lighter and 60% less volume than that used in the first generation 0 model, contributing enormously to the lightness and high speed of the train.

Our journal rolling bearings for the first generation 0 series Shinkansen have been designated as a "tribology heritage" by the Japanese Society of Tribologists. We are the only bearing manufacturer to receive this recognition.



Journal Rolling Bearings for 0 series

\* Photos are cross-sectional models of products.



Journal Rolling Bearings for N700A series

## Industrial Machinery Applications

We are committed to expanding business in new business areas.

### Results in the Fiscal Year Ended March 31, 2015

Net sales in the industrial machinery applications were 109 billion yen, up 7.8 billion yen (7.7%) over the previous fiscal year. Smooth growth of sales of products for rolling stock and aircrafts in Japan and Europe is contributing to the increased net sales. Amidst slumping demands of construction machinery worldwide, momentary recovery of demands was seen in Americas.

Operating income doubled compared to the previous term by 3 billion yen (90.9%) to 6.3 billion yen thanks effects of increased sales and positive exchange rate effects.

### Overview of the Fiscal Year Ending March 31, 2016

In the fiscal year ending March 31, 2016, sales are expected to increase with the accommodation of demands for wind turbine in the Americas and increased demands for high speed railway in China. We are also forecasting robust growth for aircrafts and machine tools. On the other hand, we are being careful with the projections for construction machinery and mining machinery, estimating sales and profits to be generally staying flat due to the sluggish demands worldwide.

### Medium- and Long-Term Strategies

For the industrial machinery market, we are committed to expanding business in new business areas in our New Medium-term Management Plan "NTN 100".

Presently, we are focusing on the development of products for robot related products, and rushing with developments of technologies such as linear modules, which have already been globally applied, and compact ball screw actuators, to be applied in this area.

Natural energy making use of innovative higher efficiency wing technology is also a very promising field. NTN's products have dramatically enhanced power generation efficiency compared to conventional products, and with these products, we hope to contribute significantly to the spread of natural energy by providing such products to regions requiring small energy networks called "micro-grids", and realizing the recycling of energy using wastewater from plants, etc.

## Comments of Director in Charge

In the next three years, we are aiming to achieve net sales of 120 billion yen and operating income of 7.5% for industrial machinery. To achieve these targets, we are particularly focusing our efforts to reinforce production capacity and expanding sales for wind turbine, rolling stock, machine tools, and aircrafts which have potential for growth.

New businesses which we are working hard on include the early commercialization of "compact wind turbine", establishment of the sales system of "linear modules", development of "CMS" technology, and establishment of sales system.

To build the next 100 years of NTN, we hope to reform our business department by not only focusing on our bearing sales but also by providing services and solutions.

**Kazuki Kawashima**  
Director

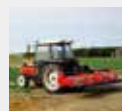


## P R O D U C T S



### Construction machinery bearings

Applications for resource mining and civil engineering



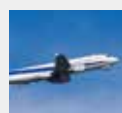
### Agricultural machinery bearings

Contributes to food demand with high quality products



### Gearbox bearings

Supports industrial machinery robots



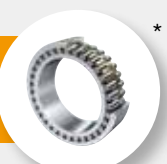
### Aerospace bearings

Applications for jet engines around the world



### Wind turbine bearings

Meets growing demand in renewable energy and other areas



### Rolling stock bearings

Supports safety of the world's high-speed railways



### Machine tool bearings

High-precision support for high-speed rotation



### Office equipment bearings

Supports smooth operation of copiers and multifunctional printers



### Hydrodynamic bearings

Used also for HDDs and thin fan motors



### Medical equipment bearings

Used for CT scanners and artificial hearts



\* Photos are cross-sectional models of products.

### New Products

#### For machine tool main spindles High Speed Angular Contact Ball Bearing HSE-New T2 Type

Machine tool main spindles are growing higher and higher in speed. NTN has developed a new product which uses high melting point polyamide resin as the material of the retainer to enhance strength and minimize heat produced by the contact between the retainer pocket and rolling element during high-speed rotation. The new product also reduces heat generation on the shaped surface by reviewing the shape of the retainer pocket and optimizing contact between the rolling element and retainer. Compared to conventional products, this product has improved high-speed rotational performance by as much as 50%, and enables the use of polyamide resin retainers in high speed ranges for which phenol plastic cages were used to date.





### NTN's "Mechanical Clutch Unit (MCU) for Next-generation Steering" wins 2014 "CHO" MONODZUKURI Innovative Parts and Components Award

In 2013, NTN released on the market the "Mechanical Clutch Unit (MCU) for Next-generation Steering", adopted for the Direct Adaptive Steering developed by Nissan for the first time in the world. The direct adaptive steering transmits the driver's steering actions to the tires via electric signals, thereby allowing quick and accurate steering since there are no elements mechanically connecting the steering and tires at all times.

NTN's Mechanical Clutch Unit (MCU) for Next-generation Steering contributes to the realization of a backup mechanism during malfunctions in

which the Direct Adaptive Steering cannot sustain its functions. A compact structure combining an electromagnetic clutch and roller clutch, when a malfunction is detected, power to the electromagnetic clutch is turned off and the roller clutch is instantaneously connected to mechanically transmit steering input to the tires.

This product won the Automobile Parts Award during the 2014 "CHO" MONODZUKURI Innovative Parts and Components Award hosted by the Nikkan Kogyo Shimbun, Ltd.



Mechanical Clutch Unit (MCU) for Next-generation Steering

\* Photo is cross-sectional model of product.

## Automotive Applications Committed to wholesome and sound business growth

### Results in the Fiscal Year Ended March 31, 2015

Net sales of the automotive applications were 480.5 billion yen, up 46.6 billion yen (10.7%) over the previous fiscal year. Sales increased both in the Americas and Japan due to the smooth automotive demands in North America. Sales in Asia also increased with the increase in automobile production in China and start of new mass production in India.

Operating income increased 6.4 billion yen (52.9%) compared to the previous term to 18.4 billion yen due to factors including the effects of increased sales, decreased proportional costs, and exchange-rate effects, despite an increase in fixed costs due to increased burden on production lines resulting from higher sales in the Americas.

### Overview of the Fiscal Year Ending March 31, 2016

In the fiscal year ending March 31, 2016, demands for NTN's driveshafts are expected to grow and exports from Japan should also continue to be brisk thanks to the continued robust demands in North America. In Asia, we are hoping that sales of NTN's products will increase with the increase in the number of cars sold with the launch of new proposals by Japanese, European, and U.S. car companies, despite the risks of the Chinese economy slowing down.

### Medium- and Long-Term Strategies

As for efforts for the automotive applications, NTN will strive towards the continued development of our automotive business based on the three pillars of our New Medium-term Management Plan "NTN 100", which are "Improved Brand Value", "Focus on Growth Areas", and "Business Development in New Areas".

To "Improve Brand Value", we will differentiate ourselves from other manufacturers by developing products and providing services that accurately reflect the needs of users.

As for "Focus on Growth Areas", we will invest the optimum business resources based on clear business strategies by customer, region, and product, and enhance quality and quantity by maximizing output.

In "Business Development in New Areas", our aim is not only to extend the technologies that NTN has cultivated, but we will merge new technologies and innovative ideas, and develop business in new areas.

By carrying out these policies soundly and reforming automotive business to one that is profitable, we will achieve operating income of 6% in the fiscal year ending March 31, 2018, which is the last year of "NTN 100".

## Comments of Director in Charge

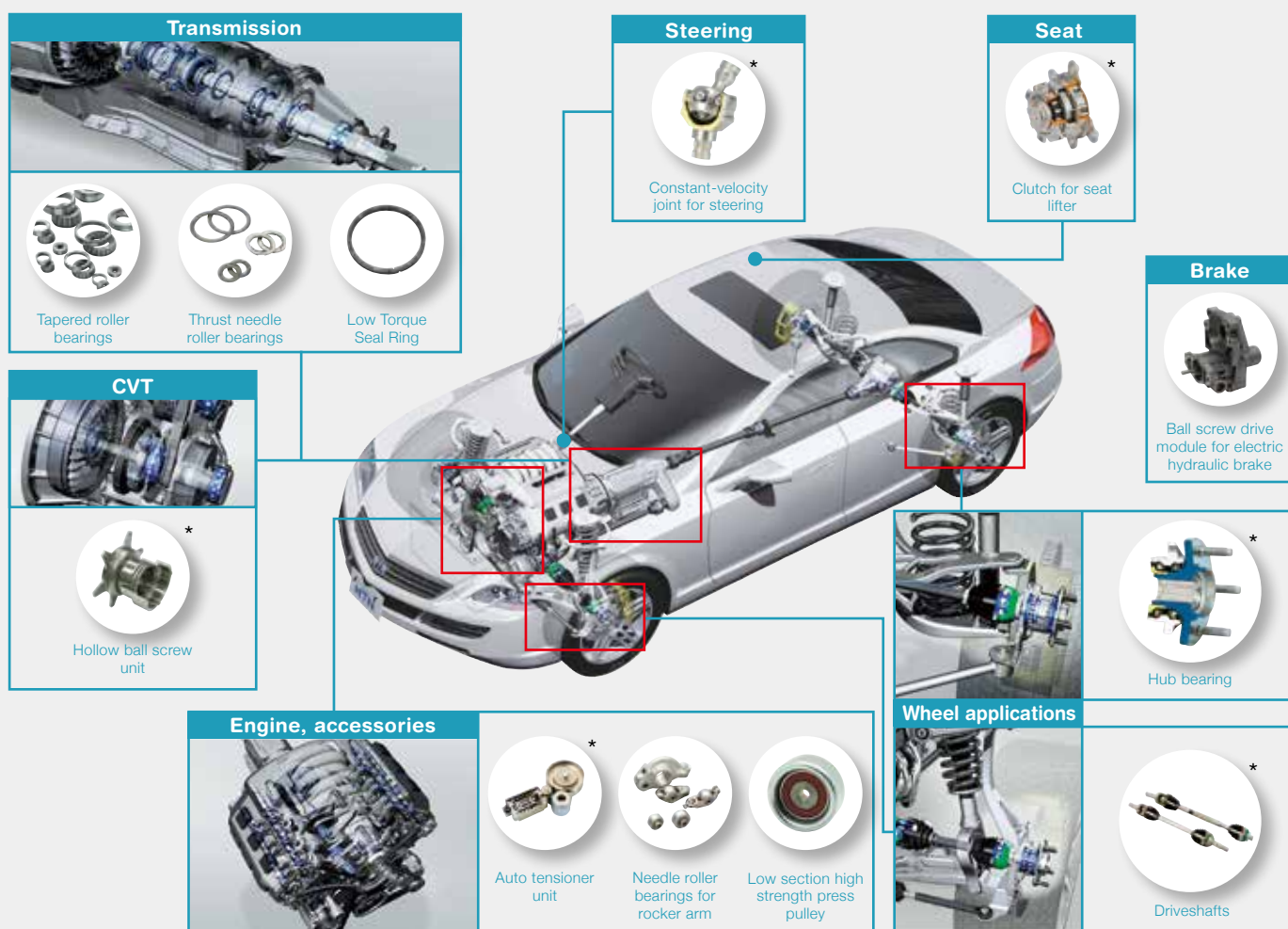
With the slogan "Volume Sales to Value Sales", we will shift the business policy of our automotive business from a business that focuses on expanding sales scale to one that focuses on profits. We will promote reforms from mass development style to development proposition type business, aiming to achieve net sales of 530 billion yen and operating margin of 6% in three year, in the fiscal year ending March 31, 2018.

To achieve these targets, we will not only strengthen quality, cost, delivery deadline, and technology, but will also differentiate ourselves from other manufacturers by thinking and acting from the customers' standpoint. We will provide innovative products and services to enhance customer satisfaction and heighten NTN's brand value.

**Hideaki Miyazawa**  
Managing Director



## P R O D U C T S

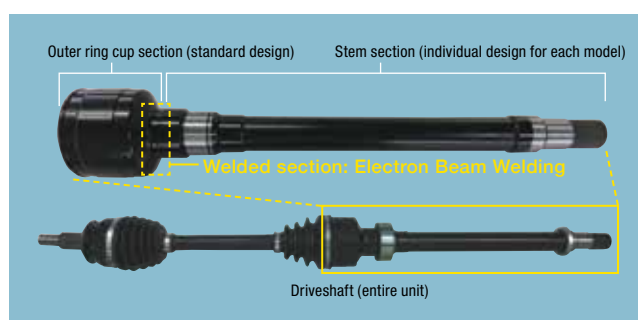


\* Photos are cross-sectional models of products.

### New Products

#### EBW Driveshaft

Automobile manufacturers are shortening the development time of new cars to meet diversifying market needs. The EBW driveshaft developed by NTN is a highly reliable driveshaft realized in a short development lead time by standardizing the in-board outer wheel (which had been specially designed and made for every car model to date) by size and setting the cup as a standard product, as well as welding the individually designed stem (axis) according to model by electron beam.





# Governance/Compliance

## Strengthening Corporate Governance

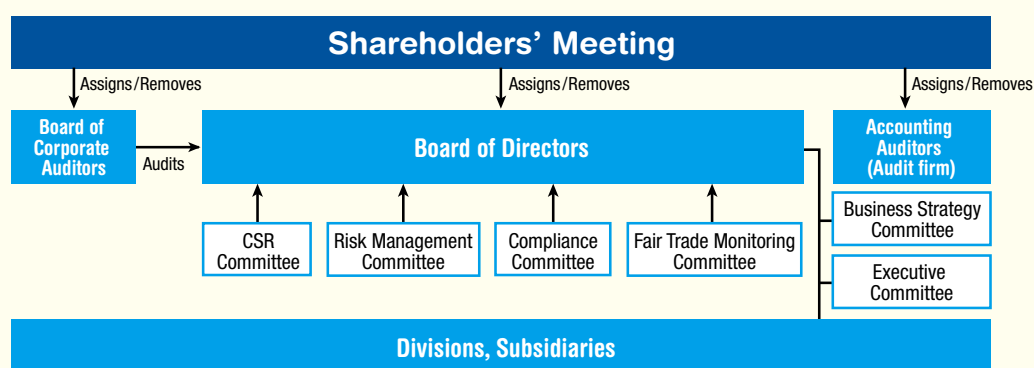
NTN is aiming to become “A company where all employees around the world behave in accordance with the corporate philosophy, comply with regulations and contribute to the local community” as part of “Our vision” raised in the new medium-term management plan “NTN100,” and is working on enhancing corporate governance to achieve this goal.

## Philosophy and System of Corporate Governance

NTN makes the implementation of highly efficient corporate governance a top management priority and we build systems that make management more efficient and robust.

We also strive to communicate with shareholders, investors, and other stakeholders by providing information in a prompt, accurate manner. This ensures more transparent management.

## Corporate Governance Structure



### Board of Directors

The role of the Board of Directors is to make decisions relating to fundamental business policies, statutory matters, and important management issues, and to supervise the performance of duties by its members. The board holds regular meetings at least once per month, with extraordinary meetings also convened at any time when necessary.

### Business Strategy Committee

The Business Strategy Committee discusses fundamental business policies and important management strategies, with meetings held twice per month.

### Executive Committee

NTN introduced the Executive Officer System in the fiscal year ended March 31, 2005 to enable swift decision-making and business execution. Reviews of monthly performance are conducted by the Executive Committee, comprising Directors and Executive Officers.

### Corporate Auditors

NTN has four corporate auditors, two of who are standing auditors (with three of the four being outside auditors). The auditors are responsible for auditing the performance of duties by members of the board. Auditors attend board meetings and express their opinions as part of their efforts to maintain and improve the transparency and fairness of the Company's management supervision system.

### CSR Committee

The CSR Committee oversees various policies aimed at effectively implementing CSR activities.

### Risk Management Committee

Identifies and analyzes the various risks that the NTN Group faces, and develops measures for preventing and managing those risks.

### Compliance Committee

Oversees and provides advice for taking a preventative approach to developing internal rules, organizing training and educational activities, and monitoring activities for global compliance risks other than those related to the Japan Antimonopoly Act (Antimonopoly Act) and the Act against Delay in Payment of Subcontract Proceeds, Etc. to Subcontractors (Subcontracting Act).

### Fair Trade Monitoring Committee

Chaired by the NTN President, the committee is focused on comprehensive compliance with the Antimonopoly Act and Subcontracting Act, and exerts practical control to ensure fair-trading by providing advice regarding training and educational activities.

## Continuously Strengthening Management Auditing Functions

NTN employs a corporate auditor-based governance system in which three of the four corporate auditors are from outside the company. External corporate auditors bring specialized knowledge in areas such as finance, management, and law, and they conduct audits in collaboration with in-house standing statutory auditors and the Internal Audit Department.

The Board of Directors, which includes two outside directors, makes decisions on important matters and oversees business execution, and corporate auditors sit on the Board of Directors to give their opinions. In this way, we strive to maintain and improve transparency and fairness of the Company's management supervision system.

All external board members (5) are designated and registered as independent board members in accordance with the regulations set in place by the Tokyo Stock Exchange.

We also employ the Executive Officer System to ensure swift decision-making and business execution.

The Board of Directors, based on set regulations, makes decisions on the selection and dismissal of representative directors and directors with special titles, as well as the designation and cancellation of duties delegated to directors. After director candidates are decided on at the Board of Directors meeting, they are nominated and voted in at the General Meeting of Shareholders. This ensures transparency and fairness.

## Compensation Based on Regulations

The upper limit of compensation for officers is voted on at the General Meeting of Shareholders, and the compensation and bonuses for directors are decided on by the Board of Directors based on its regulations. Statutory auditors negotiate their compensation. NTN has no system of retirement benefits.

## Board of Director Evaluations

NTN has until now focused on strengthening governance, however has taken the Corporate Governance Code that was formulated in June 2015 as an opportunity to evaluate the performance of the Board of Directors via third parties with the aim of further increasing the effectiveness of the Board of Directors and to build on NTN's corporate value.

The Board of Directors takes the results of these evaluations to further build on the areas covered by the board, and to develop and implement policies that the directors and auditors can take an active role in discussing and contributing to.

## Internal Control

### Creating and Implementing Systems is a Top Priority

In line with the basic framework for internal control as outlined in "On the Setting of the Standards and Practice Standards for Management Assessments and Audits Concerning Internal Control Over Financial Reporting (Council Opinions)," published by the Business Accounting Council, NTN has developed a basic policy for the structure of internal control. Based on this policy, we have made developing and implementing an internal control system a top priority of our risk management and compliance.

The Internal Audit Department is responsible for internal audits, and has been established as an independent auditing organization to audit business execution throughout the Company.

It also runs various initiatives in the form of project activities in order to strengthen the global compliance system. To further enhance internal control throughout the NTN Group, the Internal Audit Department, overseas offices of the General Manager and auditors at subsidiaries in Japan work together to audit subsidiaries and focus on strengthening internal control.

## Furthering Compliance

NTN defines compliance as not only abiding by laws and regulations, but also complying with all social norms and rules, and operates a system that ensures thorough compliance on a global level.

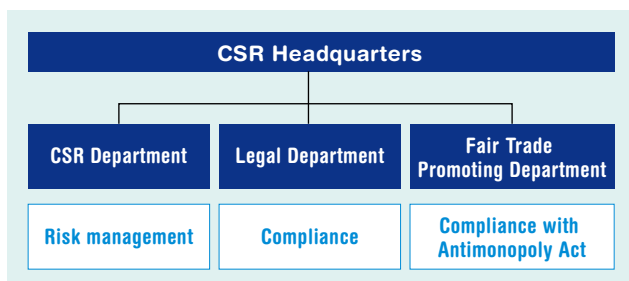
### A New System for Thorough Compliance (Business Ethics) Establishment of CSR Headquarters

NTN recognizes that proper compliance is one of the most important issues to address, and is improving systems that ensure compliance with regulations and laws.

In April 2014, departments that covered efforts related to corporate social responsibility (CSR Department, Legal Department and Fair Trade Promoting Department) were consolidated to establish the new "CSR Headquarters" that organizes global activities and ensures that the entire NTN Group maintains compliance and fulfills its corporate social responsibilities.

Within the CSR Headquarters, the CSR Department chiefly covers risk management, the Legal Department covers compliance and the Fair Trade Promoting Department ensures compliance with the Antimonopoly Act,

and all three departments work together closely to implement various policies to ensure that NTN fulfills its corporate social responsibilities.



## Internal Control Section Established at Five Overseas Offices of the General Manager

NTN established an Internal Control Section at each of its five overseas offices of the General Manager with the aim of developing and enhancing a system for ensuring compliance at its group companies located overseas.

The Internal Control Sections cooperate with the relevant departments of the CSR Headquarters for each topic related to the company’s social responsibility to implement policies for each region and country to suit the particular circumstances and characteristics there. This system allows the policies developed by NTN for corporate social responsibility to be shared globally between group companies, while also implementing individual policies on a global scale.

In January 2015, the relevant staff from each region gathered in Japan for the first CSR Global Meeting as part of a system to share efforts regarding compliance, a key factor behind CSR, by sharing various types of information, creating common rules, running training and educational sessions and monitoring progress.

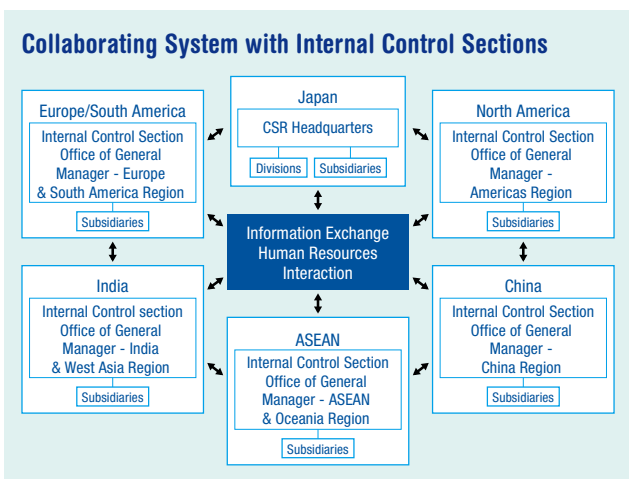
## Establishment of Compliance Committee

A new Compliance Committee was established in April 2015 to further strengthen systems for ensuring compliance on a global scale throughout the entire NTN Group.

This new system ensures compliance by placing a key emphasis on risk management. Compliance risks that have the risk of violating regulations under key risk management items that were identified and defined by the Risk Management Committee are handled solely by the Compliance Committee. These risks are addressed after assigning them an order of priority, the results of which are reported to the Board of Directors.

The Risk Management Committee has taken recent global trends to stem corruption as well as changes in the legal framework evidenced by efforts of authorities in each country to regulate bribery and improve detection to define violations of laws related to bribery as a key management risk that ranks second to violations of the Antimonopoly Act. The Compliance Committee gathers information on potential internal risks including those outlined above, and committee members covering business areas with a high level of risk propose and implement plans for developing rules, running training and educational activities and monitoring as part of the department designated with covering such tasks.

This process is coordinated seamlessly with the Internal Control Section at each of the five overseas offices of the General Manager to ensure a thorough level of compliance, not only at NTN departments and business sites, but also at all group companies, even those located overseas.



A scene from a Compliance Committee Meeting

## General Training and Educational Activities for Compliance

In addition to efforts to address compliance risks undertaken by the Compliance Committee, training and educational activities are continually being conducted at all business sites throughout the NTN Group with the aim of improving broad-ranging and generalized knowledge and awareness related to compliance. At business sites and group companies in Japan, compliance promotion activities supervisors are in mainly in charge of creating educational plans and holding training by level, topic or other categories for executives and all employees.

Self-learning by distributing textbooks and comprehension tests through e-learning are also held every year for employees promoted to project managers in particular, to ensure thorough compliance throughout the workplace. To ensure that this knowledge is ingrained, employees are required to repeat these tests until they reach a passing level. The latest information is also provided via the intranet compliance database and legal information database, which outlines the latest trends

related to compliance and various regulations, as well as case studies on violations of such regulations, all as a means of improving awareness amongst employees.

A yearly attitude survey has also been organized from the fiscal year ended March 31, 2015 to assess the results of training and educational activities related to compliance. The results of this survey will be applied to better expand on promotional activities.

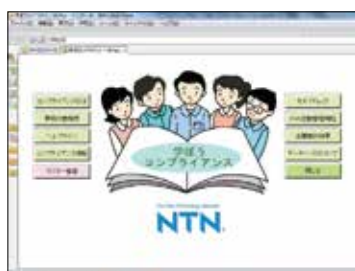
Group companies overseas are also focusing their efforts on compliance training. This is mainly covered by the Internal Control Sections, which conduct training and educational activities to suit regional characteristics and requirements while conforming to NTN policies.

## Helpline

We have set up internal and external helplines to offer consultation on matters related to compliance.

NTN's "Helpline Management Rules" were revised in April 2015 based on these systems to ensure compliance, so that calls to the helpline related to compliance could be reported to the Compliance Committee and calls related to competition laws (Antimonopoly Act, Subcontract Act) to the Fair Trade Monitoring Committee. This system allows information included in whistle-blowing to be utilized by both committees.

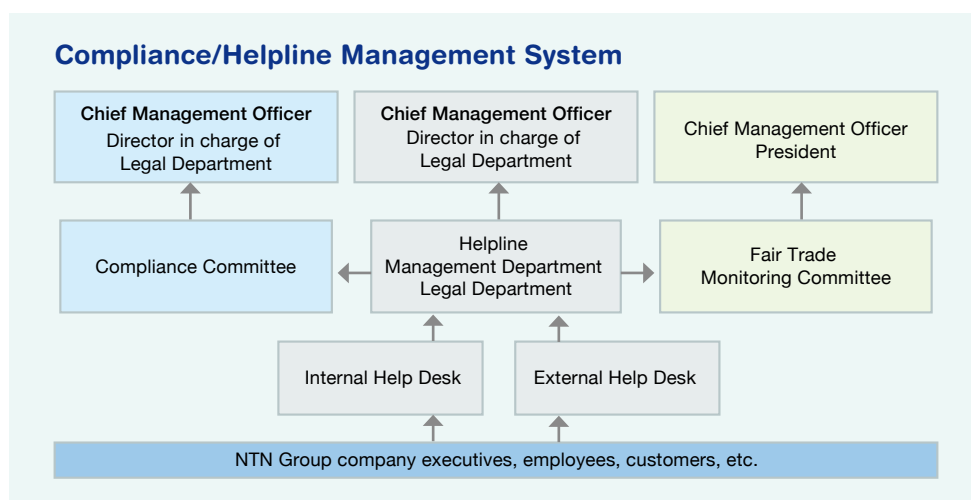
In addition to the helpline, we have also arranged a direct number for consultations with the Fair Trade Promoting Department.



Learning Compliance



Legal Information



### NTN's Efforts to Comply with the Antimonopoly Act

The NTN Group recognizes that proper compliance is one of the most important issues to address, and is improving systems that ensure compliance with regulations and laws.

In June 2012, NTN and former executives received an indictment filed by the Tokyo District Prosecutors Office (TDPO) on suspicion of having violated Japan's Antimonopoly Act in relation to the domestic sale of bearings. In March 2013, we received a cease and desist order and surcharge payment order (for ¥7.231 billion) from the Japan Fair Trade Commission (JFTC). Because the assertions by the JFTC and TDPO are greatly different from NTN's views of the facts, NTN requested for resorting to hearing procedures beginning in September of the same year. The trial began in the criminal court that December, and NTN and former executives were sentenced by Tokyo District Court in February 2015. NTN and former executives were unhappy with this decision and lodged an appeal, with the case currently pending in the Tokyo High Court.

Overseas, NTN was fined by authorities in Europe, Singapore and China for violating competition laws.

In March 2015, NTN received notification from the Antitrust Division of the U.S. Department of Justice stating that NTN and American consolidated subsidiaries were no longer subjects of grand jury investigation into the activities of companies in the bearing industry. In November 2011, NTN's U.S. consolidated subsidiaries received subpoenas from the Antitrust Division requesting information regarding bearing transactions to be handed over, to which we cooperated with their investigations. Meanwhile, consolidated subsidiaries in Korea and other regions have been subject to investigations by the authorities in those regions. NTN and its consolidated subsidiaries in the U.S. and Canada are defendants in a number of class action suits for suspected price-fixing of bearing sales with other businesses.

We at NTN express gratitude to all relevant personnel including shareholders for their understanding and their professional efforts during the past period.

The NTN Group will continue strengthening systems in place to ensure thorough compliance

with laws and regulations, social norms, ethics, and in-house regulations on a global basis, to further drive business activities through fair and sincere competition.

#### (1) The construction of systems to ensure compliance with the Antimonopoly Act

To ensure compliance with the Antimonopoly Act and the Subcontracting Act, activities are chiefly conducted by the “Fair Trade Promoting Department” under the supervision of the “Fair Trade Monitoring Committee.”

The CSR Headquarters that we established last year covers the efforts of departments related to corporate social responsibility, including the Fair Trade Promoting Department, and ensures that the entire NTN Group complies with relevant regulations and implements social corporate responsibility. It also works more closely with the “Internal Control Sections” established within each overseas office of the general manager to develop and enhance compliance systems overseas.

#### (2) Continuous compliance activities for the Antimonopoly Act

The Fair Trade Promoting Department covers internal training, and also self-audits related to compliance with the Antimonopoly Act and mandatory applications submitted in advance to prevent and monitor contact with competitor companies. This system allows the overall state of contact with competitor companies to be monitored.

Overseas, we work with the Internal Control Section in each region to develop systems for training and advanced applications, as well as self-audits organized by each region, and we are redesigning the system to ensure compliance with the relevant competition laws in each region.

The NTN Group will use these various systems to conduct continuous education and awareness activities that strengthen overall control over our compliance.



## Pursuing Risk Management

### Philosophy and System of Risk Management

#### System Implementation in line with Basic Policies and Management Rules

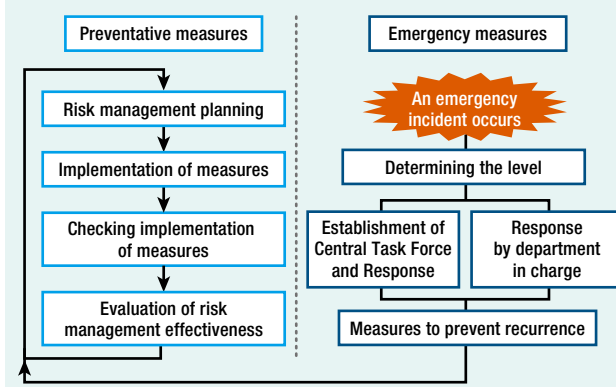
NTN has developed the "Risk Management Policy" and established "Risk Management Rule" which set out the systems and standards to follow in case of an emergency. Based on these policy and rule, we have created an integrated system that prevents risks from occurring, and in the event that they do occur, outlines methods to handle them swiftly.

#### Risk Management Policy

NTN Corporation hereby establishes the basic policy of NTN Group to precisely manage the risk prevention and to quickly respond at the outbreak of various risks (i.e., the events that may prevent the accomplishment of business purpose and the operation of business) surrounding the business of NTN Group.

- 1 We shall make an effort to eliminate or reduce the various risks to the stakeholders, such as customers, suppliers, shareholders, investors and local communities, and executives and employees.
- 2 We shall maintain the risk management system for prompt and proper measures against the risks and implement the company-wide and general risk management.
- 3 We shall implement the risk findings, risk analysis, risk assessment and risk measures according to the risk management plan and take proper preventive measures.
- 4 In the case of risk arising (emergency), we shall keep to minimize the damage expansion by initial risk counter-measures including the proper information transfer to inside and outside the Company.
- 5 We shall make an effort to keep and develop the stable business by monitoring the proper structure and implementation of the risk management on a daily basis.

#### Risk Management Flow Chart

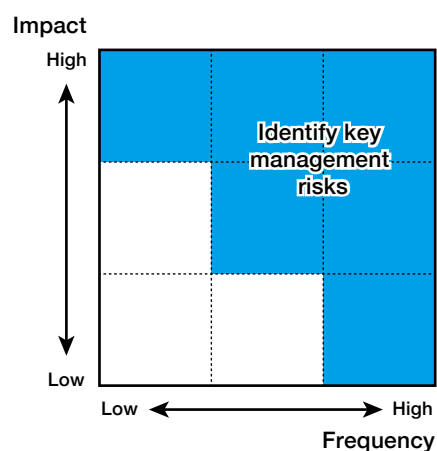


#### Setting Key Management Risks to Handle with the PDCA Cycle

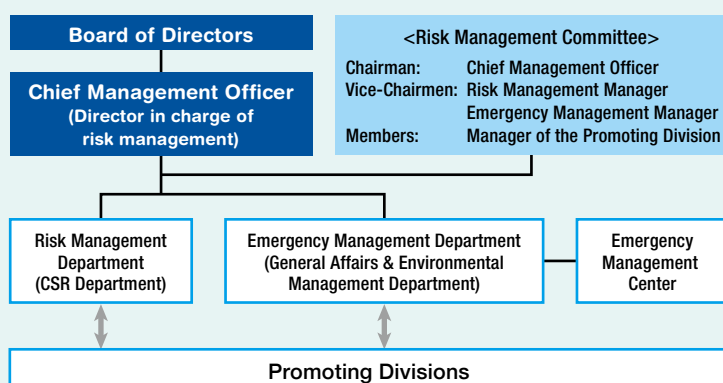
We established the Risk Management Committee as an advisory body for managing risk. The committee identifies risks that need to be addressed, and focuses on verifying plans and following up on performances for "key management risks" in particular.

In April 2014, the committee proposed amending key management risks based on the results of a risk analysis survey it conducted. At the December 2014 session, the committee outlined risks and their degree of impact and frequency based on the risk map, and identified risks that required intensive management efforts. The better verify the approaches made to address the risks and follow up on risk measures taken, the committee set goals to be achieved by each promoting.

#### Risk Matrix (Approach to risk mapping)



#### Risk Management System



## Key Management Risks

(Fiscal Year Ended March 31, 2015)

- Violation of Antimonopoly Act
- Violation of bribery-related laws, fraudulent accounting, violation of labor-related laws
- Damage caused by large-scale disasters such as earthquakes, eruptions and tsunamis
- Leakage of R&D information

Fraudulent accounting and violations of labor-related laws have also been defined as key management risks with the view to preventing fraudulent accounting that can lead to a wide range of problems, and maintaining and making improvements for appropriate work environments.

The Compliance Committee implements various specific policies related to compliance to address these key management risks.

### [Damage caused by large-scale disasters such as earthquakes, eruptions and tsunamis]

Interruptions to business sites due to large-scale disasters has been defined as a key management risk, and the Risk Management Committee implements various activities to prevent damage, minimize the effects of damage and recover quicker with the aim of keeping employees safe and maintaining supply to customers.

### [Leakage of R&D information]

NTN makes efforts to prevent leakage of information by enhancing data management and access authorization rights, as well as providing comprehensive internal training.

The Information Security Committee works together with numerous departments to ensure proper management of drawing plans, including those at affiliated companies, and management of confidential sales information.

## Addressing Key Management Risks

### [Violation of Antimonopoly Act]

Violations of the Antimonopoly Act are still considered key management risks, and the Fair Trade Monitoring Committee implements activities aimed at compliance on a global scale.

### [Violation of bribery-related laws, fraudulent accounting, violation of labor-related laws]

With recent global trends for more stringent regulations to counter bribery to stem corruption, violations of laws related to bribery have been set as a key management risk that ranks second to violations of the Antimonopoly Act.

## From the Chief Management Officer (Director in charge of Risk Management)

Risk management is covered by the newly organized CSR Headquarters. Risks that are being managed cover a wide range of fields from natural disasters and environmental issues to unauthorized or illegal behavior by individual employees. In addition to our business sites in Japan, NTN is approaching these risks from a global perspective with overseas subsidiaries following the company's expansion into other regions.

Measures that have been screened and approved by the Risk Management Committee for addressing risks and any subsequent achievements are also reported to the Board of Directors as a way of sharing this information throughout the entire NTN Group.

We will be developing Business Continuity Plan/Management (BCP/BCM) that covers a wide range of risks, while also implementing policies to address key management risks, and will be finalizing effective plans as soon as possible to achieve each goal of preventing damage, minimizing the effects of damage and recovering quicker.



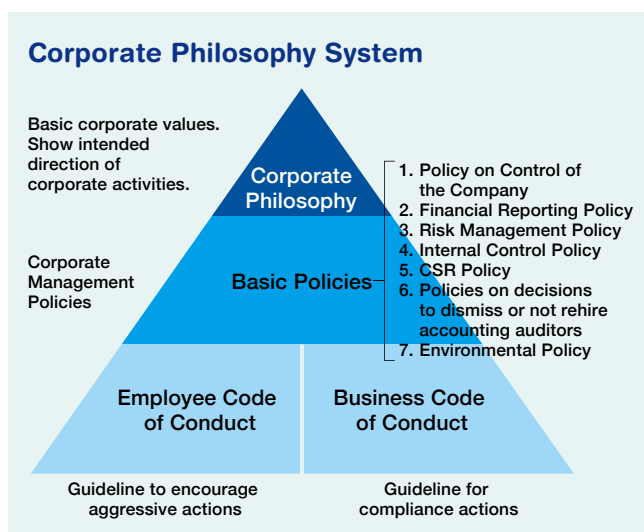
Keiji Ohashi  
Managing Director

# Governance/CSR Management

## Pursuing CSR Management

### CSR as part of corporate philosophy framework

NTN's corporate philosophy is "We shall contribute to international society through creating new technologies and developing new products." To achieve this philosophy, NTN developed the "CSR Policy" in June 2006 as one of "NTN's Basic Policies."



### Codes of Conduct Established Based on the CSR Policy

NTN developed the "Employee Code of Conduct," which set out guidelines for conducting CSR activities, and the "Business Code of Conduct," which all officers and employees must abide by.

These are set forth in the "CSR Guidebook" and the "Pocket Card" that all NTN Group employees in Japan carry with them, so that they can put CSR into action during their daily tasks. New employees are provided with training when the guidebook and card are handed out.

These codes are read out aloud during morning meetings and other opportunities, to ensure that employees are fully aware of them.

### Codes of Conduct Developed and Established Even at Overseas Group Companies

Codes of Conduct have been developed for overseas group companies that match that particular region, and these are distributed to all employees. In China, employees must carry a card that outlines the CSR Policy, Employee Code of Conduct, and Business Code of Conduct. We will be adopting similar initiatives soon in Japan and other countries.

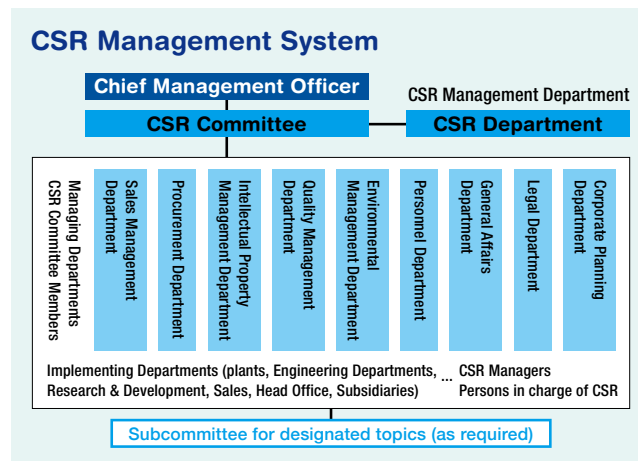


Pocket Card (Chinese)

### CSR Promotion Structure

#### CSR Department and CSR Committee Lead Activities

In 2006, we embarked on our CSR activities by establishing the "CSR Management Rules" and the CSR Department.



### CSR Policy

- 1 Legal compliance/Policy for activities:** We shall comply with laws and regulations, endeavor to engage in fair competition, and carry out our business activities in an honest and ethical manner.
- 2 Customers:** We shall strive to develop new technologies and new products, as well as to provide safe and reliable products.
- 3 Business partners:** We shall engage in fair and free competition, and at the same time establish excellent partnerships with our business partners.
- 4 Stockholders/Disclosure of information:** We shall work to develop this corporation and increase stockholder return, while at the same time communicating broadly with society and actively disclosing information.
- 5 Employees:** We shall value the individuality and diversity of our employees, work to create a safe and pleasant work place, and achieve comfort and prosperity.
- 6 The environment:** With ample consideration to preserving the global environment and protecting the ecosystem, we shall work toward the creation of a sustainable, progressing society.
- 7 Society:** We shall make every effort to interact meaningfully with society on a local level, and to engage in activities that contribute to society.
- 8 International activities:** We shall, as a matter of course, obey all international rules as well as the laws of each country and each region that we operate in; we shall also respect local cultures and practices and contribute to local development.

The CSR Department was amalgamated with the Legal Department and Fair Trade Promoting Department in April 2014 to form the “CSR Headquarters” with the aim of enhancing CSR activities, including matters related to compliance. The CSR Department covers CSR activities conducted by the NTN Group, and is the department in charge of implementing efforts to improve CSR. The “CSR Committee” is chaired by the head of the CSR Department and made up of the heads of relevant divisions. It systematizes CSR activity plans and CSR policies, and it deliberates on CSR issues that span all divisions.

We implement CSR activities throughout the entire NTN Group in Japan by appointing CSR managers and staff in charge of CSR at all of our business sites and at the NTN Group companies in Japan. The NTN Group

sets quantitative goals (KPI) for various CSR topics as a means of implementing activities.

## Employee Code of Conduct

- ① We respect social ethics and act as good members of society.
- ② We have noble ambitions and always make efforts to brainstorm and achieve the set target.
- ③ We accept changes, have broad vision and act voluntarily.
- ④ We deepen mutual understanding and enhance the vitality of our work site.
- ⑤ Management and supervisors in particular, as faces of the corporation, improve their qualifications, make efforts to develop individuals, always take care of safety and show leadership.

## Business Code of Conduct

- |  |   |   |
|--|---|---|
| ① Compliance with laws and norms                               | ⑩ Ensuring security by strengthening export controls        | ⑱ Respect for human rights                              |
| ② Pursuit of quality and safety                                | ⑪ Compliance with industrial laws                           | ⑲ Prohibition of sexual harassment                      |
| ③ Compliance with the Anti-Trust Law                           | ⑫ Compliance with corporate accounting principles           | ⑳ Proper control of information about individuals       |
| ④ Fair trade with suppliers                                    | ⑬ Compliance with international rules                       | ㉑ Strict distinction between public and private matters |
| ⑤ Honoring agreements  | ⑭ Promotion of environmental preservation                   | ㉒ Confronting harmful social forces                     |
| ⑥ Refusal to engage in improper conduct with business partners | ⑮ Positive contribution to society                          | ㉓ Proper utilization of our information system          |
| ⑦ Proper labeling and specification                            | ⑯ Compliance with labor-related laws and company work rules | ㉔ Prohibition of insider trading                        |
| ⑧ Respect for intellectual property rights                     | ⑰ Realization of a safe and positive work environment       | ㉕ Self-restraint regarding entertainment and gifts      |
| ⑨ Proper control of confidential information                   |   | ㉖ Lawful donations/political donations                  |

## CSR Global Management

### CSR Global Meeting

The first CSR Global Meeting was held in January 2015 to build a framework for implementing various CSR-related activities on a global scale. The plans and performances of each region were shared at the meeting, together with the policies from Headquarters and information on plans. To ensure better efficiency and standardization, we decided on a number of initiatives, including translating Japanese guidebooks and other materials into English, selecting supervisors for each region, and building a database for sharing information.



A scene from the first CSR Global Meeting

### Participation in “United Nations Global Compact”

In 2015, NTN endorsed (joined) the United Nations Global Compact, an international initiative for developing a global framework for sustainable worldwide growth with the aim of becoming a company trusted on the international stage.



Network Japan

### The Ten Principles of the United Nations Global Compact

- |                  |   |
|------------------|---|
| Human Rights:    | Principle 1: Business should support and respect the protection of internationally proclaimed human rights; and make sure that they are not complicit in human rights abuses.   |
| Labour:          | Principle 2: Business should uphold the freedom of association and the effective recognition of the right to collective bargaining; the elimination of all forms of forced and compulsory labour;   |
|                  | Principle 3: Business should uphold the freedom of association and the effective recognition of the right to collective bargaining; the elimination of all forms of forced and compulsory labour;   |
|                  | Principle 4: Business should uphold the freedom of association and the effective recognition of the right to collective bargaining; the elimination of all forms of forced and compulsory labour;   |
| Environment:     | Principle 5: the effective abolition of child labour; and the elimination of discrimination in respect of employment and occupation.  |
|                  | Principle 6: Business should support a precautionary approach to environmental challenges; undertake initiatives to promote greater environmental responsibility; and encourage the development and diffusion of environmentally friendly technologies. |
|                  | Principle 7: Business should support a precautionary approach to environmental challenges; undertake initiatives to promote greater environmental responsibility; and encourage the development and diffusion of environmentally friendly technologies. |
| Anti-Corruption: | Principle 8: Business should support a precautionary approach to environmental challenges; undertake initiatives to promote greater environmental responsibility; and encourage the development and diffusion of environmentally friendly technologies. |
|                  | Principle 9: Businesses should work against corruption in all its forms, including extortion and bribery.   |

# Focus

## Stakeholder Dialog

It is that Corporate Social Responsibility (CSR) to stakeholders such as shareholders, investors, customers, suppliers, employees, the environment and local communities is demanded.

To ensure that the voices of stakeholders are applied as part of sustainable company activities, we held our first stakeholder dialog on May 22, 2015 (Fri.) by inviting academic experts and intellectuals in the various fields of CSR. We had mutual discussions and received feedback on our Group's CSR activities.

### — Participants —

#### Stakeholders

**Katsuhiko Kokubu** Kobe University, Graduate School of Business Administration, Dean and Professor

**Yoko Hiyama** Lawyer admitted in Japan and New York/Ethos Law Office Ethos LPC

**Kazuhiko Shiratori** Senior Manager, Sekisui Integrated Research Inc.

#### Facilitator

**Eriko Nashioka** Certified Public Accountants/Representative Director/Institute for Environmental Management Accounting

#### NTN Participants

**Hiroshi Nakano** Director and General Corporate Manager, CSR Headquarters

**Toshiyuki Matsutani** General Manager, General Affairs & Environmental Management Department

**Yoichiro Mochida** General Manager, CSR Department, CSR Headquarters



Katsuhiko Kokubu



Yoko Hiyama



Kazuhiko Shiratori



Hiroshi Nakano



Toshiyuki Matsutani



Yoichiro Mochida



Eriko Nashioka

### Outline of Dialog

- NTN's CSR report contains a lot of information for a B to B company (Business to Business, companies selling products and services to other companies, instead of general consumers). Further coordination between business activities and CSR activities will be important in the future.
- After a system has been built, promoting CSR activities is tend to be difficult to become part of routine procedures. It is vital to include "Value Creation" as part of corporate activities for the further development.
- For globalization, it is vital that employees around the world are aware of NTN's overall image and significance of CSR.

Building up a global network is needed for the mutual interaction within the NTN Group. It is also important to provide a framework that allows the most suitable people for the job to work by incorporating a sense of global value with suitable positions and jobs.

- Companies that face problems related to compliance have issues with their corporate culture. Even companies have an appropriate system for compliance; it would be possible not to function properly. Sharing information with transparency is a key point. Some countries have different levels of compliance with laws and regulations, so it is also important to develop a framework for each country.
- Environmental efforts designed with the concept of Reduce, Reuse and Recycle are reaching their limit with regards to the Recycle aspect. The issue in the future will be focused on the Reduce aspect. We would also like to see more information on environmentally friendly products designed to "create value."

Issues that have been raised from the feedback we received will be assigned an order of priority in spans. We will continue to hold this kind of stakeholder dialog with a view to taking a pro-active stance to issues related to the environment, society, governance and other fields.



A scene from Stakeholder Dialog



# Governance/Disclosure of Information

## General Shareholder Meeting

### Our Goal: An Open General Shareholder Meeting “Transparency of General Shareholder Meeting”

We have taken the following steps, such as making it easy to take part in general shareholder meetings, to streamline procedures for shareholders to exercise their voting rights.

At the June 2015 meeting, we took a similar approach to the one taken during the June 2014 meeting. We endeavored to provide information of the general shareholder meeting on the Web earlier before mailing.

### Measures to Streamline Shareholder Voting Rights

Sending our general shareholder meeting notice quicker	We send notices regarding shareholder meetings to shareholders three weeks before they are held, which is seven days earlier than the two weeks notification required by law.
Scheduling meetings outside of common dates that other companies use	To ensure that as many shareholders as possible can attend shareholder meetings, we schedule them outside of common dates that most companies hold their meetings, and we take into account factors such as settlement and audit schedules.
General shareholder meetings and other notices listed on the company homepage	We endeavored to provide information of listed notices of the general shareholder meeting on the Web earlier before mailing.
Voting rights over the Internet	<ol style="list-style-type: none"> <li>1. We accept shareholder votes via mail and the Internet through the 5:25 p.m. close of business up to the day before the general shareholder meeting.</li> <li>2. We have methods for dealing with cases in which there are overlapping votes by mail and the Internet, or where shareholders vote multiple times over the Internet.</li> <li>3. We participate in the Electronic Voting Platform, which is managed by Investor Communications Japan(ICJ), an entity formed by the Tokyo Stock Exchange and other bodies, and which makes it possible for institutional investors to vote.</li> </ol>
Other efforts	At general shareholder meetings, certain sections of business reports and settlement data are shown on monitors using graphs, photos and other visible data to complement the meeting chairperson's explanations.

## IR Activities

### Disclosing Accurate Information in a Fair and Timely Manner

We respond to the desire of shareholders and investors to receive accurate information in a fair and timely manner.

### Timely Disclosure on the Web

We focus on making information available for anyone to read by disclosing it on the Internet.

We disclose the required information through “the Company Announcements Disclosure Service” on the website of Tokyo Stock Exchange due to “the Securities Listing Regulations.” On the NTN website, we also release timely information including our securities, quarterly report, business results, the NTN Report, annual and business reports, and materials from our results meetings.

For those who register on our website for the NTN newsletter, we send an email with the latest news as soon as it appears on our homepage.



A scene from General Shareholder Meeting

### Explaining Policies at Seminars and Briefings

We provide as many opportunities as possible for stakeholders to hear about NTN management policy from the company's top management.

At seminars for individual investors hosted by large securities companies, NTN top management talk about our company. They also host visits to production sites in Japan.

On a regular basis, our executives convene results meetings, teleconferences, one-on-one gatherings, and other regular briefings for analysts and institutional investors. They also respond whenever there are questions or requests from investors. In the fiscal year ended March 31, 2015, we released as much information in as many ways as possible both in Japan and overseas, holding IR technology briefings and factory tours, and taking part in events sponsored by securities companies.

We will be conducting IR roadshows overseas, business briefing sessions, meetings for individual investors and plant tours in the fiscal year ended March 2016.

## NTN Included in SRI Indices

### NTN Continues to Be Included in Numerous SRI Indices

NTN has been included in several socially responsible investment (SRI) indices in the stock market for its aggressive efforts to protect the environment and contribute to society.

SRI indices (included as of March 2015)



# Officers (As of June 24, 2015)



Front row, from left: Hiroshi Ohkubo, Hironori Inoue  
Rear row, from left: Akira Wada, Hisaji Kawabata, Hiroshi Nakano, Itsuji Gotou, Keiji Ohashi, Fukumatsu Kometani, Yoshinori Terasaka, Hideaki Miyazawa, Hidefumi Tsuji, Takehiko Umemoto, Toshinori Shiratori, Kazuki Kawashima

## Directors

**Hiroshi Ohkubo**  
President  
Representative Director

**Hironori Inoue**  
Executive Vice President  
Representative Director  
Human Resources, Production,  
Driveshaft Business Strengthening Project

**Fukumatsu Kometani**  
Executive Director  
Aftermarket Business Headquarters  
NTN KOREA CO., LTD.

**Yoshinori Terasaka**  
Managing Director  
Research and Development  
Americas Region  
Composite Material Product Division  
Quality Management

**Keiji Ohashi**  
Managing Director  
Corporate General Manager, Finance  
Headquarters  
General Affairs, Environment,  
CSR Headquarters

**Hideaki Miyazawa**  
Managing Director  
Corporate General Manager, Automotive  
Business Headquarters  
Europe & Africa Region  
EV Module Business Headquarters

**Itsuji Gotou**  
Director  
Procurement, Logistics & Cost Planning  
China Region

**Hiroshi Nakano**  
Director  
Corporate General Manager, CSR  
Headquarters  
Internal Audit Department

**Hidefumi Tsuji**  
Director  
Production  
ASEAN & Oceania, India & West Asia Region

**Takehiko Umemoto**  
Director  
Deputy Corporate General Manager, Automotive  
Business Headquarters  
Corporate General Manager, EV Module Business  
Headquarters  
Quality Management

**Toshinori Shiratori**  
Director  
Corporate General Manager, Corporate  
Strategy Headquarters

**Kazuki Kawashima**  
Director  
Corporate General Manager, Industrial  
Business Headquarters

**Hisaji Kawabata**  
Director  
Outside Director

**Akira Wada**  
Director  
Outside Director

## Audit & Supervisory Board Members

**Kouji Kawahara**  
Standing Audit &  
Supervisory Board Member  
(Outside)

**Mizuho Hikida**  
Standing Audit &  
Supervisory Board Member

**Tadao Kagono**  
Audit &  
Supervisory Board Member  
(Outside)

**Ryo Kawakami**  
Audit &  
Supervisory Board Member  
(Outside)

## Executive Officers

**Tetsuya Kondo**  
Senior Executive Officer

**Isao Ozako**  
Senior Executive Officer

**Yoshinobu Akamatsu**  
Executive Officer

**Jianping Zhu**  
Executive Officer

**Kazuki Hagihara**  
Executive Officer

**Kenji Nono**  
Executive Officer

**Eiichi Ukai**  
Senior Executive Officer

**Isao Koizumi**  
Senior Executive Officer

**Etsu Harima**  
Executive Officer

**Alain Chauvin**  
Executive Officer

**Katsuaki Miyake**  
Executive Officer

**Satoshi Ueda**  
Executive Officer

**Natsuhiko Mori**  
Senior Executive Officer

**Koji Kametaka**  
Senior Executive Officer

**Pete Eich**  
Executive Officer

**Eiichi Nakamizo**  
Executive Officer

**Masaki Egami**  
Executive Officer

**Masaaki Yamamoto**  
Executive Officer

**Tetsuya Sogo**  
Senior Executive Officer

**Takayuki Matsuo**  
Executive Officer

**Makoto Okasaka**  
Executive Officer

**Yusuke Iyama**  
Executive Officer

**Koji Ishikawa**  
Executive Officer

**Herve Brelaud**  
Executive Officer

# Quality Management

## Quality Management Policy

### Basic Policy of Quality, Quality Management Policy

#### Stipulate Basic Policy and Formulate Annual Management Policy

Under our Basic Policy of Quality, which forms the basic concept of all our manufacturing, we formulate quality management policies for each fiscal year and define policies for maintaining and raising product quality. In the fiscal year ended March 31, 2015, our target was “zero complaints” and “reduction in wasting defective products” to strengthen the NTN brand and generate profit.

We will be striving to prevent from these issues.

#### Basic Policy of Quality

**Pursuit of appropriate quality that can suffice the functions and specifications required by customers.**

- Quality that meets diversified needs in markets (Conformable quality)
- Superior quality to competitors' (Competitive quality)
- Quality that benefits producers (Economic quality)

#### Quality Slogan

**Quality is our future — Quality paves the way for our future.**

#### Quality Management Policy in Fiscal Year Ended March 31, 2015

With the basic goal of maintaining and boosting trust among customers, we aim to improve the NTN brand value and contribute to corporate profit by having all employees strive to “ensuring global quality,” by eliminating all complaints, and by reducing the number of defective products.

#### Quality Management Policy for Fiscal Year Ending March 31, 2016

As we start the first year of our New Medium-Term Management Plan which marks a significant milestone, the company's 100th anniversary, we will work to “overcome NTN's weak points”, “achieve unrivaled quality compared with other products”, for the purpose of “improving NTN brand” and “ensuring global quality”, under the basic concept of laying the foundation of a company that will survive into the next century.

Besides the certification for the ISO 9001 quality management system at production and sales bases in Japan and overseas, we have been aggressively working to obtain the certification for the ISO/TS 16949, a quality management standard that automotive manufacturers demand.

In 2010, NTN became Japan's first bearing manufacturer to obtain the certification under the International Railroad Industry Standard (IRIS), the quality standard for the European railway industry, and in 2014, NTN obtained the certification from CRCC (China Railway test & Certification Center). Together with the quality management certification of the Association of American Railroads (AAR) acquired in 1986, this shows that we are a high-quality supplier to the railroad industry. NTN has also been certified for the JISQ9100 and NADCAP standards for aerospace quality management.

### Major Certifications Acquired in Fiscal Year Ended March 31, 2015

#### ISO 9001 certification acquired at 38 bases

Region	Base	Date of Certification
Japan	NTN HAKUI CORP.	Fiscal year ended March 31, 2015
Japan	NTN AKAIWA CORP.	Fiscal year ended March 31, 2015
Thailand	NTPT CO., LTD.	Fiscal year ended March 31, 2015
Japan	NTN NOTO CORP.	Fiscal year ending March 31, 2016 (planned)

#### ISO/TS 16949 certification acquired at 27 bases

Region	Base	Date of Certification
Japan	NTN AKAIWA CORP.	Fiscal year ended March 31, 2015
Thailand	NTPT CO., LTD.	Fiscal year ended March 31, 2015
Thailand	NMT (Pinthong Plant)	Fiscal year ending March 31, 2016 (planned)
China	NTN-RAB (CHANGZHOU) CORP.	Fiscal year ending March 31, 2016 (planned)

## Global Quality Management

### Sharing and Harnessing Quality Information

In January 2012, we installed the G-QUICK quality information control system throughout the NTN Group, which has resulted in a system where information can be shared globally for a faster initial response to complaints and requests from customers to examine defects. We also developed operating rules so that all group companies can utilize examples of past quality problems and extract information from G-QUICK, with the aim of training purposes and applying solutions to defects quickly to other bases. Any information related to quality that we have saved will be utilized in a proactive manner for training and to prevent the same issues from recurring.

## Quality Management System

### Management Certification for Various Production Items

#### Working Towards ISO 9001, ISO/TS 16949 and Other Standards

The NTN Group has been working to obtain the certification for quality management standards for its various production items.

## Dissemination of Basic Policy of Quality throughout Worldwide NTN Group

We have published "Basic Policy of Quality" and our "Quality Control Handbook." These have been distributed to approximately 100 companies including NTN worldwide manufacturing, engineering, R&D, distribution divisions, and suppliers.



Localized version of Quality Control Handbook

In addition to the existing Japanese, English, Chinese and Thai versions, we made Spanish and Portuguese versions during the fiscal year ended March 31, 2015, which were used for training and other purposes when launching new overseas factory. In addition to these handbooks, we will be developing training materials with more detailed content for maintaining quality and make it available globally to raise the quality level throughout the NTN Group.

## Working with Suppliers

The NTN Group strives to enhance quality by cooperating with the suppliers who provide us with raw materials and parts.

During Quality Month in November every year, we hold the "Supplier Quality Improvement Challenge" to provide knowledge and know-how on improving quality to our suppliers through lectures and other events related to quality. Last year, 96 companies participated in this Challenge.

Quality audits are also conducted by the suppliers themselves using the NTN Group's check sheet for quality criteria. Based on the results of these self-audits, NTN conducts its own on-site audits at supplier sites so that we are able to help them continuously solve their quality issues. In the fiscal year ended March 31, 2015, we conducted on-site audits at 319 suppliers.

## Enhancing Customer Satisfaction

### Determining Customer Needs

#### NTN Sales Persons and Engineers for Each Customer

At the NTN Group sales companies around the world, we appoint a sales person and an engineer to be in charge of each of our customers and sales agents. This allows us to quickly and accurately determine the needs and problems of each customer and thus offer the best responses and solutions.

We constantly work to improve the skills of these sales people and engineers. In Japan, we conduct TQM (Total Quality Management) activities, which include

meetings and education gatherings at which sales people reflect on their weekly dealings with customers and think from the customer's perspective as a way to improve service.

In the fiscal year ended March 31, 2015, we rolled out initiatives that we considered quality targets, and focused on specifically how NTN could help them improve their situation.

### NTN Engineers Provide Problem-Solving Opportunities

The NTN Group holds periodic sessions where customers can get to know our products and technologies better and speak directly about their needs with our engineers. NTN companies hold traveling product exhibitions and technical seminars. For example, NTN BEARING CORP. OF AMERICA (NBCA) tours customer sites around the U.S.A. to give training on bearing basics and bearing use. NBCA is receiving an increasing number of requests for these training sessions from customers.



A scene from Sales TQM



A scene from explanations to customers at NBCA

### Customer Satisfaction Surveys

Once a year, we conduct customer satisfaction surveys on our products and services in which customers choose one of four levels of satisfaction in six survey items including quality, cost, and delivery. Survey results go to relevant company divisions to be reflected in improved products and services.

In the fiscal year ended March 31, 2015, surveys were completed and sent in by 90 NTN customers worldwide.

#### Overall Assessment of Customer Satisfaction Surveys (As of year ended March 31, 2015)

Excellent <b>22%</b>	Good <b>71%</b>
Needs improvement slightly <b>7%</b>	Needs improvement greatly <b>0%</b>



# Supply Chain Management

## Procurement Policy

### Selecting Partners in Line with Group Policy

#### Building Partners Worldwide

Based on our “Basic Procurement Policy”, which we formulated with a view to fairness, equality, and global thinking, we have strived to select suppliers and build a reliable relationship with them. With the “NTN 100” medium-term management plan, we will be building a global procurement and logistics network in order to develop a system that allows for greater production in customer regions.

In the fiscal year ended March 31, 2015, we selected raw materials from global sources and worked to reduce their costs as part of preparations for “NTN 100.” We studied and analyzed cost-competitiveness, production capacity and other factors in each region with a focus on the automotive industry, and developed a policy on how to utilize materials from Japan and overseas. We have developed a global procurement network by working with steel manufacturers in line with this policy.

#### Basic Procurement Policy

- ① We stress quality, cost advantage, and on-time delivery from a global viewpoint, and we pursue stable procurement through prompt response to market changes.
- ② We abide by laws and ethics, and we promote fairness and equality in business.
- ③ Through procurement activities, we strive to conduct business in a manner that protects the environment and preserves resources.
- ④ We deepen understanding with suppliers, and we aim to create a partnership founded on trust that generates mutual prosperity.

#### Promotion of CSR Procurement

We go through several stages in choosing suppliers who are earnest in putting CSR into business action.

In the fiscal year ended March 31, 2015, we revised the basic contract, adding three clauses related to respect for human rights, rejection of relations with Anti-Social Forces, and forbidding of bribes. We are also looking into methods for monitoring whether suppliers are abiding by our “CSR Policy”.

### Conveying Policy through Briefings and Workshops

NTN holds “Supplier-Meetings” to explain NTN’s procurement policy and production volumes at production bases, as well as about how they can help in production activities and obtain the ISO certification.

In the fiscal year ended March 31, 2015, we held two meetings attended by a total of 57 suppliers, who were asked to help with modernization plans such as production reforms with a view of strengthening the management foundation in the lead up to NTN’s 100th anniversary. We also invite suppliers to join training workshops for NTN employees that are led by outside instructors.

Besides these examples of work-related information provision, we also take opportunities to interact actively with suppliers; for example, planting trees at their sites in Japan.

## Fair and Appropriate Business

### Thorough Compliance with the Subcontract Act

#### Self-Audits and Workshops

In January 1997, NTN formulated the Self-Audit Manual for Subcontractors. NTN production bases conduct their own self-audits using this manual, and when necessary, NTN’s procurement division intervenes with periodic audits and guidance to ensure compliance with Japan’s Subcontract Act.

Of NTN’s suppliers in Japan, 80% are subject to the Subcontract Act, so it is crucial that we ensure these suppliers are carrying out business dealings in a fair manner.

In the fiscal year ended March 31, 2015, self-audits were held at 21 bases in Japan (20 production bases, 1 research center). NTN’s procurement division intervened in all cases to ensure thoroughness of the audits.

We require all procurement staff to attend Subcontract Act workshops held by the Japan Fair Trade Commission as well as seminars held outside NTN. In addition, the procurement division held the “Workshop of Complying with Subcontract Act” to give all factory staff a deeper understanding. In the fiscal year ended March 31, 2015, workshops were held at 19 bases. Those that seemed to lack of understanding or have incorrect views of the Subcontract Act were provided with guidance, and are being monitored for continual improvements.



# Human Resources, Labor, etc.

## Occupational Safety and Health

### Building a Management System Based on OSHMS

We work to create safe work environments based on a "safety first" spirit that respects people. We have therefore created a safety and health management system based on the criteria of the "Occupational Safety and Health Management System" (OSHMS).

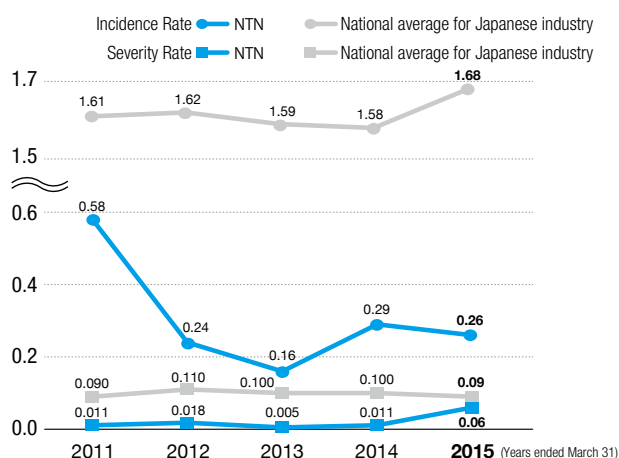
As of March 2015, a total of eight bases have been certified for OSHMS, and NTN KAMIINA CORP. have been preparing for the certification.

### Occupational Safety and Health Based on Five-Theme Action Plan

In the fiscal year ending March 31, 2015, we strove to improve occupational safety and health in five areas (outlined below), with a special focus on eliminating workplace accidents at the NTN Group in Japan. Unfortunately, there were 38 workplace accidents, which was one less than the previous year, indicating a similar level of awareness.

In the fiscal year ending March 31, 2016, we will revise work manuals and have managers and supervisors conduct risk assessments at sites based on the five themes of occupational safety and health, and also provide on-site guidance and training sessions for subsidiaries. We will also focus on eliminating recurring or similar disasters to improve safety and health throughout the entire group.

### Incidence Rate/Severity Rate



### Building Systems of Mental Health Care

NTN holds mental health training sessions for managers and supervisors, while outside counselors offer counseling during regular medical check-ups.

Employees can also receive counseling through NTN's in-house counseling service, called the "Oasis NTN" (held twice a month) and the "Mental and Physical Health Counseling Service" by phone or email.

In addition to ordinary mental health services, we will address issues using the Stress Check System that will begin from December 2015 in line with the guideline of Ministry of Health, Labour and Welfare throughout the fiscal year ending March 31, 2016.

### Action Plan: Five Themes in Fiscal Year Ended March 31, 2015

1. Elimination of workplace accidents (thorough management of work-related risks and skills)	
4 NTN works organized activities to reduce equipment risks at 4 subsidiaries in Ishikawa Prefecture, including special risk assessments training for the staff	NTN Group in Japan
Training with safety simulation devices was conducted for employees, by each of their levels, by improving the practical safety education.	NTN Group in Japan
Safety and health cross audits were conducted at 4 NTN works and 3 subsidiaries to provide guidance on issues identified during external audits and to work to develop solutions	NTN Group in Japan
Supervisor, who is in charge of safety/NTN Personnel Department, examined 7 out of 18 subsidiaries. As a result, safety management training for management auditors was conducted at NTN TADO CORP.	NTN Domestic Subsidiaries
Focused on providing support to subsidiaries, low level of safety (for 2 years).	NTN Domestic Subsidiaries
2. Thorough education on safety and health	
Safety and health consultants conducted training related to laws to improve the level of safety and health at 18 subsidiaries	NTN Domestic Subsidiaries
Provided safety and health education to employees with poor experience	NTN
Provided mental health education to management staffs and supervisors	NTN
Held individual back pain workshops with applicants, amount to 36 participants in total.	NTN
Conducted risk assessment training at KUWANA WORKS, NTN MIE CORP. and others	NTN Group in Japan

3. Health promotion	
A public health nurse at provided individual health guidance at all sales offices	NTN Group in Japan
3,840 employees underwent specific health checkups, and 378 received specific counselling guidance	NTN
4. Mental health activities	
Held the "Oasis NTN" counseling service twice a month	NTN
The quick medical interview "MINI Diagnosis" was conducted for all employees to check for problems such as depression, panic disorder, and obsessive-compulsive disorder	NTN
Mental health checks were conducted for employees before transferring overseas	NTN

5. Raised the occupational safety and health standard of NTN Group	
Focused on supporting the NTN Group in Japan by conducting the above activities	NTN



Safety simulation devices

## Respecting Human Rights and Diversity

### A Workplace Free of Discrimination

The NTN Group strives to create a discrimination-free workplace where all human rights are respected.

At the NTN business sites and group companies in Japan, we include human-rights education as part of training for new employees, supervisors, and managers. We place particular emphasis on measures against harassments such as sexual harassment and power harassment, and we have ongoing education on these issues for new employees and newly appointed managers. We also participate in the activities of regional human rights organizations and take part in a variety of human rights exhibitions and seminars. We also have “Helpline”(whistle-blowing) inside and outside the company that make it easy for employees and others to seek advice when they feel that someone’s human rights have been violated.

NTN overseas subsidiaries have also built systems that help them continue to respect human rights.

### Promoting Diversity in Workplace

#### Hiring Women, the Persons with Disabilities and Seniors

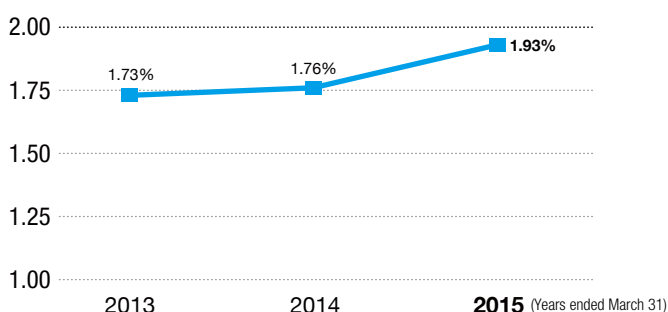
We ensure that women are given a more active role, and we are aiming to double (compared to fiscal year ended March 31, 2015) the number of women in management positions by the fiscal year ending March 31, 2018.

To achieve this target, we ran the improvement seminars for female employees to help develop their capabilities. For those in management positions, we run diversity management seminars to ensure proper awareness of diversity. By applying this approach to both women and those in management positions, participants of the seminars were assigned a management position in April 2015. We are continuously working on increasing the ratio of women amongst university graduates hired by NTN, with the women accounting for 21.2% of new employees during the fiscal year ended March 31, 2015, up 4.3 points from the previous fiscal year.

We also hire the persons with disabilities and people of advanced age.

The number of the persons with disabilities employed throughout the Group in Japan was 123 (1.93%) as of March 2015. To this end we established “Dream Workshops,” where the persons with intellectual disabilities take a leading role, at IWATA WORKS, KUWANA WORKS and OKAYAMA WORKS. We also coordinate

### The employment rate of persons with disabilities



efforts with special-needs schools and encourage online applications, and are making improvements to equipment as part of efforts to create a better working environment.

The NTN Group in Japan also provides stable employment for seniors with a system under which retirees can be re-employed (system for re-employment of those in their early 60s). In the fiscal year ended March 31, 2015, there were 74 employees working under this system.

We will continue with these initiatives into the future as our way of increasing diversity.

#### Helping Employees Continue Working While Raising Children

The NTN Group strives to support employees in both their work and child-rearing.

In Japan, for example, there are numerous such programs, including the Mom-back system to rehire women who have retired to give birth or raise a child; and the Bear Kids Land, an in-company day-care center for employees’ children.

We also provide support beyond legal requirements with our system for reduced working hours for childcare, which now covers employees until their children have finished the second grade of elementary school, and staggered work shifts in the Tokyo and Osaka areas for those raising children.



Bear Kids Land

## Human Resources Development

### Global Human Resources Development

Of NTN's worldwide employees, 34% are in Japan and 66% are overseas. We have set out to continue expanding our worldwide business, which is why we strive to develop the human resources who will run our production bases around the world.

#### Overseas Trainee and International Internship Programs

We have a system under which Japanese NTN employees are sent to overseas bases for one year, and an international internship program so that employees can experience first hand the markets overseas. We also run domestic and overseas training and scholarship programs on an ongoing basis for employees to acquire specialized skills and knowledge. In the fiscal year ended March 31, 2015, there were three trainees from overseas, and two employees were dispatched on international internships. We also hosted 11 trainees from companies overseas, and three trainees from distributors overseas.

We will continue to increase employee interaction between Japan and overseas.

### Promoting Self-Development and Higher Motivation

The NTN Group provides employees with numerous opportunities to increase their drive for work and hone their skills, which includes planning and implementing various educational programs such as the Global QC Circle Convention and NTN Technical Skills Competition, and running the Monozukuri School.

For example, we continue to run the Global QC Circle Convention, in which employee teams work independently to enhance product quality. The fourth convention held during the fiscal year ended March 31, 2015 drew 19 teams, the highest number ever recorded.

We also hold the "NTN Technical Skills Competition", where employees from around the world put the results of their daily training against one another to test their skill level. We continue to inspire "young employees' motivation through activities" such as training at temples and supporting areas stricken by the March 2011 earthquake and tsunami.

Employees also strive to improve their foreign language skills through e-learning and correspondence courses. We hold seminars with external lecturers several times a year as a way to encourage training for employees.

We will continue to focus on developing systems for training global human resources, organize educational activities by work position and field of expertise, review training programs and run events such as the Global QC Circle Convention and NTN Technical Skills Competition.

### Employment and Working Conditions/ Employee Evaluation

NTN takes employment working conditions and employee evaluation into consideration.

We recognize global efforts to stamp out forced labor and child labor, and require that all permanent employees join the NTN labor union so that they can have the right to organize.

In evaluating our employees, all are subject to uniform evaluation standards, and multiple managers conduct employee evaluations, each viewing the individual being evaluated with a unique perspective. A self-certification system and face-to-face interviews held twice a year are used to as ways to verify individual intentions in order to increase transparency.

Salary is composed of a base salary combining age consideration and job ability, as well as various allowances, however with greater diversity with work styles and employees, we will be reviewing our employee system so that it is in line with the most recent employment and working situations.

### Rewards for Employee Inventions

To reward our employees' inventions, we have established the Patent Management Rule and the Patent Reward Rule and we have clarified how patent rights are attributed and how the value of award is calculated. Rewards are also made for foreign patents and for know-how and inventions considered to be trade secrets. There is no upper limit to actual awards.

In the fiscal year ended March 31, 2015, we pursued an intellectual property strategy linked directly to business strategy and R&D strategy with the goal of boosting our competitiveness in key product areas. As a result, 354 employees (cumulative) were rewarded for obtaining rights for 154 patents.

# Contributions to Local Communities

### NTN Group Social Contribution Activities

#### Contributing to Communities as a Good Corporate Citizen

The NTN Group's CSR Policy states that we shall do all we can to interact with and contribute to local communities.

Based on the CSR Policy, the NTN business sites and group companies around the world plan and implement a range of activities that include disaster recovery support, participation in local events, promotion of culture and sports, and international exchange and internship hosting.

#### Young Employees Assist in Post-Disaster Reconstruction Efforts (Japan)

From September 3 to 5, 27 young employees volunteered to participate in the “Training for Tohoku Reconstruction Assistance Activities” held in Ishinomaki City in Miyagi Prefecture.

Volunteer activities involved installing water pipes along an approximately 2 km long area, mixing cut straw with water and sand for use in mud walls on older houses, and cleaning temporary housing air-conditioning systems ventilation fans and fly screens.

Comments from participants included “I was taken back by the real scale of damage,” “It is clear that there are still issues remaining, despite progress with recovery” and “I would like to help out by telling the stories I heard while here, or visiting the Tohoku region.”



Training for Tohoku reconstruction assistance



#### Sponsoring Free Outdoor Concerts (U.S.A)

NDI (NTN Driveshaft Inc.) sponsored a free concert held to celebrate renovations of a memorial library.

To commemorate the end of seven months of renovations, The Cleo Rogers Memorial Library, known as the Main Library of Bartholomew County, held a memorial concert at the open area adjacent to the “Large Arch” sculpture by Henry Moore. The concert drew approximately 2,000 visitors who sat in fold-up chairs to listen to a performance by the Black Violin group. Black Violin is an American violin and viola duo, and their performance was so mesmerizing that the crowd stood up and started dancing. Participants were overjoyed.



Free outdoor concert



#### Elementary School Social Studies Excursion (Thailand)

NMT (NTN MANUFACTURING (THAILAND) CO., LTD.) held a social studies excursion for elementary school students.

There were 29 participants, including head teachers, who were greeted by the president and shown a video outlining the company, followed by descriptions of products for the elementary school students. The descriptions in particular were used to explain exactly how the products were used. After the descriptions, a plant tour was held with special attention made for the safety of the children. Quizzes using microscopes and other ideas were used to make the tour as interactive as possible. At the end of the excursion, the children had lunch in the employee cafeteria, and were provided with a souvenir in what was part of efforts to contribute to the local community.



Social studies excursion for Thai elementary school students





# Provision of Products Contributing to the Environment

We work to develop and provide products and services which will contribute to the reduction of environmental impacts of customers and society.



## Wireless Measuring Unit for Wind Doctor™

We have developed a “Wireless Measuring unit for Wind Doctor™”, which realizes wireless communications for monitoring the conditions of wind turbines for the first time in the world. This product allows measurement sensors the CMS\* to be installed on optimal measurement points such as the main rotor (rotating section) of an outer ring rotation type wind turbine where conventional wired products could not be installed, and its outstanding level of water and dust-proofing allows it to be used in tough environments including off-shore places which leads to contributing to greater utilization ratio of wind turbines.

\* Abbreviation of Condition Monitoring System

[http://www.ntn.co.jp/english/news/new\\_products/news201500005.html](http://www.ntn.co.jp/english/news/new_products/news201500005.html)

## Machine Tool Main Spindle Bearing with Air Cooling Spacer

By applying our proprietary air-cooling technology “Air Cooling Spacer” to bearing for main spindles of machine tools, this product has achieved the world’s highest standard of rotational performance (improved by 20% compared to conventional products) while ensuring high rigidity of the main shaft. High speed rotation of the main spindle allows it to increase the machining feed rate, contributing to energy savings by the cycle time reduction.

\* The product in the photo is partially cut out in order to make it easier to view the structure.

[http://www.ntn.co.jp/english/news/new\\_products/news201400101.html](http://www.ntn.co.jp/english/news/new_products/news201400101.html)

## ULTAGE Large Tapered Roller Bearings

This product delivers the world’s highest standard of high-load capacity and high rotational precision. By reviewing the internal design and the crowning shape of tapered roller bearings, we have realized high-load capacity which is 1.3-times or higher than the conventional product, and improved the rated life of the bearing 3-times or more and the load resistance 2-times or more. This product contributes to improved performance and longer life of steel plant equipment, wind turbines, construction and mining machinery used in harsh environments.

[http://www.ntn.co.jp/english/news/new\\_products/news201400030.html](http://www.ntn.co.jp/english/news/new_products/news201400030.html)

## “Low Section High Strength Press Pulley” for Engine Accessory Belts

With an optimally shaped design and improvements to press molding technology, this product achieves the world’s highest standard of load resistance. A low pulley section of approximately 70% of conventional products ensures a larger diameter bearing can be assembled, which improves bearing operating life and load capacity. Moreover, because this product has superior durability under high temperature conditions and excellent wear resistance against foreign matter, it is also suited to automobiles in emerging markets with tough usage environments.

[http://www.ntn.co.jp/english/news/new\\_products/news201400047.html](http://www.ntn.co.jp/english/news/new_products/news201400047.html)

# Environmental Performances for the Fiscal Year Ended March 31, 2015

## 22 of 27 Targets Achieved

Every year, NTN sets and works towards the achievement of targets in line with four items of our Group Environmental Policy.

For the year ended March 31, 2015, as a result of focusing our efforts on “development of energy-efficient products”, “prevention of global warming” and “Reduce, reuse, and recycle” and “management and

reduction of environmentally hazardous substances” etc., we achieved 22 out of 27 target items including the reduction of the CO<sub>2</sub> emission rate etc. Though we couldn’t achieve the target of reducing domestic CO<sub>2</sub> emissions due to an increase in the production scale, we will make efforts to prevent global warming in line with the target of achieving 280,000 tons/year for the year ending March 31, 2016.

Company-Wide Environmental Results for the Fiscal Year Ended March 31, 2015						😊 Achieved	☹ Not achieved
NTN Environmental Policy	Environmental Purpose		Environmental Targets			Results	Evaluation
Development and sales of environmentally-friendly products	(1) Development of energy-efficient products	Develop environmentally contributing products to meet needs of expanding new energy and greater number of electric cars			R&D in progress in engineering and research divisions		😊
		Begin assessment of environmental efficiency in new product development			Preparing to implement		☹
Reduction in environmental impact	(1) Prevention of global warming	Wherever possible, save energy and cut peak energy use			Being implemented in each business site including the energy-saving periods		😊
		Improve energy efficiency of existing equipment by utilizing management standards			Horizontally developing the implementation examples in each business site		😊
		Improvement of the CO <sub>2</sub> emission rate through the reorganization of production (Prevention of deteriorating emission rate in production reducing phases)			Kuwana-Mie Works: Implemented a short course on improvement by inviting an expert in energy-saving.		😊
		Reduction of CO <sub>2</sub> emissions	Japan	268,000 tons/year or less	279,000 tons/year		☹
			Overseas	320,000 tons/year or less	315,000 tons/year		😊
		Reduction in CO <sub>2</sub> emissions rate	Japan	Improvement over the fiscal year ended March 31, 1998, -17.8%	-20.0%		😊
			Overseas	Improvement over the fiscal year ended March 31, 2007, -10%	-12.3%		😊
	(2) Reduce, reuse, and recycle	Raise the recycling rate	Japan	99.8% or more	99.9%		😊
			Overseas	98% or more	96.8%		☹
		Reduction in waste per unit of production output	Japan	Reduce the waste generation rate by 0.8% over the fiscal year ended March 31, 2011, -0.8%	-1.9%		😊
	(3) Preserve resources	Reduction in paper purchased per unit of production output	Japan	Increase paper consumption by +10% over the fiscal year ended March 31, 2011	11.6%		☹
		Reduction in water used per unit of production output	Japan	Reduction over the fiscal year ended March 31, 2011, -10%	-16.2%		😊
		Reduction in use of Styrofoam	Japan	In comparison with the fiscal year ended March 31, 2000, -99% maintained	-99% maintained		😊
	(4) Management and reduction of environmentally hazardous substances	Promotion of switchover in processes using phthalate esters substitutes			Replacement with alternative seal materials, etc. completed		😊
		BNST replacement in progress			Replacement of the targeted grease etc. completed		😊
		Reduce PRTR-designated substances	Japan	Completely eliminated N,N-Dicyclohexylamine	Its use has been completely eliminated since January 2015.		😊
Observance of laws and regulations and implementation of thorough environmental management systems	(1) Compliance with environmental laws	Continue to create measures to prevent leak accidents and carry out improved and full-scale emergency drills			Completed at all sites		😊
		Continue strict management of poisonous materials			Strict management continuing		😊
		Start soil purification and process management at former site of TAKARAZUKA WORKS			Soil improvement being implemented		😊
	(2) Expansion and improvement of environmental management systems	ISO 14001 certificate	Certification obtained at NTN AKAIWA CORP.		Certification complete		😊
		Energy management	Strengthen energy management system to comply with the Revised Rationalization in Energy Use Law		Formulation of detailed energy management rules		😊
			Certify the environmental management systems of at least 95% of key suppliers		96%		😊
		Promote green procurement	Clarification of responsibilities for green procurement in each division		Continued through meetings with the Quality Assurance Dept. and the Procurement Dept.		☹
			Zero complaints of environmentally hazardous substances		No complaints from customers		😊
Activities to contribute to society and protect the natural environment	(1) Protecting biodiversity	NTN Kigyo no Mori and other greening and environmental protection activities			Under way at each site, etc.		😊

# Environmental Targets for the Fiscal Year Ending March 31, 2016

## NTN Environmental Action Policy for the Fiscal Year Ending March 31, 2016

- |   |  |
|---|--|
| 1. Development and sales of environmentally-friendly products   | (1) Development of energy-efficient products   |
| 2. Reduction in environmental impact  | (1) Prevention of global warming<br>(2) Reduce, reuse, and recycle<br>(3) Preserve resources<br>(4) Management and reduction of environmentally hazardous substances |
| 3. Observance of laws and regulations and implementation of thorough environmental management systems | (1) Compliance with environmental laws<br>(2) Expansion and improvement of environment management system   |
| 4. Activities to contribute to society and protect the natural environment                            | (1) Protecting biodiversity  |

### Company-Wide Environmental Targets for the Fiscal Year Ending March 31, 2016

NTN Environmental Policy	Environmental Purpose	Environmental Targets		
Development and sales of environmentally-friendly products	(1) Development of energy-efficient products	Develop environmentally contributing products to meet needs of expanding new energy and greater number of electric cars		
		Begin assessment of environmental efficiency in new product development		
Reduction in environmental impact	(1) Prevention of global warming	Wherever possible, save energy and cut peak energy use		
		Make existing manufacturing equipment more energy efficient		
		Reduction of CO <sub>2</sub> emissions	Japan	280,000 tons/year
			Overseas	337,000 tons/year
		Reduction in CO <sub>2</sub> emissions rate	Japan	Improvement over the fiscal year ended March 31, 1998, −23%
			Overseas	Improvement over the fiscal year ended March 31, 2007, −13%
	(2) Reduce, reuse, and recycle	Raise the recycling rate	Japan	99.8% or more
			Overseas	98% or more
		Reduction in waste per unit of production output	Japan	Reduction over the fiscal year ended March 31, 2011, −4.8%
	(3) Preserve resources	Reduction in paper purchased per unit of production output	Japan	Increase paper consumption by +8.8% over the fiscal year ended March 31, 2011
		Reduction in water used per unit of production output	Japan	Reduction over the fiscal year ended March 31, 2011, −17.6%
			Overseas	Reduction over the fiscal year ended March 31, 2015, −3%
		Reduction in use of Styrofoam	Japan	In comparison with the fiscal year ended March 31, 2000, −99% maintained
	(4) Management and reduction of environmentally hazardous substances	Reduce PRTR-designated substances	Japan	
Observance of laws and regulations and implementation of thorough environmental management systems	(1) Compliance with environmental laws	Continue to create measures to prevent leak accidents and carry out improved and full-scale emergency drills		
		Continue strict management of poisonous materials		
		Follow-up operation of the soil purification and its completion at the former site of TAKARAZUKA WORKS		
	(2) Expansion and improvement of environmental management systems	ISO 14001 certificate	NTN Driveshaft do Brasil obtained the certification	
		Preparation for revision in ISO 14001	Collection of information and preparation in view of the planned revision (in September)	
		Promote green procurement	Ensuring the understanding of the revision of the Green Procurement Standards and the guidelines for activities to preserve biodiversity	
Activities to contribute to society and protect the natural environment	(1) Protecting biodiversity	Clarification of responsibilities for green procurement in each division		
		Zero complaints of environmentally hazardous substances		
		NTN Kigyo no Mori and other greening and environmental protection activities		

## Environmental Impact of Business Activities

### Reducing Environmental Impact in All Production Processes

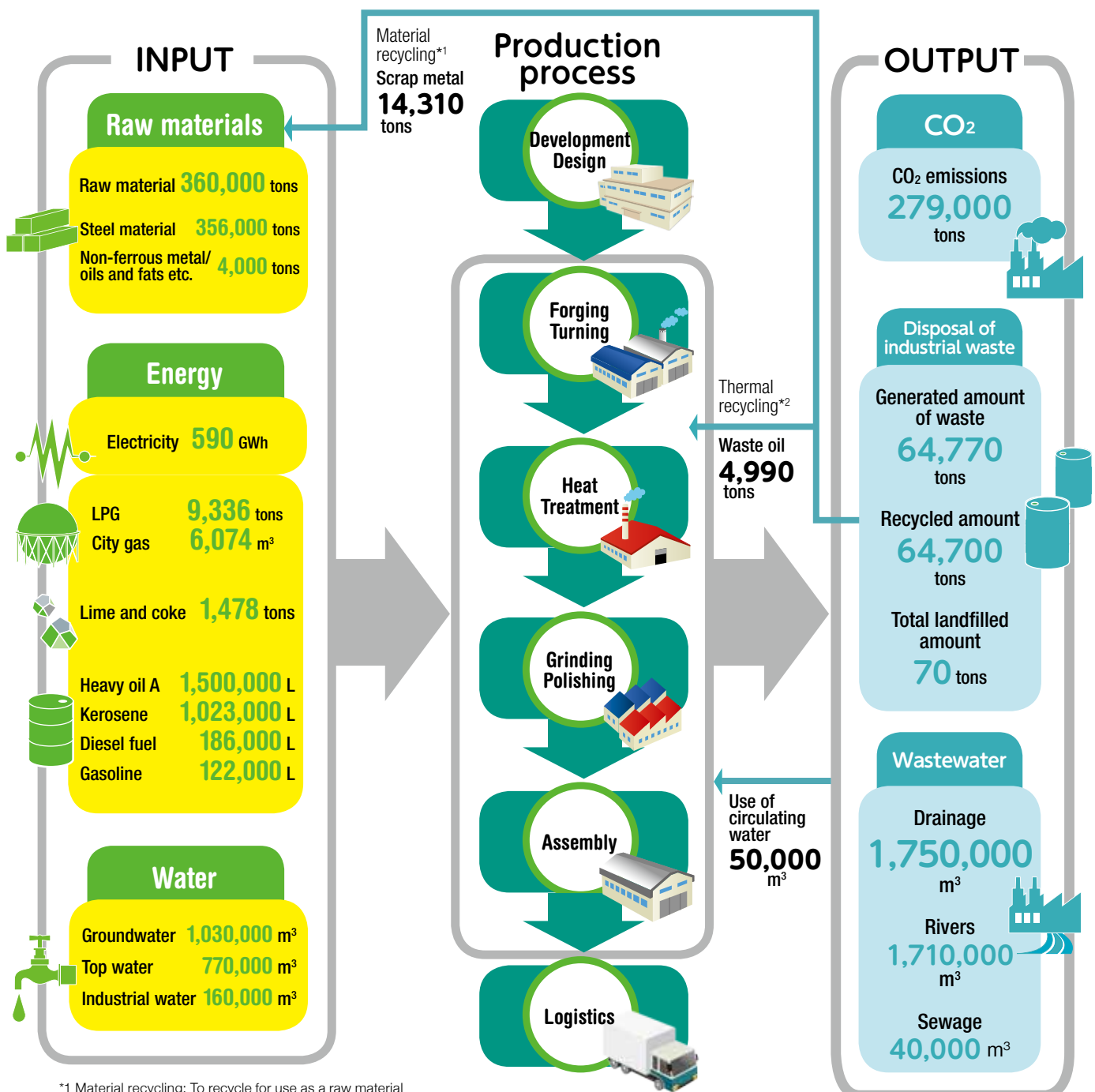
The NTN Group strives to reduce environmental impact in all processes, from development, designing to logistics. For that purpose, grasping the entire picture of

the INPUT in the manufacturing process (raw material, energy, water) and the OUTPUT from the manufacturing process (CO<sub>2</sub>, waste, wastewater), we are working to reduce them.

## Environmental impact from production activities in Japan

(Fiscal Year ended March 31, 2015)

Target: NTN Group companies in Japan





## Environmental Accounting

### Investment following Research and Development

The NTN Group companies in Japan uses environmental accounting to quantitatively assess its environmental protection activities. Environmental preservation costs in the fiscal year ended March 31, 2015 were 4,053 million yen, down 14% from the previous fiscal year. This consisted of 652 million yen in environment-related equipment investment, down 45%, and related costs of 3,401 million yen, down 4%. Though the entire amount decreased due to the reaction from the investment on research and development (of EV-related projects etc.) regarding the active environmental preservation of the first term, we have continued to invest on research and development at a high rate. There were also costs for items like energy-efficient equipment and waste recycling.



Introduction of higher efficiency compressors  
(NTN NOTO CORP.)



Replacement of mercury lamps with LEDs  
(NTN SHIKA CORP.)

### Environmental Preservation Costs

(Millions of yen/year)

Classification		Equipment investment		Amount	
		Costs	Details	Costs	Details
Work areas internal costs	Pollution prevention costs	9	Environmental equipment (dust collectors, particulate smoke removal devices, and wastewater treatment equipment)	166	Operation and management of environmental equipment Environmental measurement (Air, water quality, noise, etc.)
	Expenses to preserve the global environment	75	Energy-conserving equipment (upgrading of equipment including compressors, lighting, and air conditioning)	188	Operation and management of energy-saving equipment Service charge of ESCO business
	Resource recycling expenses	0		605	Waste reduction, recycling, and final disposal
Upstream / downstream costs		0		2	Costs of analysis related to green procurement
Costs of management activities		0		421	Disclosure of information on labor costs related to the environment management activities (advertising and NTN reports) and the greening and beautification of company grounds
R&D costs		568	R&D equipment related to environmental preservation	2,011	R&D equipment cost related to environmental preservation
Costs of social activities		0		3	Greening and beautification outside the company
Environmental remediation expenses		0		5	Cost of soil sampling
Total		652		3,401	
(Reference) Total amount for fiscal year ended March 31, 2014		1,182		3,544	
					<b>Grand total</b>
					4,053
					4,726

### Impact on Environmental Preservation

Indicator	Fiscal year ended March 31, 2014	Fiscal year ended March 31, 2015
CO <sub>2</sub> emissions	272,000 tons	279,000 tons
Reduction of waste	Recycle rate 99.8%	Recycle rate 99.9%

### Financial Effect of Environmental Preservation Activities

(Millions of yen/year)

Item	Amount	Details
Global environment preservation expenses, effects	100	Reducing electricity cost, etc. by energy-saving equipments
Resource recycling expenses, effects	700	Profit from sealable materials such as metallic sludge
Total	800	
(Reference) Total for fiscal year ended March 31, 2014	869	

# Prevention of Global Warming

The NTN Group strives to reduce CO<sub>2</sub> emissions generated during production and transportation.

## Reduction of CO<sub>2</sub> Emissions

### Efforts in Japan

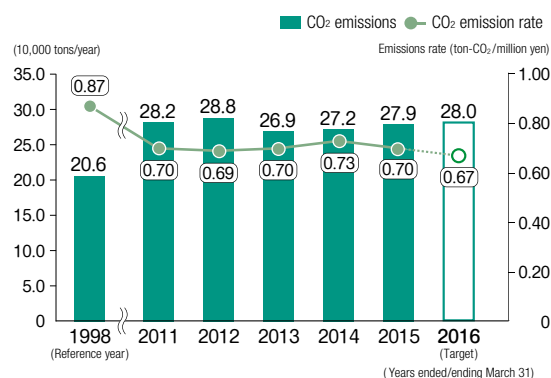
#### We have achieved our target CO<sub>2</sub> emission rate

For the fiscal year ended March 31, 2015, we set targets of CO<sub>2</sub> emissions of 268,000 tons/year and CO<sub>2</sub> emission rate reduction of 17.8% as compared with that of the year ended March 31, 1998, (0.72 tons-CO<sub>2</sub>/million yen). Though the emissions were 279,000 tons/year and we couldn't achieve our emission target due to an increase in the production scale, the emission rate was, owing to the effect of energy-saving activities, reduced by 20% (0.70 tons-CO<sub>2</sub>/million yen) as compared with that in the year ended March 31, 1998, which met the target.

For the fiscal year ending March 31, 2016, we set targets of CO<sub>2</sub> emissions of 280,000 tons/year and CO<sub>2</sub>

emission rate reduction of 23% as compared with that of the year ended March 31, 1998, (0.67 tons-CO<sub>2</sub>/million yen).

#### CO<sub>2</sub> Emissions and CO<sub>2</sub> Emission Rate



## Energy Savings and Energy-Saving Investment at NTN Sites

With a view of reorganizing the production in the entire company, we examined and discussed “measures to improve the CO<sub>2</sub> emission rate without increasing or decreasing production”, and, aiming to comply with energy-saving-related laws and to achieve the environmental targets of our company, we held energy-saving/resource-saving sectional meetings at KUWANA WORKS in July 2014. We confirmed that energy-saving measures are important for the 6 top business sites accounting for 80% of the CO<sub>2</sub> emissions from the entire domestic NTN Group, and we examined improvement measures on the basis of the actual energy-saving performance of each business site and the cases of other businesses.



A scene from Energy-Saving/Resource-Saving Section (KUWANA WORKS)

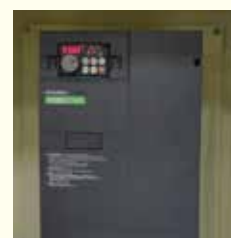
Additionally, each business site has engaged in various energy-saving activities and has aimed to reduce energy use, including the efforts to replace lighting apparatus with LEDs at NTN HAKUI CORP. and NTN SHIKA CORP., as well as updating with high-efficiency compressors at NTN MIKUMO CORP and replacement of pumps with inverter-equipped ones at NTN FUKUROI CORP. etc.



Replacement of mercury lamps with LEDs (NTN HAKUI CORP.)



Updating with higher efficiency compressors (NTN MIKUMO CORP.)



Replacement of pumps with those equipped with inverters (NTN FUKUROI CORP.)

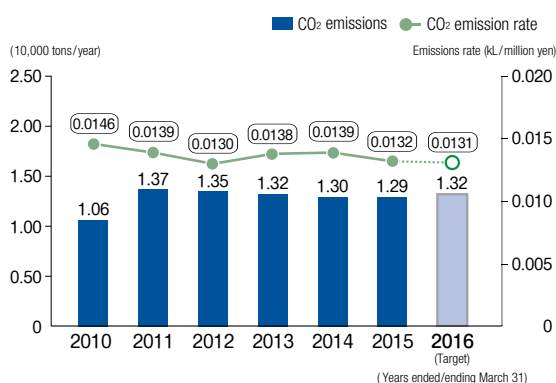
## Reducing CO<sub>2</sub> emissions during distribution

We have introduced modal shift switching the means of transportation from trucks to railroads and ships as a measure to reduce CO<sub>2</sub> emissions during transportation, and we pursued the improvement of efficiency by shortening the distance of truck transportation etc. as well.

In the year ended March 31, 2015, CO<sub>2</sub> emissions were reduced by 12,900 tons/year and the emission rate was reduced by 5.6% as compared with the previous year.

As for the year ending March 31, 2016, we will make efforts to achieve the target of CO<sub>2</sub> emissions set to 13,160 tons/year and of the emission rate to 0.0131.

### CO<sub>2</sub> Emissions and CO<sub>2</sub> Emission Rate



## Received a third party's verification for CO<sub>2</sub> emissions

We received a third party's verification by SGS Japan Inc. in order to secure confidence in the greenhouse gas emissions from 47 business sites in Japan (22 producing sites and 25 sales sites) and 16 business sites abroad (16 producing sites).



Verification Statement

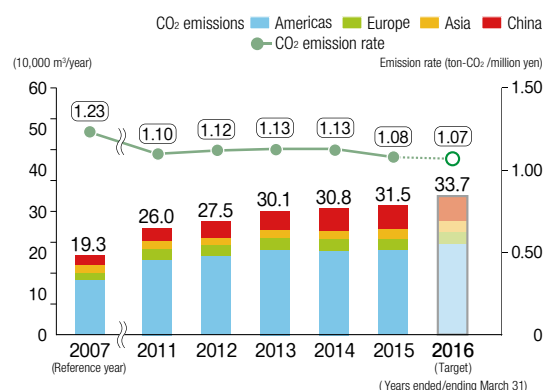
## Efforts Overseas

### CO<sub>2</sub> emission targets achieved

For the fiscal year ended March 31, 2015, we set targets of CO<sub>2</sub> emissions of 320,000 tons/year, emission rate reduction of 8% as compared with that of the year ended March 31, 2007 (1.11 ton-CO<sub>2</sub>/million yen). As a result of reducing activities, emissions amounted to 315,000 tons/year and the emission rate was reduced by 12.3% as compared with that of the year ended March 31, 2007 (1.08 tons-CO<sub>2</sub>/million years), both of which met our targets.

For the fiscal year ending March 31, 2016, we set targets of CO<sub>2</sub> emissions of 337,000 tons/year and CO<sub>2</sub> emission rate reduction of 13% as compared with that of the year ended March 31, 2007, (1.07 tons-CO<sub>2</sub>/million yen).

### CO<sub>2</sub> Emissions and CO<sub>2</sub> Emission Rate



## Activities toward obtaining ISO 50001 in Germany (for an energy management system)

German NTN Kugellagerfabrik (Deutschland) G.m.b.H. has been preparing for the introduction of ISO 50001 (for energy management systems) since 2013. Starting with an analysis on energy consumption, we identified the points to be improved, set the purpose and targets, formulated plans, and pursued improvements, resulting in the CO<sub>2</sub> emission rate at the end of the year ended March 31, 2015 being reduced by 5.8% as compared with that of the previous year. We plan to obtain a certificate in December 2015.

## Protecting Biodiversity

**The NTN Group conducts nature conservation activities and strives to preserve biodiversity around its bases in collaboration with local residents and NGOs, etc.**

### Preserving the Natural Environment and Repairing Ecosystems

NTN SHIKA CORP. was awarded the President Award by Japan Greenery Research and Development Center.

This Award is based on the commendation system for a Factory with an Outstanding Green Space Environment by the Ministry of Economy, Trade and Industry, which was meant to honor factories and organizations which have outstanding achievements in improving/enhancing the environment in and out of such factories. NTN SHIKA CORP. was highly evaluated for carrying out activities appropriate for maintaining the scenery of “Noto’s Satoyama and Satoumi” as a Globally Important Agricultural Heritage through tree planting campaigns of “Kirishima azalea specimens in the Noto District”, a representative flower tree species in the Noto District, and beautification activities.



The President Award by the Japan Greenery Research and Development Center

### NTN Kigyo no Mori Events Held Around Japan

NAGANO WORKS carried out activities for the undeveloped woodland near the populated area under the “NTN Kigyo no Mori” project in Komagane City, Nagano Pref. on June 1, 2014, and improved 5.7ha of the forest area. As a result, we were granted a Certificate of Forest CO<sub>2</sub> Absorption for an amount of 164.4 t-CO<sub>2</sub> by Nagano Pref. on March 27, 2015. Since the beginning of activities in 2006, we have improved a total of 41.5ha of the forest area.

NTN KINAN CORP. carried out improvement activities



Certification of Forest CO<sub>2</sub> absorption amount by Nagano Pref.

under the “Nagomi-no mori” project on November 22, 2014. Since the start in 2007, plantation of 2,000 trees including sawtooth oaks, pin oaks, *Quercus gilva*, and mountain cherries, etc. has been carried out in the mountain and forest areas of about 1.0ha and it is estimated to lead to 30 to 40 tons of CO<sub>2</sub> absorption in 10 years.



Participating members of the “Nagomi-no-mori” in NTN KINAN CORP.

### Volunteering for Environmental Protection Activities

NTN employees regularly take part in locally held environmental activities. On May 17, 2014, employees of NAGANO WORKS and NTN KAMIINA CORP. and their family members totaling 102 people jointly participated in the “21st Environmental Picnic in the water system around the Tenryu River”, held under the auspices of Ina Techno Valley Regional Center of Nagano, and carried out cleaning activities. They not only picked up trash such as empty cans on the river bed, but also separated the collected pieces of trash and carried them to the designated places. As a result, they keenly felt the significance and importance of river cleaning and trash separation.



21st Environmental Picnic in the water system around the Tenryu River

NTN-SNR's Curitiba Factory (Brazil) participated in the cleaning activity for Fazenda/ Rio Grande River.



Employees and the family members participating in cleaning activities



# Protection of Resources

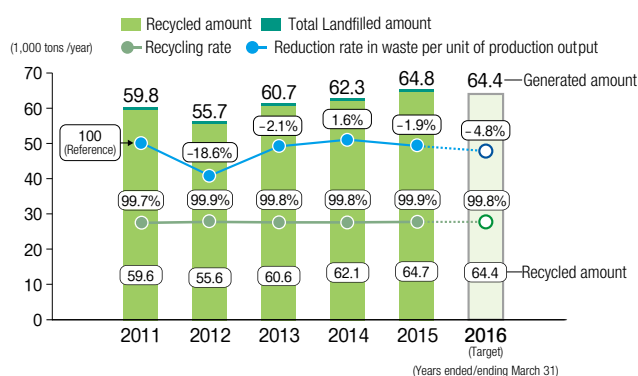
**We are working to reduce waste and water use as well as to make efficient use of resources in each process including production and distribution processes.**

## Efforts in Japan

### Promote the Reduction of Waste and Increasing Recycling at NTN Bases

Though the generated amount of waste increased by 4% in the year ended March 31, 2015 due to an increase in the production scale, the waste generation rate could be reduced by 3.5% as compared with that of the previous year by increasing the recycled amount by 4.2% compared with that of the previous year. We will continue promoting waste reduction and recycling in the year ending March 31, 2016.

#### Generated amount of waste



### Reduction of waste package in relation to ferry transportation

When we transported production equipment from PRODUCTION ENGINEERING R&D CENTER(Iwata) and Nanjing NTN Corp.(China), we could reduce the waste at the site by 1.8 tons by switching from the conventional container transportation to ferry transportation using trucks, which eliminated the need for export packaging including wood frames etc. Additionally, we could also contribute to the reduction of transportation costs and shortening the lead time of equipment installation.



In ferry boats



Unloading from trucks

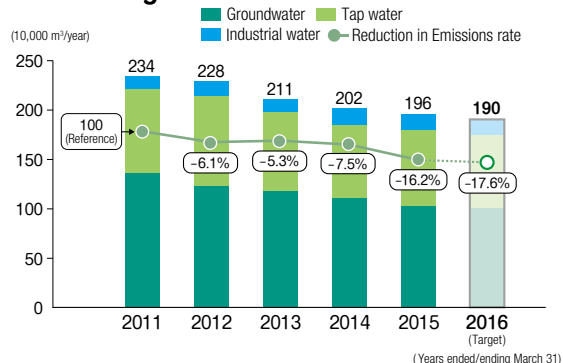
### Reduced water use at each business site

The NTN Group companies in Japan strives to preserve water resources by grasping water use and reusing discharged water as much as possible. In the year ended March 31, 2015, the water use rate was reduced by 16.2% against the target of reducing 10.0% as compared with that of the year ended March 31, 2011. In the year ending March 31, 2016, we will work to meet the target of reducing water use by 17.6% as compared with that of the year ended March 31, 2011.



Cool water circulation tanks of NTN SHIKA CORP.

#### Water usage

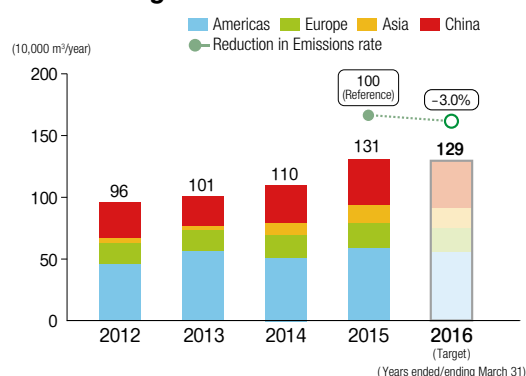


## Efforts Overseas

The NTN Group companies overseas also set a reduction target of water use (rate) starting from the current fiscal year, and strives to preserve water resources.

In the year ending March 31, 2016, we will work to meet the target of reducing water use by 3.0% as compared with that of the year ended March 31, 2015.

#### Water usage



# Management and Reduction of Environmentally Hazardous Substances

**We are managing and reducing environmentally hazardous substances while complying with worldwide laws and regulations.**

## Management of Environmentally Hazardous and Harmful Substances

### Response to Environmental Regulations

The NTN Group complies with chemical substance restrictions around the world by keeping a close watch on changing restrictions and constantly testing for what substances are contained in the raw materials, parts, and materials it procures. We strive to manage and reduce the amount of environmentally hazardous and harmful substances we use.

#### [REACH Specifications]

#### Switch Completed from Rubber Containing Phthalate Esters

Phthalic esters as prescribed in “REACH Specifications” in Europe reached the date for switchover in February 2015. In preparation for such switchover, we had been replacing procurement rubber products used by our Group with those with no phthalic esters, and have replaced all products intended for the EU market.

#### [PRTR Law]

#### Total elimination of N,N-Dicyclohexylamine

For the fiscal year ended March 31, 2015, we set a company-wide target of totally reducing N,N-Dicyclohexylamine, a PRTR designated substance contained in metal cutting and grinding fluids, and we could totally eliminate its use by January 2015.

#### [Law Concerning Special Measures against PCB Waste] Disposed of 9 high-voltage transformer and 5 reactors

In accordance with the Law Concerning Special Measures against PCB Waste, the NTN Group companies in Japan systematically disposes of PCB. In the year ended March 31, 2015, we completed the disposal of 9 high-voltage transformers and 5 reactors at the former TAKARAZUKA WORKS.



Loading into trucks

### Strengthening of waste water treatment at KUWANA WORKS

In November 2014, KUWANA WORKS introduced a water quality monitoring system using a cloud system for the waste water treatment plant. From PCs and tablet devices, we can access the records of discharged water amount and water quality indices including pH, nitrogen, phosphorus, and COD etc. on the cloud system without being limited in a place and a time, which allows us to inform the persons in charge of any abnormality and make emergency responses by unitarily managing all such information with PCs.



Water monitoring system



Unitary management using a cloud system

### Measures against the leak of oils into the ditches of the site

NTN KAMIINA CORP. has taken measures to repair the ditches of the site and to prevent oil leakage. Considering the risk of causing pollution in first-grade rivers when chemicals or oils surpassing the maximum capacity of oil separators flowed into the ditch and the common piping of the industrial park, we installed a mechanism at the place between the ditch and the oil separator for disconnecting the outflowing path and collecting oils.



A mechanism was installed at the place between the ditch and the oil separator for disconnecting the outflowing path and collecting oils.

# Environmental Management

The NTN Group strives to enhance the level of environmental activities throughout the Group by establishing and operating an Environment Management System (EMS) in line with the international standard ISO 14001.

## Environmental Management System

### Building a Management System Based on "NTN Environmental Policy"

Based on the NTN Group's Environmental Policy, the purpose of which is to reduce environmental impact and ensure our company's continuous development, we have built an environmental management system centered around the Company-wide Environmental Management Committee. We also create and revise rules and manuals when necessary as part of ongoing improvement efforts.

### Our 25 domestic business sites and 17 overseas business sites have obtained ISO 14001

The NTN Group continues to work to obtain ISO 14001 through the collective method for multiple sites (multi-site

method) in Japan. NTN AKAIWA CORP. obtained the ISO certificate through the multi-site method in September 2014, making all 25 business sites certificate-holders.

As for overseas business sites, on the other hand, after NTN-LYC (Luoyang) Bearing Corp. in China had obtained the certificate in March 2015, 17 of all 18 business sites have the certificate.

During the year ending March 31, 2016, NTN Drive shaft do Brasil is expected to obtain the certificate in December 2015.

#### Operating sites expected to be ISO 14001 certified

Region	Name of the business site	Date of certification	
		Year	Month
Brazil	NTN Driveshaft do Brasil	2015	12

#### Operating Sites with ISO 14001 Certification

Region	Name of the business site		Date of certification		Registration	
	Company	Plant	Year	Month	Registration No.	Registration body
Japan	Multi-site certification		1999	11	JSAE176	JSA
	(Operating sites included) Head Office, KUWANA WORKS, IWATA WORKS, OKAYAMA WORKS, NAGANO WORKS, NTN KONGO CORP., NTN ENGINEERING PLASTICS CORP., NTN POWDER METAL CORP., NTN MIKUMO CORP., NTN CASTING CORP., NTN KINAN CORP., HIKARI SEIKI INDUSTRY CO., LTD., NTN MIE CORP., NTN OMAEZAKI CORP., NTN FUKUJOI CORP., ADVANCED TECHNOLOGY R&D CENTER, NTN KAMINA CORP., NTN BIZEN CORP., NTN HOUDATSU SHIMIZU CORP., NTN HAKUJI CORP., NTN SHIKA CORP., NTN NOTO CORP., NTN AKAIWA CORP.					
	NIPPON KAGAKU YAKIN CO., LTD.		2000	8	JOAEM0956	JOA
U.S.A.	NTN TADO CORP.		2005	3	JSAE1058	JSA
	AMERICAN NTN BEARING MFG. CORP.	Elgin Plant	2000	6	111994	LRQA
		Schiller Park Plant	2000	9	112115	LRQA
	NTN-BOWER CORP.	Macomb Plant	2000	6	111998	LRQA
		Hamilton Plant	2000	6	111999	LRQA
	NTN DRIVESHAFT, INC.		1999	12	A8478	UL
	NTN USA CORP. Head Office		2000	4	112005	LRQA
	NTK PRECISION AXLE CORP.		2008	4	4000717	LRQA
Canada	NTA PRECISION AXLE CORP.		2013	4	C0094458-EM1	NSF
	NTN BEARING CORP. OF CANADA LTD.		1999	7	287	KPMG
Germany	NTN Kugellagerfabrik (Deutschland) G.m.b.H.		1999	6	201167-2	LRQA
France	NTN TRANSMISSIONS EUROPE		2003	1	19479	AFAQ
	NTN-SNR ROULEMENTS*		2009	1	0448-4	UTAC
Thailand	NTN MANUFACTURING (THAILAND) CO., LTD.		2003	3	31634	TÜV
China	Guangzhou NTN-Yulon Drivetrain Co., Ltd.		2005	4	104043247	TÜV
	Shanghai NTN Corp.		2005	7	CH05/0489	SGS
	NTN-LYC (Luoyang) Bearing Corp.		2014	12	00615E20208ROM	QAC
India	NTN NEI Manufacturing India Private Ltd.		2011	6	104071903	TÜV

\* Obtained through Multi-site certification



ISO 14001 management system certificate (NTN-LYC)

### NTN Environmental Policy

Harmony with the global environment is our most important issue and we will continuously strive to contribute to the harmonious development of society and work to reduce the impact of our corporate activities on the environment.

#### 1. Development and sales of environmentally-friendly products

- NTN will contribute to world-wide energy conservation by developing and providing eco-products using tribological technologies and high precision processing technologies.

#### 2. Reduction of environmental impact

- NTN will work to prevent global warming by improving energy efficiency activities throughout the business process, from procurement of materials and parts, through to manufacture, distribution and sales.
- NTN will strive to reduce waste by paying heed to efficient use of raw materials, and thorough application of the 3Rs (reduce, reuse, recycle).
- NTN will avert environmental pollution by rigorous management of substances having an environmental impact that are used in products or processes, and by active substitution of chemical substances suspected of having harmful effects.

#### 3. Observance of laws and regulations and implementation of thorough environmental management systems

- In addition to observing laws, regulations and ordinances, NTN will actively seek to comply with requests from regional communities and customers by imposing tighter self-determined standards and internal rules, and keeping to them.
- NTN will establish an environmental management organization and operational methods, and will conduct environmental audits to maintain and improve corporate environmental management systems. We will also advance communication with society at large by publishing information about our environmental initiatives.
- NTN will conduct environmental education. NTN will promote improved awareness of this Environmental Policy and environmental protection to all persons working on behalf of the NTN Group.

#### 4. Activities to contribute to society and protect the natural environment

- By actively participating in regional social contribution activities and natural environmental protection activities, NTN will interact with the immediate community, aiming to develop together with the local region.

## Response to Laws

### Response to legal reforms

The NTN Group keeps abreast of the latest environmental laws and regulations and keeps relevant departments and sections up to date with the necessary information.

During the year ended March 31, 2015, we continued to build up a management system in line with the Act for Rationalized Use and Proper Management of Fluorocarbons (enforced on April 1, 2015), the Revised Water Pollution Control Act (enforced on June 1, 2012), and the Revised Asbestos Trouble Prevention Rule (enforced on June 1, 2014). Since the Act for Rationalized Use and Proper Management of Fluorocarbons addresses all business sites, in particular, the Company-wide Committee on Environment Management explained the methods for collecting and decomposing fluorocarbons, contents of the revision, targeted components, management obligation and maintenance/inspection documents, etc., and ensured understanding.

## Environmental Communication

### Display at the “BOSAI Industry Fair in Sendai”

NTN takes part in environment- and technology-related trade fairs in order to promote its products and technologies that contribute to protecting the environment.

On March 16, 2015, we displayed a vertical axis wind turbine, a horizontal axis wind turbine and a micro hydro turbine adopting the blade technology of GLOBAL ENERGY CO., LTD. at the “BOSAI Industry Fair in Sendai”. The

vertical axis wind turbine and the horizontal axis wind turbine were displayed in their operating status, and many of the visitors showed keen interest in the mechanism of generating power from a gentle wind into the blower without any wind noise, etc.



The compact wind turbines displayed at the “BOSAI Industry Fair in Sendai”

## Environmental Audits

### Two Types Internal Audits Conducted

The NTN Group in Japan has internal site audits (once a year), which are conducted by each site’s internal auditors, and cross-audits (every three years), which are

conducted between operating sites. Also part of improving the level of environmental management systems are external audits by ISO certification institutes.

In the fiscal year ended March 31, 2015, internal audits were held at all bases and cross-audits were held at seven sites. ISO audits were held at 12 sites in July 2014, and these sites kept their multi-site certification designation up to date without any indication of violation.

### Number of Internal Environmental Auditors Reaches 292

The NTN Group in Japan held its first training session to increase the number of internal environmental auditors.

In the fiscal year ended March 31, 2015, internal environmental auditor training with 24 participants from 16 sites was held in December led by a top instructor from L.M.J. Japan, an institute that trains ISO auditors. This training brought the number of NTN internal environmental auditors to a total of 292.

## Environmental Education

### Education Geared to Workplace Needs

The NTN Group strives to raise environmental awareness by holding environmental education for each level of employees at the head office, business sites, and group companies, gearing sessions to particular characteristics and conditions of each location.

In July 2014, OKAYAMA WORKS provided education on the importance of managing environmentally hazardous materials and poisonous/deleterious substances to 13 employees in their 3rd year of employment at the Technical Workshop of Okayama, a training institution for young engineers.

In June every year, HIKARI SEIKI INDUSTRY CO., LTD. implements training to respond to oil leakage under the assumption of a situation where oil leaks from a waste oil tank.



Education in Okayama Technical Workshop



Response training for an oil leak by HIKARI SEIKI



# Third-Party Opinion

## NTN Report 2015 Third-Party Opinion

This report combines both the Annual Report and the CSR Report in a single booklet.

Moreover, to position as an integrated report, I suppose that it should be considered with “integrated thinking.” It is stated that “NTN contributes to build a sustainable society by taking its business activities as creation of a diverse range of value through a diverse range of capital investment” in this report. I regard this as a commitment for society and evaluate it.

In fact, high-efficiency natural energy business and service solution business relevant to wind turbines, tunnel, bridge and others, are mentioned in NTN's new medium-term management plan “NTN 100”. I consider these businesses could be regarded as integrated thinking, which natural capital and social value creation lead to the company's profit. In addition, I am convinced of the indication “Bearings themselves are “eco-products” that help reduce environmental impact”, and also the significance of developing products contributing to the environment is stated in the first principle of the Environmental Policy. However, this report does not represent the outcomes that how NTN's products contribute to environmental value creation as a whole. Although, it may be difficult for the companies with B to B business model to measure the contribution through products, some methods for indicating its contribution such as quantification and visualization would be demanded as long as considering it as company's strong point.

Next, I highly evaluate that NTN considers the value creation through human capital such as “NTN Technical Skills Competition” and “Global QC Circle Convention.” I evaluate promoting localization with the number of 66% of employees overseas in proportion to the overseas sales amount to more than 70%. One thing I would like to point out is that there are not enough explanations about personnel treatment for more than 60% employees overseas. For instance, I wonder the following points; how the promotion system is like for local employees and the actual ratio of employees being in managerial positions. Not only these points, explanations of present conditions, but also the disclosure of basic policy and objective would lead to social evaluation, especially in foreign countries. Therefore, I expect NTN to consider these points for further development.

NTN has been endeavoring to comply with the law and regulations. One of its efforts is establishing the Fair Trade Monitoring Committee in 2012 followed by on-site inspections related to the Japanese Antimonopoly Act and EU competition law in 2011.

I highly evaluate the progressive activities such as establishing the Compliance Committee and holding CSR Global Meeting. If there were risks, it could be the so-called gray area in which one tends to lapse into under significant pressure to achieve performance targets, rather than any intentional form of fraud. However, once it is considered as a form of fraud, it could have a serious impact on corporate value. Since NTN has set the aggressive targets of sales and profit, it is important to define the priority of long-term value rather than the immediate profit. Furthermore, continuing to inform an accurate message to all employees is essential.

The stakeholder dialog that was pointed out last year's Third-Party Opinion was held for the first time. I hope to see more efforts in adopting feedback from various ranges of experts outside of the company.



**Takeshi Mizuguchi**

Professor, Faculty of Economics, Takasaki City University of Economics

### Profile

After working at a trading company and auditing corporations, he became the lecturer in the Faculty of Economics at Takasaki City University of Economics from 1997, and assumed his present position in 2008.

Other appointments include being a member of the Central Environment Council's Special Committee on the Environment and Finance (2009 to 2010), chair of the Japanese Institute of Certified Public Accountants' Technical Committee on Sustainability Information Disclosure (2005 to 2010), and auditor-secretary of the Society for Environmental Economics and Policy Studies (SEEPS) (2008 to 2014).

His areas of expertise cover responsible investing, disclosure of non-financial information and environmental accounting.

Major publications include “Responsible Investment” (Iwanami Shoten, winner of SEEPS Commentary Award) and “The Environment and Financial/Investment Trends” (author/editor, Chuo Keizai-sha).

## Responding to the Third-Party Opinion

I would like to extend my sincere appreciation to Mr. Mizuguchi in providing his valuable opinions in the lead-up to this “NTN Report 2015.” This report represents various initiatives we are taking, including business activities as part of the new medium-term management plan “NTN 100” (manage growth, manage profitability and manage foundation), efforts to CSR activities such as social contributions, environmental conservation activities and enhancing compliance with regulations. While we were commended on the overall integrity of the report, we also received expectations and opinions on visualizing the results of value creation and managing global personnel. We will take this feedback seriously and refer to them as informative advice for the further activities in the future.

As a global company, we will focus on value creation as well as ensuring the greater level of compliance and taking a better approach to diversity and governance in order to become a respected company in all regions and to contribute to international society.



**Hiroshi Nakano**

Director  
CSR Headquarters  
Corporate General Manager

# Financial Review

## ■ Net Sales and Earnings

### ● Sales Performance

Consolidated net sales for the fiscal year ended March 31, 2015 were 701,900 million yen, an increase of 62,929 million yen (9.8%) year-on-year. Overseas sales totaled 510,440 million yen, an increase of 50,551 million yen (11.0%) year-on-year. Overseas sales accounted for 72.7% of net sales overall (Americas 28.9%, Europe 24.4%, Asia and others 19.5%), an increase of 0.7 percentage points from the previous fiscal year.

### Net Sales and Earning by Business Sector

In the aftermarket, development of new demand, increased customer demand and exchange-rate effects resulted in net sales of 112,433 million yen. Operating income was 19,237 million yen.

In the industrial machinery market, increased customer demand and exchange-rate effects resulted in net sales of 108,993 million yen. Operating income was 6,261 million yen as a result of increased sales and exchange-rate effects.

In the automotive market, increased customer demand and exchange-rate effects resulted in net sales of 480,474 million yen. Operating income was 18,351 million yen due to the effects of increased sales, decreased proportional costs and exchange-rate effects, despite the increased in fixed costs resulting from an additional burden imposed on production lines in coping with increased sales in the Americas.

### Net Sales and Earning by Region

In terms of sales in Japan, looking at aftermarket applications, there was an increase in customer demand for industrial machinery aftermarket applications, and sales of industrial machinery applications increased due to sales in general machinery and aircraft applications. Regarding automotive applications, sales grew as a result of expanded demand from customers. The result was net sales of 191,460 million yen (up 6.9% over the previous fiscal year).

In terms of sales in Americas, there was an increase in aftermarket applications. Sales increased in industrial machinery applications, including in construction machinery, and sales of automotive applications increased on the back of mass production in new products, an expansion in customer demand and other factors. The result was net sales of 202,561 million yen (up 16.0%), helped partly by exchange-rate effects.

In terms of sales in Europe, there was a fall in sales in aftermarket and automotive applications, but increased sales in industrial machinery applications thanks to sales in wind turbine, aircraft and other applications. The result was net sales of 171,218 million yen (up 3.0%), helped partly by exchange-rate effects.

In terms of sales in Asia and other areas, looking at aftermarket applications, there was an increase in industrial machinery aftermarket applications thanks to increased customer demand. Sales also increased in wind turbine and rolling stock applications in the industrial machinery market. Regarding automotive applications, sales increased thanks to mass production in new projects and increased customer demand in China. The result was net sales of 136,661 million yen (up 14.8%), helped partly by exchange-rate effects.

### ● Cost of Sales and Selling, General and Administrative (SG&A) Expenses

The cost of sales was 570,197 million yen, down 1.1 percentage points and representing 81.2% of consolidated net sales. This was mainly due to decreased proportional costs.

Selling, general and administrative (SG&A) expenses were 87,852 million yen, representing 12.5% of consolidated net sales, the same rate as the previous year.

### ● Earnings

Factors contributing to increased earnings included a decrease in fixed costs such as labor, favorable effects of exchange rates, decreased proportional costs, and the dissolution of temporal expenses incurred in because of an increased burden on production lines resulting from higher sales in the Americas. As a result, the operating income for the term was 43,851 million yen, up 10,847 million yen over the previous fiscal year.

Other expenses amounted to a net expense of 6,788 million yen. Major contributing factors were income totaling 6,430 million yen, including a gain on sale of fixed assets of 4,287 million yen, and expenses that included payment of customs duties for past financial years of 3,567 million yen, losses related to Anti-Monopoly Act of 2,094 million yen, and loss on liquidation of affiliated companies of 432 million yen.

As a result, the profit before income taxes was 37,063 million yen, an improvement from the 2,451 million yen loss of the previous fiscal year. The net income per share was 43.91 yen for the year under review.

Although dividends for the full fiscal year were planned at 2.5 yen, it was increased by 1 yen to 3.5 yen per share in view of overall factors such as performance trends and the management environment.

## ■ R&D and Capital Expenditures

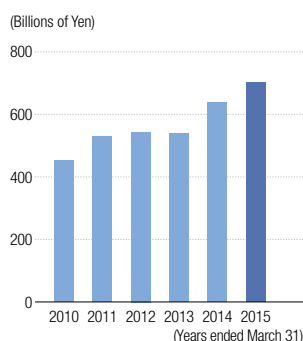
### ● R&D Costs

R&D costs for the fiscal year under review were 18,088 million yen (up 267 million yen over the previous fiscal year), representing 2.6% of consolidated net sales.

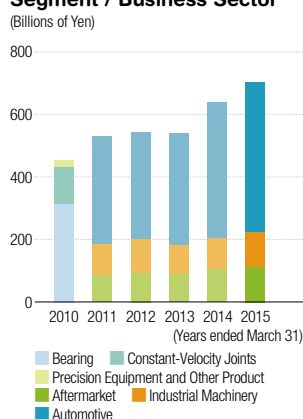
In the industrial machinery applications, quick and smooth launch of new businesses in the natural energy fields, including small wind turbines has been promoted. Large and offshore wind turbines are positioned as key business sectors, along with ongoing technical development that includes Condition Monitoring System (CMS) for wind turbines, as well as other rolling stock, aircraft, machine tools, and construction machinery, which all require state-of-the-art bearing technology. The NTN Group is working to reduce environmental impact by more compact, lighter weight products with long life and low-torque, and promote development new products that meet customer needs for high precision and high speed, as well as elemental technologies that will make NTN more competitive, and high-value added products by unitization and modularization of peripheral parts such as sensors with bearings.

In the automotive applications, in addition to boosting productivity of existing products such as bearings and driveshafts, the NTN Group is also making improvements to products that have

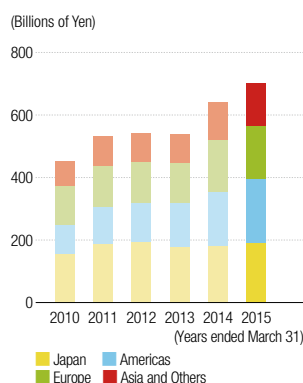
**Net Sales**



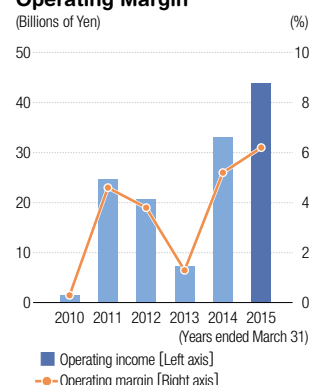
**Net Sales by Business Segment / Business Sector**

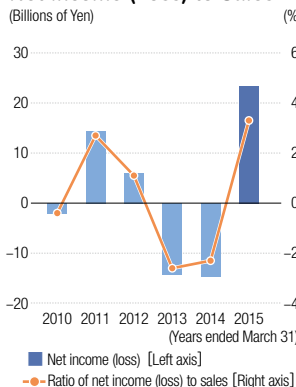
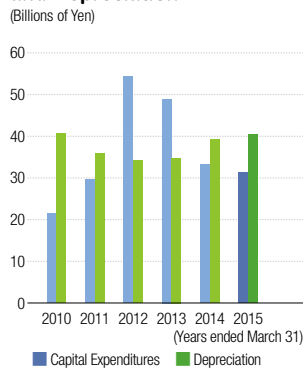
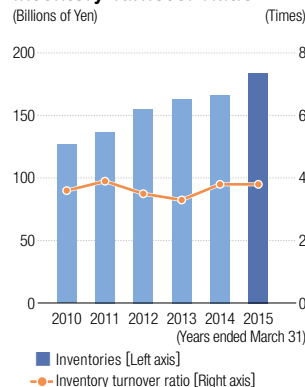
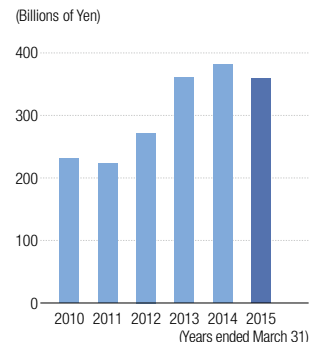


**Net Sales by Region**



**Operating Income / Operating Margin**



**Net Income (Loss) / Ratio of Net Income (Loss) to Sales****Capital Expenditures and Depreciation****Inventories / Inventory Turnover Ratio****Interest-Bearing Debt**

already been introduced to the market and started mass-production such as the Ball Screw Drive Module for Electric Hydraulic Brake, which dramatically improves the efficiency of hybrid cars and other next-generation vehicles, and the Mechanical Clutch Unit (MCU) for Next-generation Steering, as well as preparing to expand the market for these products. Module products are also being developed and proposed with a focus on vehicle functional safety standards.

**Capital Expenditure**

For NTN Corporation and its consolidated subsidiaries, the main focus of capital expenditures was on increasing production capacity, labor savings, and rationalization, maintaining and upgrading existing facilities, improving safety, and conducting R&D for new products.

In Japan, capital expenditures were 11,177 million yen, with projects including the expansion of plant buildings and constant velocity joint (CVJ) production equipment at NTN FUKUROI CORP., and the expansion of bearing production equipment at NTN's OKAYAMA WORKS.

In the Americas, capital expenditures were 5,186 million yen, with projects including the construction of a new building with a new plant at NTN MANUFACTURING DE MEXICO, S.A. DE C.V., expansion of CVJ production equipment at NTN DRIVESHAFT, INC. and expansion of bearing production equipment at NTN-BOWER CORP.

In Europe, capital expenditures were 6,034 million yen, with projects including the expansion of plant buildings at and the expansion of bearing production equipment at NTN-SNR ROULEMENTS.

In Asia and other areas, capital expenditures were 9,058 million yen. Projects included the construction of a new building and installation of CVJ production equipment with a new plant at XIANGYANG NTN-YULON DRIVETRAIN CO. LTD, the expansion of bearing production equipment at SHANGHAI NTN Corporation, the expansion of CVJ production equipment at Guangzhou NTN-YULON Drivetrain Co. Ltd, and the expansion of bearing production equipment at NANJING NTN CORP.

After adjusting for -189 million yen in equipment transfers between segments, total capital expenditures for the fiscal year under review were 31,266 million yen.

All expenditures were funded from internal funds and short-term loans. Depreciation for the fiscal year under review amounted to 40,392 million yen (up 1,077 million yen from the previous fiscal year).

**Financial Position and Cash Flows**

Total current assets at March 31, 2015 amounted to 460,980 million yen, a year-on-year decrease of 6,768 million yen (or 1.4%). Major factors included a 12,765 million yen increase in finished goods & purchased goods, a 9,275 million yen increase in notes and accounts receivable, a 26,000 million yen decrease in securities and a 16,652 million yen decrease in cash and bank deposits. Total fixed assets at the fiscal year-end amounted to 395,297 million yen, an increase of 15,008 million yen (or 3.9%) against the end of the previous fiscal year. Major factors included an increase of 6,662 million yen in property, plant and equipment, and an increase of 11,032 million yen in investment securities. As a result, total assets amounted to 856,277 million yen, a year-on-year increase of 8,240 million yen (or 1.0%).

Current liabilities were 301,530 million yen, a year-on-year decrease of 13,688 million yen (or 4.3%). Major factors included an increase of 57,778 million yen in electronically-recorded monetary claims, a decrease of 45,319 million yen in notes and accounts

payable, and a decrease of 21,568 million yen in "Other", due to accrued liabilities for loss related to Anti-Monopoly Act and other factors. Total long-term liabilities amounted to 292,188 million yen, a year-on-year decrease of 27,262 million yen (or 8.5%). This is mainly due to a 13,736 million yen decrease in long-term loans and long-term lease obligations, and a 9,171 million yen decrease in liabilities for retirement benefits. As a result, total liabilities were 593,718 million yen, a year-on-year decrease of 40,950 million yen (or 6.5%).

Total net assets were 262,559 million yen, a year-on-year increase of 49,190 million yen (or 23.1%). Major factors included an increase of 16,629 million yen in translation adjustments, an increase of 23,272 million yen in retained earnings, and an increase of 6,489 million yen in net unrealized holding gain on securities.

The equity to capital ratio was 28.6%, up 5.1 percentage points. Total net assets per share, based on the number of shares outstanding over the end of the previous fiscal year, were 461.21 yen per share (an increase of 86.53 yen per share over the previous fiscal year). Interest-bearing debt amounted to 359,105 million yen, a decrease of 22,662 million yen (5.9%) from the end of the previous fiscal year. Factoring in the 11,727 million yen increase from currency effects, the actual decrease was 34,389 million yen. The ratio of interest-bearing debt to total assets was 41.9% (down 3.1 percentage points compared to the end of the previous fiscal year).

Net working capital was 159,450 million yen, an increase of 6,920 million yen from the end of the previous fiscal year. The current ratio was 152.9% (up 4.5 percentage point over the end of the previous fiscal year).

The inventory turnover ratio was 3.81 times (0.03 times down over the end of the previous fiscal year), while the turnover ratio of total assets was 0.82 times (up 0.07 times).

Net cash provided by operating activities was 25,121 million yen (a year-on-year decrease of 49,397 million yen, or 63.6%). Major items included proceeds of 40,392 million yen from depreciation and amortization, 37,063 million yen from gains before income taxes and minority interests, and 11,794 million yen from trade payables. In contrast to these items, payments included a decrease of 27,926 million yen in accrued liabilities related to a loss related to Anti-monopoly Act, an increase in inventories of 10,522 million yen, a decrease of 8,559 million yen in liabilities for retirement benefits, and disbursement of 8,066 million yen for payment of income taxes.

Net cash used in investment activities was 31,294 million yen (a year-on-year decrease of 2,837 million yen, or 8.3 %). This was mainly due to expenditure of 31,131 million yen in the purchase of property, plant and equipment.

Net cash used in financing activities was 37,492 million yen (6,596 million yen was provided by financing activities in the previous fiscal year). Major factors included expenditure of 37,463 million yen in the repayment of long-term loans and a net reduction of 27,390 million yen in short-term loans, compared to 29,524 million yen in proceeds from long-term loans.

After adding an increase of 1,772 million yen in translation adjustments to the above changes, cash and cash equivalents as of the end of the current fiscal year were 87,778 million yen, a decrease of 41,893 million yen (32.3%) from the previous consolidated fiscal year end.

Free cash flow, the difference between net cash provided by operating activities and net cash used in investing activities, amounted to -6,173 million yen. The proportion of net cash provided by operating activities to net sales was 3.6%.

# Main Financial Indexes: 11-Year Summary

Years ended March 31

		2005	2006	2007	2008
<b>FOR THE YEAR DATA</b>					
Net sales . . . . .	(Millions of yen)	388,349	434,837	483,818	533,985
Operating income . . . . .	(Millions of yen)	33,201	37,645	46,793	49,612
Operating margin . . . . .	(%)	8.5	8.7	9.7	9.3
Income (loss) before income taxes . . . .	(Millions of yen)	26,586	30,370	45,170	44,313
Net income (loss) . . . . .	(Millions of yen)	16,740	19,550	27,014	27,431
Capital expenditures . . . . .	(Millions of yen)	49,670	49,284	59,347	59,504
Depreciation . . . . .	(Millions of yen)	24,870	28,586	32,693	39,547
R&D costs . . . . .	(Millions of yen)	14,952	14,771	14,221	15,006

## YEAR-END DATA

Total assets . . . . .	(Millions of yen)	516,578	561,494	611,944	629,464
Net assets/Shareholders' equity . . . . .	(Millions of yen)	157,952	183,247	215,815	216,401
Inventories . . . . .	(Millions of yen)	93,167	107,047	107,131	109,969
Interest-bearing debt . . . . .	(Millions of yen)	176,185	183,198	197,911	212,874
Number of employees . . . . .		12,788	14,631	17,306	18,960

## PER SHARE DATA

Net assets . . . . .	(Yen)	341.93	396.73	445.61	445.98
Net income (loss):					
- Basic . . . . .	(Yen)	35.83	41.94	58.34	58.43
- Diluted . . . . .	(Yen)	32.94	38.55	53.74	54.59
Cash dividends . . . . .	(Yen)	8.50	11.00	16.00	19.00

## OTHER INFORMATION

Inventory Turnover Ratio . . . . .	(Times)	4.2	4.1	4.5	4.9
Net D/E ratio . . . . .	(Times)	0.79	0.80	0.79	0.86
Net income (loss)/Average total assets (ROA) . . . . .	(%)	3.4	3.6	4.6	4.4
Net income (loss)/ Average shareholders' equity (ROE) . . . . .	(%)	11.1	11.5	13.8	13.1
NTN-ROI*2 . . . . .	(%)	7.7	7.7	8.6	8.6
Shareholders' equity ratio . . . . .	(%)	30.6	32.6	34.2	33.3

\*1. In Financial Section, U.S. dollar amounts have been converted from yen, for convenience only, using the approximate exchange rate on March 31, 2015, which was U.S.\$1 = ¥120.17

\*2. NTN-ROI = Net operating income after tax / (Inventories + tangible fixed assets)



Thousands of US dollars\*1  
(except per share amounts)

2009	2010	2011	2012	2013	2014	2015	2015
527,100	452,746	530,056	543,468	539,595	638,971	701,900	5,840,892
9,479	1,399	24,560	20,724	7,278	33,004	43,851	364,908
1.8	0.3	4.6	3.8	1.3	5.2	6.2	6.2
(10,104)	(1,838)	22,855	16,357	(13,898)	(2,451)	37,063	308,421
(8,985)	(2,015)	14,399	5,993	(14,196)	(14,648)	23,353	194,333
49,594	21,504	29,700	54,440	48,979	33,162	31,266	260,181
45,759	40,702	35,936	34,175	34,841	39,315	40,392	336,124
17,402	14,687	15,697	17,157	16,174	17,821	18,088	150,520
627,613	618,802	632,001	693,258	768,462	848,037	856,277	7,125,547
192,223	214,551	210,353	212,126	211,743	213,369	262,559	2,184,897
140,466	126,663	136,985	155,107	163,287	166,484	184,128	1,532,229
275,996	231,638	223,284	271,978	360,802	381,767	359,105	2,988,308
20,679	17,959	19,172	20,789	21,398	22,156	23,360	23,360
376.77	374.19	376.05	370.19	375.84	374.68	461.21	3.84
(19.14)	(4.00)	27.08	11.27	(26.69)	(27.54)	43.91	0.37
—	—	—	—	—	—	—	—
13.00	8.00	10.00	10.00	0	2.00	6.00	0.05
3.8	3.6	3.9	3.5	3.3	3.8	3.8	
1.38	1.00	0.92	1.11	1.37	1.27	1.11	
(1.3)	(0.3)	2.3	0.9	(1.9)	(1.8)	2.7	
(4.3)	(1.1)	7.2	3.0	(7.2)	(7.3)	10.5	
1.5	0.2	4.2	3.4	1.1	4.6	6.3	
28.2	32.2	31.6	28.4	26.0	23.5	28.6	

# Risk Factors

Business results and the financial position of the NTN Group are subject to the following risks. It should be noted that the forward-looking statements contained in the following reflect judgments of the NTN Group as of the submission date of our securities report (June 25, 2015).

## 1) Economy

The NTN Group operates global production and sales networks, and supplies customers in various industrial sectors. Business results and the financial position of the NTN Group operations may be affected by the economic conditions in specific countries and business conditions in industries to which our customers belong.

## 2) Foreign Exchange Fluctuations

Overseas sales of the NTN Group account for over 50% of consolidated sales. This percentage is expected to increase further due to continued acceleration in the global business development of the NTN Group.

Overseas subsidiaries' foreign currency-denominated business results and financial positions are converted to yen for the preparation of consolidated financial statements. Moreover, many export transactions with overseas customers of the Company are conducted in foreign currencies. Although the NTN Group hedges risks through forward foreign exchange contracts and expansion of local procurement, effects of exchange rate fluctuations on business results and financial positions cannot be fully eliminated.

## 3) Declines in Market Prices

The competitive environment surrounding production and sales activities of the NTN Group is becoming harsher worldwide. As products from China and Eastern Europe are gaining ground, bearings have been affected by falling market prices. At the same time, against a backdrop of global price competition, calls for price reductions are mounting in the automotive industry, which accounts for over half of the NTN Group sales. Although the NTN Group works continuously to reduce costs while developing new products of high quality and high added value, business results and the NTN Group's financial position may be affected by downward pressure on market prices.

## 4) Rise in Raw Materials Prices

The NTN Group procures a wide range of raw materials from outside sources. To deal with cost increases, especially of steel materials, which pose a high weighting in materials costs, measures have been taken such as mark-ups on selling prices to reflect higher materials cost. In addition, the Group is targeting cost reductions through enhanced production yields and VA/VE methods. Nevertheless, business results and the NTN Group's financial position may be affected by stronger than expected increases in raw materials costs.

## 5) Disasters and Accidents

Production plants and facilities of the NTN Group and its transaction counterparts are exposed to the risk of damage from natural disasters such as earthquakes, floods, and fires. Although the NTN Group has put into place crisis management systems and stands ready to engage in measures to contain damage as much as possible, risks cannot be completely eliminated. Business performance and the financial status of the NTN Group may be affected by a natural disaster or by accidents.

## 6) Dependence on Specific Industries

The NTN Group's Bearings Division derives approximately half of its sales revenues from the automotive industry, which also accounts for more than half of sales of components that the Constant-velocity Joints Division produces for automotive power transmission to the drive axle. Dependence on the automotive industry is therefore high. Although the NTN Group works to increase sales of bearings and precision equipment products to the industrial machinery sector and implements policies to achieve a balanced sales structure, a rapid shift in demand in the automotive industry could potentially affect the NTN Group's business results and financial position.

## 7) Product Defects

To ensure product quality, the NTN Group works to satisfy customers' requirements concerning product functions and specifications, and strives to provide appropriate quality and product safety by enforcing quality assurance globally. However, a substantial product defect leading to a serious accident, claim for damages, or product recall could entail huge product warranty costs and potentially affect business performance and the financial position of the NTN Group. Although the NTN Group has taken out global product liability insurance, complete coverage for loss is not possible.

## 8) Intellectual Property

The NTN Group generates a wealth of innovative technologies and know-how in the process of new product development, representing valuable intellectual property for which the NTN Group files patent applications to protect its rights. However, business performance and the financial position of the NTN Group may be affected if a legal challenge is initiated against its intellectual property or if its intellectual property is infringed by a third party.

## 9) Global Operations

The NTN Group develops its business operations worldwide with overseas sales exceeding 50% of consolidated sales. Overseas business development is associated with the following risks:

- a. Risks from unforeseen change in tax systems of or between individual countries
- b. Risks from unforeseen change in laws of individual countries
- c. Difficulty in hiring and retaining appropriate staff
- d. Evolving technology levels and unstable labor relations in emerging economies
- e. Political instability in emerging economies

## 10) Statutory Regulations

The NTN Group is subject to the various laws and regulations (tax laws, environmental laws, occupational safety and health laws, economic statutes such as antimonopoly laws and anti-dumping laws, trade and exchange laws, and securities trading regulations) of the countries and regions in which it does business.

The NTN Group strives to abide by these laws and regulations and conduct fair business activities. However, if the NTN Group is ever be subject to litigation or involved in legal proceedings because of a violation of a law or regulation, and if the decision of such litigation or legal proceedings goes against the Group, this may have an affect on the business performance or the financial state of the Group. As well, if these laws or regulations change, or if new unforeseen laws or regulations are enacted, these also may have an affect on the business performance or the financial state of the Group.

# Consolidated Balance Sheet

March 31, 2015

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2015	2014	2015
<b>Assets</b>			
Current assets:			
Cash and cash equivalents (Note 14)	¥ 87,778	¥ 129,671	\$ 730,449
Short-term investments (Note 14)	1,321	2,076	10,993
Trade receivables (Note 14):			
Notes	13,027	12,261	108,405
Accounts	131,511	123,001	1,094,375
Electronically recorded monetary claims	1,786	96	14,862
Allowance for doubtful accounts	(939)	(895)	(7,814)
	145,385	134,463	1,209,828
Inventories (Note 5)	184,128	166,484	1,532,229
Deferred income taxes (Note 24)	11,062	7,952	92,053
Other current assets (Note 14)	31,306	27,102	260,514
Total current assets	460,980	467,748	3,836,066
Property, plant and equipment, at cost (Note 6):			
Land (Note 2(g))	34,237	32,632	284,905
Buildings and structures (Note 2(g))	198,483	190,395	1,651,685
Machinery, equipment and vehicles (Note 2(g))	785,762	746,301	6,538,753
Construction in progress	21,737	19,914	180,885
	1,040,219	989,242	8,656,228
Less accumulated depreciation	(724,167)	(679,851)	(6,026,188)
Property, plant and equipment, net (Note 26)	316,052	309,391	2,630,040
Investments and other assets:			
Investment securities (Notes 7 and 14)	40,251	30,413	334,950
Investments in unconsolidated subsidiaries and affiliates (Note 14)	16,734	15,540	139,253
Goodwill	193	266	1,606
Deferred income taxes (Note 24)	9,377	16,978	78,031
Other assets	12,690	7,701	105,601
Total investments and other assets	79,245	70,898	659,441
Total assets (Note 26)	¥ 856,277	¥ 848,037	\$ 7,125,547

See accompanying notes to the consolidated financial statements.

# Consolidated Balance Sheet

March 31, 2015

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2015	2014	2015
<b>Liabilities and net assets</b>			
Current liabilities:			
Short-term bank loans (Notes 8 and 14)	¥ 75,097	¥ 100,756	\$ 624,923
Current portion of long-term debt and lease obligations (Notes 8 and 14)	45,833	29,237	381,401
Trade payables (Note 14):			
Notes	1,300	14,693	10,818
Accounts	59,791	91,717	497,553
Electronically recorded obligations	57,778	—	480,803
	118,869	106,410	989,174
Accrued income taxes (Notes 14 and 24)	7,919	3,424	65,898
Deferred income taxes (Note 24)	4	—	33
Provision for loss on support to a related company (Note 19)	1,562	1,602	12,998
Provision for surcharge payments under the Anti-Monopoly Act (Note 22)	—	35	—
Other current liabilities	52,246	73,754	434,768
Total current liabilities (Note 26)	301,530	315,218	2,509,195
Long-term liabilities:			
Long-term debt and lease obligations (Notes 8 and 14)	239,456	253,192	1,992,644
Liability for retirement benefits (Note 9)	45,077	54,248	375,110
Provision for product defect compensation	940	932	7,822
Deferred income taxes (Note 24)	2,564	3,479	21,336
Other long-term liabilities	4,151	7,599	34,543
Total long-term liabilities (Note 26)	292,188	319,450	2,431,455
Contingent liabilities (Note 11)			
Net assets:			
Shareholders' equity (Note 10):			
Common stock:			
Authorized – 1,800,000,000 shares			
Issued – 532,463,527 shares in 2015 and 2014	54,347	54,347	452,251
Capital surplus	67,370	67,370	560,622
Retained earnings	106,128	82,856	883,150
Treasury stock, at cost:			
670,098 shares in 2015 and 619,746 shares in 2014	(559)	(534)	(4,652)
Total shareholders' equity	227,286	204,039	1,891,371
Accumulated other comprehensive income (loss):			
Net unrealized holding gain on securities (Note 7)	14,562	8,073	121,178
Translation adjustments	14,901	(1,728)	124,000
Retirement benefit liability adjustments	(11,478)	(11,111)	(95,515)
Total accumulated other comprehensive income (loss), net	17,985	(4,766)	149,663
Minority interests	17,288	14,096	143,863
Total net assets	262,559	213,369	2,184,897
Total liabilities and net assets	¥ 856,277	¥ 848,037	\$ 7,125,547

See accompanying notes to the consolidated financial statements.



# Consolidated Statement of Operations

Year ended March 31, 2015

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2015	2014	2015
Net sales (Note 26)	¥ 701,900	¥ 638,971	\$ 5,840,892
Cost of sales (Note 16)	570,197	525,935	4,744,920
Gross profit	131,703	113,036	1,095,972
Selling, general and administrative expenses (Note 16)	87,852	80,032	731,064
Operating income (Note 26)	43,851	33,004	364,908
Other income (expenses):			
Interest and dividend income	1,156	928	9,620
Interest expense	(4,769)	(4,822)	(39,685)
Equity in earnings of affiliates	987	706	8,213
Gain on sales of fixed assets (Note 17)	4,287	—	35,674
Gain on contribution of securities to employees' retirement benefit trust (Note 7)	—	1,272	—
Payment of prior year customs duties	(3,567)	—	(29,683)
Loss on surcharge payments under the Anti-Monopoly Act (Note 18)	(2,094)	(27,024)	(17,425)
Loss on liquidation of a subsidiary	(432)	—	(3,595)
Loss on impairment of fixed assets (Note 6)	—	(2,013)	—
Provision for loss on support to a related company (Note 19)	—	(1,600)	—
Reorganization expenses (Note 20)	—	(1,421)	—
Restructuring costs (Note 21)	—	(301)	—
Provision for surcharge payments under the Anti-Monopoly Act (Note 22)	—	(35)	—
Other, net	(2,356)	(1,145)	(19,606)
	(6,788)	(35,455)	(56,487)
Income (loss) before income taxes and minority interests	37,063	(2,451)	308,421
Income taxes (Note 24):			
Current	12,156	6,744	101,156
Deferred	888	4,887	7,390
	13,044	11,631	108,546
Income (loss) before minority interests	24,019	(14,082)	199,875
Minority interests	(666)	(566)	(5,542)
Net income (loss)	¥ 23,353	¥ (14,648)	\$ 194,333

See accompanying notes to the consolidated financial statements.

# Consolidated Statement of Comprehensive Income

Year ended March 31, 2015

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2015	2014	2015
Income (loss) before minority interests	¥ 24,019	¥ (14,082)	\$ 199,875
Other comprehensive income (loss) (Note 23):			
Net unrealized holding gain on securities (Note 7)	6,489	2,863	53,999
Translation adjustments	17,513	15,378	145,735
Retirement benefit liability adjustments	(284)	1,821	(2,363)
Share of other comprehensive income of affiliates accounted for by the equity method	1,023	1,980	8,513
Other comprehensive income, net	24,741	22,042	205,884
Comprehensive income	¥ 48,760	¥ 7,960	\$ 405,759
Total comprehensive income attributable to:			
Shareholders of NTN Corporation	¥ 46,104	¥ 6,226	\$ 383,657
Minority interests	¥ 2,656	¥ 1,734	\$ 22,102

See accompanying notes to the consolidated financial statements.

# Consolidated Statement of Changes in Net Assets

March 31, 2015

	Millions of yen									
	Number of shares in issue	Common stock	Capital surplus	Retained earnings	Treasury stock, at cost	Net unrealized holding gain on securities	Translation adjustments	Retirement benefit liability adjustments	Minority interests	Total net assets
Balance at April 1, 2013	532,463,527	¥ 54,347	¥ 67,370	¥ 96,740	¥ (517)	¥ 5,211	¥ (18,128)	¥ (5,119)	¥ 11,839	¥ 211,743
Net loss	—	—	—	(14,648)	—	—	—	—	—	(14,648)
Net effect of change in scope of consolidation	—	—	—	764	—	—	—	—	—	764
Purchases of treasury stock	—	—	—	—	(18)	—	—	—	—	(18)
Sales of treasury stock	—	—	—	—	1	—	—	—	—	1
Other changes	—	—	—	—	—	2,862	16,400	(5,992)	2,257	15,527
Balance at April 1, 2014	532,463,527	54,347	67,370	82,856	(534)	8,073	(1,728)	(11,111)	14,096	213,369
Cumulative effect of change in accounting principle (Note 3)	—	—	—	2,312	—	—	—	—	—	2,312
Restated balance at April 1, 2014	532,463,527	54,347	67,370	85,168	(534)	8,073	(1,728)	(11,111)	14,096	215,681
Cash dividends paid	—	—	—	(2,393)	—	—	—	—	—	(2,393)
Net income	—	—	—	23,353	—	—	—	—	—	23,353
Purchases of treasury stock	—	—	—	—	(25)	—	—	—	—	(25)
Sales of treasury stock	—	—	—	—	0	—	—	—	—	0
Other changes	—	—	—	—	—	6,489	16,629	(367)	3,192	25,943
<b>Balance at March 31, 2015</b>	<b>532,463,527</b>	<b>¥ 54,347</b>	<b>¥ 67,370</b>	<b>¥ 106,128</b>	<b>¥ (559)</b>	<b>¥ 14,562</b>	<b>¥ 14,901</b>	<b>¥ (11,478)</b>	<b>¥ 17,288</b>	<b>¥ 262,559</b>

	Thousands of U.S. dollars (Note 1)								
	Common stock	Capital surplus	Retained earnings	Treasury stock, at cost	Net unrealized holding gain on securities	Translation adjustments	Retirement benefit liability adjustments	Minority interests	Total net assets
Balance at April 1, 2014	\$ 452,251	\$ 560,622	\$ 689,490	\$ (4,444)	\$ 67,180	\$ (14,380)	\$ (92,461)	\$ 117,301	\$ 1,775,559
Cumulative effect of change in accounting principle (Note 3)	—	—	19,240	—	—	—	—	—	19,240
Restated balance at April 1, 2014	452,251	560,622	708,730	(4,444)	67,180	(14,380)	(92,461)	117,301	1,794,799
Cash dividends paid	—	—	(19,913)	—	—	—	—	—	(19,913)
Net income	—	—	194,333	—	—	—	—	—	194,333
Purchases of treasury stock	—	—	—	(208)	—	—	—	—	(208)
Sales of treasury stock	—	—	—	0	—	—	—	—	0
Other changes	—	—	—	—	53,998	138,380	(3,054)	26,562	215,886
Balance at March 31, 2015	\$ 452,251	\$ 560,622	\$ 883,150	\$ (4,652)	\$ 121,178	\$ 124,000	\$ (95,515)	\$ 143,863	\$ 2,184,897

See accompanying notes to the consolidated financial statements.

# Consolidated Statement of Cash Flows

March 31, 2015

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2015	2014	2015
<b>Cash flows from operating activities:</b>			
Income (loss) before income taxes and minority interests	¥ 37,063	¥ (2,451)	\$ 308,421
Adjustments for:			
Depreciation and amortization	40,392	39,315	336,124
Loss on impairment of fixed assets (Note 6)	—	2,197	—
Amortization of goodwill	55	134	458
Decrease in provision for surcharge payments under the Anti-Monopoly Act	(35)	(7,196)	(291)
Decrease in provision for employees' early retirement incentive plans	—	(5,860)	—
(Decrease) increase in provision for loss on support to a related company	(40)	1,559	(333)
Increase (decrease) in allowance for doubtful accounts	32	(122)	266
Increase in allowance for directors' and corporate auditors' bonuses	92	12	765
Increase (decrease) in provision for product defect compensation	5	(255)	42
(Decrease) increase in liability for retirement benefits	(8,559)	9,100	(71,224)
(Decrease) increase in account payable for Anti-Monopoly Act	(27,926)	27,024	(232,387)
(Decrease) increase in account payable for reorganization expenses	(889)	1,138	(7,398)
Decrease in other current and long-term liabilities resulting from amendment of pension plans	(10)	(999)	(83)
Surcharge payment under Anti-Monopoly Act	30,058	7,231	250,129
Severance payments under early retirement incentive plans	—	10,698	—
Interest and dividend income	(1,156)	(928)	(9,620)
Interest expense	4,769	4,822	39,685
Translation adjustments and foreign exchange loss (gain), net	459	(1,420)	3,819
Equity in earnings of affiliates	(987)	(706)	(8,213)
Gain on sales of fixed assets, net	(4,287)	—	(35,674)
Gain on contribution of securities to employees' retirement benefit trust	—	(1,272)	—
Contribution to employees' retirement benefit trust	5,000	1,864	41,608
Increase in trade receivables	(6,892)	(7,197)	(57,352)
(Increase) decrease in inventories	(10,522)	9,105	(87,559)
Increase in trade payables	11,794	14,804	98,144
Other	2,654	(4,039)	22,085
Subtotal	71,070	96,558	591,412
Interest and dividend income received	1,820	1,576	15,145
Interest paid	(4,645)	(4,912)	(38,653)
Payment for loss of Anti-Monopoly Act	(30,058)	(7,231)	(250,129)
Severance payments under early retirement incentive plans	—	(10,698)	—
Payment for contribution to employees' retirement benefit trust	(5,000)	—	(41,608)
Income taxes paid	(8,066)	(6,235)	(67,121)
Net cash provided by operating activities	¥ 25,121	¥ 69,058	\$ 209,046
<b>Cash flows from investing activities:</b>			
Increase in short-term investments	(78)	(323)	(649)
Purchases of property, plant and equipment	(31,131)	(33,351)	(259,058)
Proceeds from sales of property, plant and equipment	5,117	—	42,581
Proceeds from upfront portion for sales of property, plant and equipment	—	1,251	—
Purchases of other assets	(4,645)	(1,843)	(38,654)
Purchases of investment in subsidiaries	—	(37)	—
Other	(557)	172	(4,635)
Net cash used in investing activities	(31,294)	(34,131)	(260,415)
<b>Cash flows from financing activities:</b>			
Decrease in short-term bank loans, net	(27,390)	(11,594)	(227,927)
Proceeds from long-term debt	29,524	83,694	245,685
Repayment of long-term debt, including current portion	(37,463)	(65,710)	(311,750)
Proceeds from issuance of common stock to minority shareholders of consolidated subsidiaries	980	801	8,155
Cash dividends paid	(2,393)	—	(19,913)
Repayment of lease obligations	(274)	(277)	(2,280)
Other	(476)	(318)	(3,961)
Net cash (used in) provided by financing activities	(37,492)	6,596	(311,991)
Effect of exchange rate changes on cash and cash equivalents	1,772	1,515	14,746
Net (decrease) increase in cash and cash equivalents	(41,893)	43,038	(348,614)
Cash and cash equivalents at beginning of the year	129,671	86,100	1,079,063
Increase in cash and cash equivalents resulting from inclusion of subsidiaries in consolidation	—	533	—
Cash and cash equivalents at end of the year	¥ 87,778	¥ 129,671	\$ 730,449

See accompanying notes to the consolidated financial statements.

# Notes to Consolidated Financial Statements

March 31, 2015

## 1. Basis of Preparation

The accompanying consolidated financial statements of NTN Corporation (the "Company") and consolidated subsidiaries are prepared on the basis of accounting principles generally accepted in Japan, which are different in certain respects as to the application and disclosure requirements of International Financial Reporting Standards, and are compiled from the consolidated financial statements prepared by the Company as required by the Financial Instruments and Exchange Act of Japan.

In preparing the accompanying consolidated financial statements, certain reclassifications have been made to the consolidated financial statements issued domestically in order to present them in a format which is more familiar to readers outside Japan. In addition, certain notes included herein are not required under accounting principles generally accepted in Japan but are presented as additional information.

Certain amounts in the prior year's financial statements have been reclassified to conform to the current year's presentation. Such reclassification had no effect on consolidated net income or net assets.

The translation of yen amounts into U.S. dollar amounts is included solely for the convenience of readers outside Japan and has been made at ¥120.17 = U.S.\$1.00, the exchange rate prevailing on March 31, 2015. This translation should not be construed as a representation that yen can be converted into U.S. dollars at the above or any other rate.

## 2. Summary of Significant Accounting Policies

### (a) Principles of consolidation

The accompanying consolidated financial statements include the accounts of the Company and the significant companies which it controls directly or indirectly. Companies over which the Company exercises significant influence in terms of their operating and financial policies have been included in the accompanying consolidated financial statements on an equity basis.

The financial statements of certain consolidated subsidiaries whose fiscal year end is December 31 have been included in consolidation on the basis of a full fiscal year closing on March 31 for consolidation purposes.

### (b) Foreign currency translation

Monetary assets and liabilities denominated in foreign currencies are translated into yen at the rates of exchange in effect at the balance sheet date. Revenues and expenses are translated at the rates of exchange prevailing when the transactions were made.

Assets and liabilities of overseas consolidated subsidiaries are translated into yen at the exchange rates in effect at the respective balance sheet dates, except for the components of net assets excluding minority interests which are translated at the respective historical rates. Revenue and expenses are translated at the average rates of exchange for the respective years. Differences arising from translation are reflected in "Translation adjustments" and "Minority interests" in the accompanying consolidated balance sheets and statements of changes in net assets.

### (c) Cash and cash equivalents

Cash and cash equivalents consist of cash on hand, deposits with banks withdrawable on demand, and short-term investments which are readily convertible to cash subject to an insignificant risk of any change in their value and which were purchased with an original maturity of three months or less.

### (d) Allowance for doubtful accounts

The allowance for doubtful accounts is computed based on the actual historical percentage of bad debts and an estimate of uncollectible amounts determined after an analysis of specific individual receivables.

### (e) Short-term investments and investment securities

The accounting standard for financial instruments requires that securities be classified into three categories: trading, held-to-maturity or other securities. Trading securities are carried at fair value and held-to-maturity debt securities are carried at amortized cost. Marketable securities classified as other securities are carried at fair value with any changes in unrealized holding gain or loss, net of the applicable income taxes, included directly in net assets. Cost of securities sold is determined by the moving average method. Non-marketable securities classified as other securities are carried at cost based on the moving average method.

### (f) Inventories

Inventories are principally stated at lower of cost, determined by the average method, or net selling value.

### (g) Property, plant and equipment

Property, plant and equipment are stated at cost. Depreciation is computed at rates based on the estimated useful lives of the respective assets by the declining-balance method, except for the buildings and assets of foreign consolidated subsidiaries to which the straight-line method is principally applied.

The principal estimated useful lives are as follows:

Buildings and structures	10 to 50 years
Machinery, equipment and vehicles	5 to 12 years

Contributions granted by national and municipal governments are deducted directly from the acquisition costs of the related fixed assets as stipulated in the Corporation Tax Law of Japan. The property, plant and equipment accounts on the consolidated balance sheets at March 31, 2015 and 2014 were reduced by the following amounts:

	Millions of yen		Thousands of U.S. dollars
	2015	2014	2015
Land	¥ 799	¥ 799	\$ 6,649
Buildings and structures	478	529	3,978
Machinery, equipment and vehicles	332	420	2,762
	¥1,609	¥1,748	\$13,389

### (h) Provision for loss on support to a related company

Provision for loss on support to a related company is provided for the possible loss on support provided to a related company due to the subsidiary's financial condition and other factors.

### (i) Provision for surcharge payments under the Anti-Monopoly Act

Provision for surcharge payments under the Anti-Monopoly Act is provided for the expected corresponding payments.

### (j) Liability for retirement benefits

Liability for retirement benefits has been provided principally at an amount calculated based on the retirement benefit obligation after the fair value of the pension plan assets are deducted. The estimated benefit is attributed to each period by the benefit formula method over the estimated years of service of the eligible employees.

Past service cost is amortized as incurred primarily by the straight-line method over a period of principally 15 years, which is within the estimated average remaining years of service of the eligible employees.

Net unrecognized actuarial gain or loss is amortized commencing in the year following the year in which the gain or loss was recognized primarily by the straight-line method over a period of principally 15 years, which is within the estimated average remaining years of service of the eligible employees.

### (k) Provision for product defect compensation

Provision for product defect compensation is provided at an estimated amount in order to cover the anticipated compensation.



**(l) Leases**

For lease transactions involving the transfer of ownership, the leased assets are depreciated by the same methods used for owned fixed assets.

For lease transactions not involving the transfer of ownership, leased assets are depreciated over the lease period using the straight-line method with a nil residual value.

The Company continues to account for finance lease transactions not involving the transfer of ownership that commenced prior to April 1, 2008 as operating leases.

**(m) Goodwill**

Goodwill is being amortized on the straight-line method over the estimated period of the economic benefits.

**(n) Research and development costs and computer software**

Research and development costs are charged to income as incurred.

Expenditures relating to computer software developed for internal use are charged to income when incurred, except if the software is expected to contribute to the generation of income or to future cost savings. Such expenditures are capitalized as assets and are amortized by the straight-line method over their respective estimated useful lives, generally 5-year period.

**(o) Deferred income taxes**

Deferred income taxes are provided for temporary differences between the balances of assets and liabilities reported for financial reporting purposes and the corresponding balances for tax reporting purposes.

**(p) Derivative financial instruments and hedging activities**

All derivatives are stated at fair value with any changes in fair value included in net income for the period in which they arise, except for derivatives which meet the criteria for deferral hedge accounting under which realized gain or loss, net of the applicable income taxes, is deferred as a component of net assets. Receivables and payables hedged by forward foreign exchange contracts which meet certain conditions are translated at the corresponding foreign exchange contract rates. Interest-rate swaps which meet certain conditions are accounted for as if the interest rates applied to the interest-rate swaps had originally applied to the underlying debt.

Interest-rate and cross currency swaps which meet certain conditions are accounted for as if the interest rates and currencies applied to the interest-rate and cross currency swaps had originally applied to the underlying debt.

**(q) Distribution of retained earnings**

Under the Corporation Law of Japan and the Company's Articles of Incorporation, the distribution of retained earnings with respect to a given financial period is made by resolution of the shareholders at a general meeting held subsequent to the close of the financial period. The distribution of retained earnings with respect to the interim financial period is made by resolution of the Board of Directors. The accounts for the period do not reflect such distributions.

**(r) Consolidated taxation system**

The Company and certain domestic consolidated subsidiaries adopted the consolidated taxation system, which allows companies to file tax returns based on the combined profits or losses of the parent company and its wholly owned domestic subsidiaries.

**3. Accounting Changes****Accounting Standards for Retirement Benefits**

The Company and its domestic subsidiaries adopted Section 35 of "Accounting Standard for Retirement Benefits" (Accounting Standards Board of Japan ("ASBJ") Statement No. 26 of May 17, 2012) and the main clause of Section 67 of "Guidance on Accounting Standard for Retirement Benefits" (ASBJ Guidance No. 25 of March 26, 2015) effective from April 1, 2014. As a result, the methods for calculating the retirement benefit obligation and service cost have been revised in the following respects: the method for attributing projected benefits to each period has been changed from the straight-line method to the benefit formula method, and the method for determining the discount rate has been changed to use a single weighted-average discount rate reflecting the expected timing and amount of benefit payments.

The cumulative effect of changing the method for calculating the retirement benefit obligation and service cost was recognized by adjusting retained earnings at the beginning of the fiscal year ended March 31, 2015, in accordance with the transitional treatment provided in Paragraph 37 of Accounting Standard for Retirement Benefits.

As a result, the liability for retirement benefits and deferred income taxes decreased ¥3,557 million (\$29,600 thousand) and ¥1,245 million (\$10,360 thousand), respectively, and retained earnings increased ¥2,312 million (\$19,240 thousand) at the beginning of the fiscal year ended March 31, 2015. The effects of this change on operating income, ordinary income, and income before income taxes and equity in earnings of affiliated companies are insignificant. In addition, the effects on net assets per share and net income per share as of and for the year ended March 31, 2015 are also insignificant.

**4. Standards Issued but Not Yet Effective****Accounting Standards for Business Combinations**

On September 13, 2013, the ASBJ issued "Revised Accounting Standard for Business Combinations" (ASBJ Statement No.21), "Revised Accounting Standard for Consolidated Financial Statements" (ASBJ Statement No.22), "Revised Accounting Standard for Business Divestitures" (ASBJ Statement No.7), "Revised Accounting Standard for Earnings Per Share" (ASBJ Statement No.2), "Revised Guidance on Accounting Standard for Business Combinations and Accounting Standard for Business Divestitures" (ASBJ Guidance No.10) and "Revised Guidance on Accounting Standard for Earnings Per Share" (ASBJ Guidance No.4).

Under these revised accounting standards, the accounting treatment for any changes in a parent's ownership interest in a subsidiary when the parent retains control over the subsidiary and the corresponding accounting for acquisition-related costs were revised. In addition, the presentation method of net income was amended, the reference to "minority interests" was changed to "non-controlling interests," and accounting treatment for adjustments to provisional amounts was also changed.

The Company expects to adopt these revised accounting standards and guidance from the beginning of the fiscal year ending March 31, 2016. In addition, the determination of provisional accounting treatments will be adopted for business combinations conducted on or after the beginning of the fiscal year ending March 31, 2016.

At present, the Company believes these revised standards will have no effect on its consolidated financial statements.

**5. Inventories**

Inventories at March 31, 2015 and 2014 consisted of the following:

	Millions of yen		Thousands of U.S. dollars
	2015	2014	2015
Finished goods	¥103,307	¥ 90,541	\$ 859,673
Work in process	46,512	45,097	387,052
Raw materials and supplies	34,309	30,846	285,504
	¥184,128	¥166,484	\$1,532,229

## 6. Impairment of Fixed Assets

The Company and its consolidated subsidiaries group fixed assets used for manufacturing by management segment into minimum units which generate identifiable cash flows (e.g., a factory). They also group fixed assets used at the head office or used for sales activities as shared assets.

The Company and its consolidated subsidiaries wrote down the following assets to their respective net recoverable values because the Company and its consolidated subsidiaries do not expect any future use for them and do not expect them to be recoverable. Consequently, the Company and its consolidated subsidiaries recorded related losses on impairment of fixed assets of ¥2,013 million in the accompanying consolidated statement of operations for the year ended March 31, 2014:

			Millions of yen
Location	Usage	Classification	2014
Japan	Production equipment	Machinery and equipment	¥ 167
		Construction in progress	453
	Employee recreational facilities	Buildings and structures	52
		Land	15
		Other	0
Americas	Production equipment	Machinery and equipment	1,040
		Construction in progress	185
		Other	101
			¥2,013

The recoverable value of the fixed assets presented in the above table has been measured primarily at net realizable value based on appraisals conducted by real estate appraisers or value in use. If a fixed asset cannot be sold or diverted to other usage, such asset is valued at nil.

The Company recorded reorganization expenses of ¥1,421 million, which included loss on impairment of fixed assets in the amount of ¥184 million for the year ended March 31, 2014. The aggregate amount of ¥2,197 million of loss on impairment of fixed assets included ¥2,013 million as shown in the above table and the ¥184 million, which was included in the reorganization expenses mentioned above, was presented as a component of cash flows from operating activities in the consolidated statement of cash flows for the year ended March 31, 2014.

## 7. Securities

(a) Information regarding marketable securities classified as other securities at March 31, 2015 and 2014 is summarized as follows:

	Millions of yen					
	2015			2014		
	Carrying value	Acquisition costs	Unrealized gain (loss)	Carrying value	Acquisition costs	Unrealized gain (loss)
Securities whose carrying value exceeds their acquisition costs:						
Equity securities	¥37,244	¥16,170	¥21,074	¥26,129	¥13,673	¥12,456
Securities whose carrying value does not exceed their acquisition costs:						
Equity securities	595	627	(32)	2,779	3,124	(345)
Other	10,000	10,000	—	35,000	35,000	—
Subtotal	10,595	10,627	(32)	37,779	38,124	(345)
Total	¥47,839	¥26,797	¥21,042	¥63,908	¥51,797	¥12,111

	Thousands of U.S. dollars		
	2015		
	Carrying value	Acquisition costs	Unrealized gain (loss)
Securities whose carrying value exceeds their acquisition costs:			
Equity securities	\$309,927	\$134,559	\$175,368
Securities whose carrying value does not exceed their acquisition costs:			
Equity securities	4,952	5,218	(266)
Other	83,215	83,215	—
Subtotal	88,167	88,433	(266)
Total	\$398,094	\$222,992	\$175,102

(b) Sales and aggregate gain on investment securities are summarized as follows:

The Company contributed certain available-for-sale securities with a fair value of ¥1,864 million to the employee retirement benefit trust for the Company's contributory pension plan, and recognized a gain of ¥1,272 million for the year ended March 31, 2014. There were no sales of investment securities for the year ended March 31, 2015.

## 8. Short-Term Bank Loans, Long-Term Debt and Lease Obligations

Short-term bank loans principally represent short-term notes with average annual interest rates of 0.65% and 0.78% at March 31, 2015 and 2014, respectively.

Long-term debt and lease obligations at March 31, 2015 and 2014 consisted of the following:

	Millions of yen		Thousands of U.S. dollars
	2015	2014	2015
Loans from banks and other financial institutions, due through 2025, at an average annual interest rate of 1.5%	¥284,009	¥281,011	\$2,363,394
Lease obligations due through 2026	1,280	1,418	10,651
	285,289	282,429	2,374,045
Less current portion	(45,833)	(29,237)	(381,401)
	¥239,456	¥253,192	\$1,992,644

The aggregate annual maturities of long-term debt and lease obligations subsequent to March 31, 2015 are summarized as follows:

Year ending March 31,	Millions of yen	Thousands of U.S. dollars
2016	¥ 45,833	\$ 381,401
2017	71,597	595,798
2018	72,675	604,768
2019	45,520	378,797
2020	15,357	127,794
2021 and thereafter	34,307	285,487
	¥285,289	\$2,374,045

## 9. Retirement Benefits

### 1. Outline of retirement benefits for employees

The Company and certain domestic consolidated subsidiaries have defined benefit pension plans (i.e., corporate pension fund plans and lump-sum payment plans), covering substantially all employees who are entitled to lump-sum or annuity payments, the amounts of which are determined by reference to their basic rates of pay, length of service, and the conditions under which termination occurs. They also have defined contribution pension plans and advance payment plans. Certain overseas consolidated subsidiaries also have defined benefit pension plans and/or defined contribution pension plans. The Company has also established a employees' retirement benefit trust.

### 2. Defined benefit pension plans

(1) The changes in the retirement benefit obligation for the years ended March 31, 2015 and 2014 are as follows:

	Millions of yen		Thousands of U.S. dollars
	2015	2014	2015
Retirement benefit obligation at the beginning of the year	¥106,253	¥110,526	\$884,189
Cumulative effect of change in accounting principle	(3,557)	—	(29,600)
Restated balance at the beginning of the year	102,696	110,526	854,589
Service cost	2,995	3,311	24,923
Interest cost	1,993	2,282	16,585
Actuarial gain and loss	6,437	(658)	53,566
Benefits paid	(7,038)	(13,204)	(58,567)
Other	2,581	3,996	21,478
Retirement benefit obligation at the end of the year	¥109,664	¥106,253	\$912,574

\*Certain domestic consolidated subsidiaries calculate the liability for retirement benefits based on the simplified method.

(2) The changes in plan assets for the years ended March 31, 2015 and 2014 are as follows:

	Millions of yen		Thousands of U.S. dollars
	2015	2014	2015
Plan assets at fair value at the beginning of the year	¥52,004	¥ 56,541	\$432,754
Expected return on plan assets	1,945	1,769	16,185
Actuarial gain	4,525	3,096	37,655
Contributions by the employers	7,328	4,111	60,980
Benefits paid	(3,964)	(16,221)	(32,987)
Other	2,749	2,709	22,877
Plan assets at fair value at the end of the year	¥64,587	¥ 52,005	\$537,464

(3) The balance of retirement benefit obligation and plan assets at fair value, liabilities and assets recognized in consolidated balance sheets as of March 31, 2015 and 2014 are as follows:

	Millions of yen		Thousands of U.S. dollars
	2015	2014	2015
Funded retirement benefit obligation	¥102,203	¥ 98,539	\$ 850,487
Plan assets at fair value	(64,587)	(52,005)	(537,464)
	37,616	46,534	313,023
Unfunded retirement benefit obligation	7,461	7,714	62,087
Net amount of liabilities and assets recognized in the consolidated balance sheet	45,077	54,248	375,110
Liability for retirement benefits	45,077	54,248	375,110
Net amount of liabilities and assets recognized in the consolidated balance sheet	¥ 45,077	¥ 54,248	\$ 375,110

(4) The components of retirement benefit expenses for the years ended March 31, 2015 and 2014 are as follows:

	Millions of yen		Thousands of U.S. dollars
	2015	2014	2015
Service cost	¥ 2,995	¥ 3,311	\$ 24,923
Interest cost	1,993	2,282	16,585
Expected return on plan assets	(1,945)	(1,769)	(16,185)
Amortization:			
Actuarial loss	2,210	2,566	18,391
Past service cost	(195)	(184)	(1,624)
Retirement benefit expenses	¥ 5,058	¥ 6,206	\$ 42,090

(5) The components of retirement benefit liability adjustments included in other comprehensive income (before tax effect) for the years ended March 31, 2015 and 2014 are as follows:

	Millions of yen		Thousands of U.S. dollars
	2015	2014	2015
Actuarial loss	¥ 298	¥2,068	\$ 2,480
Past service cost	(203)	8	(1,689)
Total	¥ 95	¥2,076	\$ 791

(6) The components of retirement benefit liability adjustments included in accumulated other comprehensive income (before tax effect) as of March 31, 2015 and 2014 are as follows:

	Millions of yen		Thousands of U.S. dollars
	2015	2014	2015
Unrecognized actuarial gain	¥(16,785)	¥(17,084)	\$(139,677)
Unrecognized past service cost	(148)	55	(1,232)
Total	¥(16,933)	¥(17,029)	\$(140,909)

(7) The fair value of plan assets, by major category, as a percentage of total plan assets as of March 31, 2015 and 2014 are as follows:

	2015	2014
Equities	49.5%	51.3%
Bonds	20.7	24.4
General accounts at life insurance companies	16.2	18.7
Other	13.6	5.6
Total	100.0%	100.0%

The expected long-term rate of return on plan assets is determined as a result of consideration of both the portfolio allocation at present and anticipated in the future, and long-term expected rate of return from multiple plan assets.

(8) The assumptions used in accounting for the defined benefit plans are as follows:

	2015	2014
Discount rate	Principally 1.2%	Principally 1.5%
Expected long-term rate of return on plan assets	Principally 2.5%	Principally 2.5%



### 3. Defined contribution pension plans

	Millions of yen		Thousands of U.S. dollars
	2015	2014	2015
Contributions to defined contribution pension plans	<b>¥1,444</b>	¥1,290	<b>\$12,016</b>

## 10. Shareholders' Equity

(a) The Corporation Law of Japan (the "Law") provides that an amount equal to 10% of the amount to be disbursed as distributions of capital surplus (other than the capital reserve) and retained earnings (other than the legal reserve) be transferred to the capital reserve and the legal reserve, respectively, until the sum of the capital reserve and the legal reserve equals 25% of the capital stock account. Such distributions can be made at any time by resolution of the shareholders or by the Board of Directors if certain conditions are met.

Retained earnings include the legal reserve provided in accordance with the provisions of the Law. The legal reserve of the Company included in retained earnings amounted to ¥8,639 million (\$71,890 thousand) at March 31, 2015 and 2014.

(b) Movements in shares issued and treasury stock during the years ended March 31, 2015 and 2014 are summarized as follows:

	Number of shares			
	2015			
	April 1, 2014	Increase	Decrease	March 31, 2015
Shares issued: Common stock	<b>532,463,527</b>	—	—	<b>532,463,527</b>
Treasury stock: Common stock	<b>619,746</b>	<b>51,285</b>	<b>933</b>	<b>670,098</b>
	2014			
	April 1, 2013	Increase	Decrease	March 31, 2014
Shares issued: Common stock	532,463,527	—	—	532,463,527
Treasury stock: Common stock	576,643	44,948	1,845	619,746

The increases in treasury stock were due to purchases of shares of less than one voting unit and the decreases in treasury stock were due to sales of shares at requests of shareholders owning less than one voting unit for the years ended March 31, 2015 and 2014.

## 11. Contingent Liabilities

### Arbitration for claim of damages

NTN-SNR ROULEMENTS (hereinafter referred as NTN-SNR), a consolidated subsidiary, has been involved in arbitration proceedings since November 2012. One automotive customer submitted a claim to arbitration and requested the payment in the amount of \$57,774 thousand (¥6,943 million) for damages due to allegedly defective products provided by NTN-SNR.

With subsequent arbitration proceedings, the claim for damages has increased to \$77,282 thousand (¥9,287 million) related to these products. NTN-SNR continues to present counterarguments against this claim appropriately.

Depending on the results of the arbitration, the results of operations of the Company and its consolidated subsidiaries could be affected. However, it is currently difficult to make reasonable estimates of the future possible effects on the results of operations and financial position of the Company and its consolidated subsidiaries.

## 12. Finance Lease Transactions That Do Not Transfer Ownership

### Lessees' accounting

The following pro forma amounts represent the acquisition costs, accumulated depreciation and net book value of property leased to the Company and its consolidated subsidiaries at March 31, 2015 and 2014, which would have been reflected in the accompanying consolidated balance sheets if finance leases other than those which transfer the ownership of the leased property to the Company and its consolidated subsidiaries (which are currently accounted for as operating leases) had been capitalized:

	Millions of yen					
	2015			2014		
	Acquisition costs	Accumulated depreciation	Net book value	Acquisition costs	Accumulated depreciation	Net book value
Buildings and structures	<b>¥1,412</b>	<b>¥1,252</b>	<b>¥160</b>	¥1,412	¥1,195	¥217
Machinery, equipment and vehicles	—	—	—	4	4	0
Other assets	—	—	—	12	11	1
	<b>¥1,412</b>	<b>¥1,252</b>	<b>¥160</b>	¥1,428	¥1,210	¥218

	Thousands of U.S. dollars		
	2015		
	Acquisition costs	Accumulated depreciation	Net book value
Buildings and structures	<b>\$11,750</b>	<b>\$10,419</b>	<b>\$1,331</b>
Machinery, equipment and vehicles	—	—	—
Other assets	—	—	—
	<b>\$11,750</b>	<b>\$10,419</b>	<b>\$1,331</b>

Lease payments relating to finance leases accounted for as operating leases in the accompanying consolidated financial statements amounted to ¥58 million (\$483 thousand) and ¥59 million for the years ended March 31, 2015 and 2014, respectively. Depreciation of the leased assets computed by the straight-line method over the respective lease terms with a nil residual value amounted to ¥58 million (\$483 thousand) and ¥59 million for the years ended March 31, 2015 and 2014, respectively.

Future minimum lease payments subsequent to March 31, 2015 for finance leases accounted for as operating leases are summarized as follows:

Years ending March 31,	Millions of yen	Thousands of U.S. dollars
2016	¥ 56	\$ 466
2017 and thereafter	104	865
Total	¥160	\$1,331

The acquisition costs and future minimum lease payments under finance leases presented in the above tables include the imputed interest expense.

No loss on impairment was allocated to any leased assets for the years ended March 31, 2015 and 2014.

### 13. Operating Leases

Future minimum lease payments subsequent to March 31, 2015 for non-cancelable operating leases were as follows:

Years ending March 31,	Millions of yen	Thousands of U.S. dollars
2016	¥ 905	\$ 7,531
2017 and thereafter	3,919	32,612
Total	¥4,824	\$40,143

### 14. Financial Instruments – Fair Value

#### Overview

##### (a) Policy for financial instruments

The Company and its subsidiaries (collectively, the “Group”) raise necessary funds in accordance with management plans mainly by bank borrowings in support of operations related to the manufacture and sales of bearings, constant-velocity joints (CVJs) and precision equipments. The Group utilizes bank borrowings for short-term operating funds, and bank borrowings for long-term capital investments and finances. Temporary surplus funds are managed by low-risk financial assets. The Group utilizes derivatives to avoid or mitigate risks as described in the later part of this note and does not hold them for speculative purposes.

##### (b) Types of financial instruments and related risks

Trade receivables, notes, accounts receivable and electronically recorded monetary claims, are exposed to credit risk of customers. In addition, as a result of the business of the Group, which operates globally, foreign currency trade receivables are exposed to currency rate fluctuation risk, which is mitigated by utilizing forward foreign currency exchange contracts. Securities are mainly composed of stocks of the companies with which the Group has business relationships and they are exposed to fluctuation risk of market prices.

Trade payables, notes, accounts payable and electronically recorded obligations, are due within one year. Certain trade payables resulting from the import of raw materials are denominated in foreign currencies. These are exposed to fluctuation risk of foreign currencies. However, the risk is mitigated because the trade payables, notes and accounts payable denominated in foreign currencies are within the range of accounts receivable denominated in the same currencies.

Loans are mainly utilized for business operations of the Group. Short-term loans are mainly utilized for financing of operating activities. Long-term loans are mainly utilized for capital investments and financing. These have maturity dates of 10 years or less, at the longest, subsequent to March 31, 2015. Certain loans are exposed to fluctuation risk of interest rates and fluctuation risk of exchange rates and this risk is hedged by derivative transactions of interest rate swap agreements and cross currency swap agreements.

The Group has a policy to utilize derivative transactions involving forward foreign currency exchange contracts, currency option agreements, currency swap agreements, interest rate swap agreements and interest rate option agreements for the purpose of

avoiding future fluctuation risk of foreign currencies trade receivables and payables and mitigating future fluctuation risk of interest rate of loans and corporate bonds. The Group utilized forward foreign currency exchange contracts, interest rate swap agreements and cross currency swap agreements for the year ended March 31, 2015. Refer to “(p) Derivative financial instruments and hedging activities” in Note 2. “Summary of Significant Accounting Policies.”

##### (c) Risk management for financial instruments

(i) Monitoring of credit risk (the risk that customers or counterparties may default)

In accordance with internal rules and manual, the credit management section periodically monitors financial conditions of major customers, manages collection due dates and balances of each customer and tries to identify credit risk of customers with worsening financial conditions at the early stage and mitigate the risk. Credit risk of securities is quite low because the Group utilizes certificate of deposits with high credit ratings, up to a limited amount, which is approved by the Company. The Group believes credit risk of derivative transactions is almost nil because counterparties are financial institutions with high credit ratings.

(ii) Monitoring of market risks (the risks arising from fluctuations in foreign currency exchange rates, interest rates and others)

The Group mainly utilizes forward foreign currency exchange contracts for hedging of fluctuation risk which is identified by each currency. Depending on the market conditions of foreign currencies, the Group utilizes forward foreign currency exchange contracts for forecasted export transactions with a maximum period of 6 months.

The Group utilizes interest rate swap agreements and cross currency swap agreements to mitigate fluctuation risk of interest rates and fluctuation risk of loans principal due to floating exchange rates.

The Group continuously reviews securities holdings by monitoring periodically the market value and financial condition of securities’ issuers (companies with business relationships with the Group) and by evaluating those relationships.

The Group has established policies which include maximum upper limits and reporting obligations for derivative transactions and comply fully with these guidelines. Derivative transactions are entered into by the Company’s Accounting Department and certain consolidated subsidiaries. The Company carries out mutual supervision and monitoring of the derivative transactions in accordance with

management policies and its consolidated subsidiaries apply the same approach. Each derivative transaction of the Company is reported to the responsible director when entered into. The consolidated subsidiaries are required to report the status of their derivatives transactions to the Company on a monthly basis and are also required to consult with the Company when they enter into derivative transactions other than forward foreign currency exchange contracts.

(iii) Monitoring of liquidity risk (the risk that the Group may not be able to meet its obligations on scheduled due dates)

The Group manages liquidity risk with the responsible section preparing and updating cash flow plans and keeping necessary funds based on reports of each section.

Syndicated loans have certain financial covenants that represent a liquidity risk from an early repayment request by financial institutions.

#### (d) Supplementary explanation of the fair value of financial instruments

The fair value of financial instruments is based on their quoted market price, if available. When there is no quoted market price available, fair value is reasonably estimated. Since various assumptions and factors are reflected in estimating the fair value, different assumptions and factors could result in different fair value. In addition, the notional amounts of derivatives in Note 15 "Derivative Financial Instruments and Hedging Activities" are not necessarily indicative of the actual market risk involved in the derivative transactions.

#### Fair Value of Financial Instruments

The carrying value of financial instruments on the consolidated balance sheets, fair value and the difference as of March 31, 2015 and 2014, are shown in the following table. The table does not include financial instruments for which it is extremely difficult to determine the fair value. (Please refer to Note 2 below).

	2015			2014		
	Carrying value	Fair value	Difference	Carrying value	Fair value	Difference
(1) Cash and cash equivalents	¥ 87,778	¥ 87,778	¥ —	¥129,671	¥129,671	¥ —
(2) Short-term investments	1,321	1,321	—	1,076	1,076	—
(3) Trade receivables	144,538	144,538	—	135,262	135,262	—
(4) Electronically recorded monetary claim	1,786	1,786	—	96	96	—
(5) Investment securities	37,839	37,844	5	28,908	28,913	5
(6) Short-term loans receivable included in other current assets	17	17	—	29	29	—
Total assets	¥273,279	¥273,284	¥ 5	¥295,042	¥295,047	¥ 5
(7) Short-term bank loans	75,097	75,097	—	100,756	100,756	—
(8) Current portion of long-term debt	45,561	45,561	—	28,992	28,992	—
(9) Trade payables	61,091	61,091	—	106,410	106,410	—
(10) Electronically recorded obligations	57,778	57,778	—	—	—	—
(11) Accrued income taxes	7,919	7,919	—	3,424	3,424	—
(12) Long-term debt	238,448	239,362	914	252,019	251,787	(232)
Total liabilities	¥485,894	¥486,808	¥914	¥491,601	¥491,369	¥(232)
Derivative transactions (*)	¥ (489)	¥ (489)	¥ —	¥ (30)	¥ (30)	¥ —

	2015		
	Carrying value	Fair value	Difference
(1) Cash and cash equivalents	\$ 730,449	\$ 730,449	\$ —
(2) Short-term investments	10,993	10,993	—
(3) Trade receivables	1,202,780	1,202,780	—
(4) Electronically recorded monetary claim	14,862	14,862	—
(5) Investment securities	314,879	314,921	42
(6) Short-term loans receivable included in other current assets	140	140	—
Total assets	\$2,274,103	\$2,274,145	\$ 42
(7) Short-term bank loans	624,923	624,923	—
(8) Current portion of long-term debt	379,138	379,138	—
(9) Trade payables	508,371	508,371	—
(10) Electronically recorded obligations	480,803	480,803	—
(11) Accrued income taxes	65,898	65,898	—
(12) Long-term debt	1,984,256	1,991,861	7,605
Total liabilities	\$4,043,389	\$4,050,994	\$7,605
Derivative transactions (*)	\$ (4,069)	\$ (4,069)	\$ —

\*Assets and liabilities arising from derivative transactions are shown at net value with the amount in parentheses representing net liability position.

Note 1: Methods to determine the fair value of financial instruments and other matters related to securities and derivative transactions  
(1) Cash and cash equivalents, (2) Short-term investments, (3) Trade receivables, (4) Electronically recorded monetary claim and (6) Short-term loans receivable included in other current assets  
Since these items are settled in a short time period, their carrying value approximates fair value.

(5) Investment securities

The fair value of equity securities is based on quoted market prices.

(7) Short-term bank loans, (9) Trade payables (10) Electronically recorded obligations and (11) Accrued income taxes

Since these items are settled in a short time period, their carrying value approximates fair value.

(8) Current portion of long-term debt and (12) Long-term debt

The fair value of long-term debt is based on the present value of the total of principal and interest discounted by the interest rate to be applied assuming new loans under the similar conditions to existing loans are made.

Certain long-term loans with floating interest rates have been hedged by interest rate swap agreements and interest-rate and cross currency swap agreements. These have been accounted for as loans with fixed interest rates. The fair value of those long-term loans is based on the present value of the total of the principals, interest payments and net cash flows of the swap agreements discounted by the interest rates to be applied assuming new loans under similar conditions are made.

Derivative Transactions

Please refer to Note 15 "Derivative Financial Instruments and Hedging Activities" section of these Notes to Consolidated Financial Statements.

Note 2: Financial instruments for which it is extremely difficult to determine the fair value are as follows:

	Millions of yen		Thousands of U.S. dollars
	2015	2014	2015
Unlisted stocks			
Stocks of subsidiaries and affiliates	<b>¥16,734</b>	¥15,540	<b>\$139,253</b>
Other	<b>291</b>	287	<b>2,421</b>
Unlisted foreign bonds	<b>1,121</b>	1,218	<b>9,328</b>
Unlisted domestic bonds	<b>1,000</b>	1,000	<b>8,322</b>
Total	<b>¥19,146</b>	¥18,045	<b>\$159,324</b>

Because no quoted market price is available and it is extremely difficult to determine the fair value, the above financial instruments are not included in the preceding table.

Note 3: Redemption schedules for cash and cash equivalents, receivables and marketable securities with maturities at March 31, 2015 and 2014 are as follows:

	Millions of yen			
	2015			
	Within one year	More than one year and within five years	More than five years and within ten years	More than ten years
Cash and cash equivalents	<b>¥ 87,778</b>	<b>¥—</b>	<b>¥—</b>	<b>¥—</b>
Short-term investments	<b>1,321</b>	—	—	—
Trade receivables	<b>144,538</b>	—	—	—
Electronically recorded monetary claim	<b>1,786</b>	—	—	—
Short-term loans receivable included in other current assets	<b>17</b>	—	—	—
Total	<b>¥235,440</b>	<b>¥—</b>	<b>¥—</b>	<b>¥—</b>

	Millions of yen			
	2014			
	Within one year	More than one year and within five years	More than five years and within ten years	More than ten years
Cash and cash equivalents	¥129,671	¥—	¥—	¥—
Short-term investments	2,076	—	—	—
Trade receivables	135,262	—	—	—
Electronically recorded monetary claim	96	—	—	—
Short-term loans receivable included in other current assets	29	—	—	—
Total	¥267,134	¥—	¥—	¥—



	Thousands of U.S. dollars			
	2015			
	Within one year	More than one year and within five years	More than five years and within ten years	More than ten years
Cash and cash equivalents	\$ 730,449	\$—	\$—	\$—
Short-term investments	10,993	—	—	—
Trade receivables	1,202,780	—	—	—
Electronically recorded monetary claim	14,862	—	—	—
Short-term loans receivable included in other current assets	140	—	—	—
Total	\$1,959,224	\$—	\$—	\$—

Note 4: The redemption schedule for long-term debt is disclosed in Note 8 "Short-Term Bank Loans, Long-Term Debt and Lease Obligations" section of these Notes to Consolidated Financial Statements.

## 15. Derivative Financial Instruments and Hedging Activities

### (a) Derivative transactions to which hedge accounting is not applied

The estimated fair value of the derivatives positions outstanding which do not qualify for deferral hedge accounting at March 31, 2015 and 2014 is summarized as follows:

#### Currency-related transactions

Classification	Transaction	Millions of yen		
		2015		
		Notional amount	Fair value	Valuation gain (loss)
Over-the-counter transactions	Forward foreign currency exchange contracts			
	Selling:			
	U.S. Dollars	¥12,370	¥(441)	¥(441)
	Thai Baht	392	(13)	(13)
	British Pounds	92	3	3
	Buying:			
	Euro	6,131	(38)	(38)
	Total	¥18,985	¥(489)	¥(489)

Classification	Transaction	Millions of yen		
		2014		
		Notional amount	Fair value	Valuation gain (loss)
Over-the-counter transactions	Forward foreign currency exchange contracts			
	Selling:			
	Euro	¥ 6,402	¥(38)	¥(38)
	U.S. Dollars	4,464	5	5
	Thai Baht	466	1	1
	Canadian Dollars	74	0	0
	British Pounds	120	0	0
	Buying:			
	U.S. Dollars	16	0	0
	Euro	281	2	2
	Total	¥11,823	¥(30)	¥(30)

Classification	Transaction	Thousands of U.S. dollars		
		2015		
		Notional amount	Fair value	Valuation gain (loss)
Over-the-counter transactions	Forward foreign currency exchange contracts			
	Selling:			
	U.S. Dollars	\$102,938	\$(3,670)	\$(3,670)
	Thai Baht	3,262	(108)	(108)
	British Pounds	766	25	25
	Buying:			
	Euro	51,019	(316)	(316)
	Total	\$157,985	\$(4,069)	\$(4,069)

The fair value of forward foreign currency exchange contracts are computed using prices provided by counterparty financial institutions. There are no contracts to be settled after one year.

**(b) Derivative transactions to which hedge accounting is applied**

The estimated fair value of the derivatives positions outstanding which qualify for deferral hedge accounting at March 31, 2015 and 2014 is summarized as follows.

		Millions of yen		
		2015		
		Contractual value		
Method of hedge accounting	Transaction	Notional amount	More than one year	Fair value
Swap rates applied to underlying long-term debt	Interest rate swaps Receive / floating and pay / fixed	¥27,000	¥17,000	(*)
Swap rates and currency applied to underlying long-term debt	Interest-rate and cross currency swaps Receive / floating US\$ and pay / fixed yen	¥ 1,500	¥ 1,500	(*)

		Millions of yen		
		2014		
		Contractual value		
Method of hedge accounting	Transaction	Notional amount	More than one year	Fair value
Swap rates applied to underlying long-term debt	Interest rate swaps Receive / floating and pay / fixed	¥27,000	¥27,000	(*)
Swap rates and currency applied to underlying long-term debt	Interest-rate and cross currency swaps Receive / floating US\$ and pay / fixed yen	¥ 1,500	¥ 1,500	(*)

		Thousands of U.S. dollars		
		2015		
		Contractual value		
Method of hedge accounting	Transaction	Notional amount	More than one year	Fair value
Swap rates applied to underlying long-term debt	Interest rate swaps Receive / floating and pay / fixed	\$224,682	\$141,466	(*)
Swap rates and currency applied to underlying long-term debt	Interest-rate and cross currency swaps Receive / floating US\$ and pay / fixed yen	\$ 12,482	\$ 12,482	(*)

\*Because interest rate swap agreements and cross currency swap agreements are accounted for applying swap rates to underlying long-term debt, their fair value is included in that of long-term debt disclosed in Note 14 "Financial Instruments – Fair Value."

**16. Research and Development Costs**

Research and development costs included in cost of sales and selling, general and administrative expenses totaled ¥18,088 million (\$150,520 thousand) and ¥17,821 million for the years ended March 31, 2015 and 2014, respectively.

**17. Gain on Sales of Fixed Assets**

Gain on sales of fixed assets for the year ended March 31, 2015 consisted of the following:

	Millions of yen	Thousands of U.S. dollars
	2015	2015
Gain on sales of a part of land at former TAKARAZUKA Works	¥3,982	\$33,136
Others	305	2,538
	¥4,287	\$35,674

**18. Loss on Surcharge Payments under Anti-Monopoly Act**

In August 2014, the National Development and Reform Commission of China made a decision to impose on the Company a monetary penalty of RMB119,160 thousand on charges of violating the Anti-Monopoly Act of China in connection with the sales of bearings in China. The Company recorded ¥2,094 million (\$17,425 thousand) as a loss on surcharge payments under the Anti-Monopoly Act for the year ended March 31, 2015.

The Company and certain consolidated subsidiaries in Europe received a notice from European Commission regarding the imposition of surcharges due to violations of EU Competition Law related to the automotive bearings business in Europe. Based on the notice from the European Commission, loss on surcharge payments under the Anti-Monopoly Act in the amount of €201,354 thousand or ¥27,024 million, at the average exchange rate for the year ended March 31, 2014, was recorded for the year ended March 31, 2014. This decision was made through the settlement process with the European Commission based on relevant laws.

**19. Provision for Loss on Support to a Related Company**

The Company's related company in the Americas received a payment notice in connection with claims involving inappropriate import procedures in prior years. As a result, the liabilities of this related company were in excess of assets. Provision for loss on support to a related company in the amount of ¥1,600 million was recorded for the year ended March 31, 2014.

## 20. Reorganization Expenses

Reorganization expenses for the year ended March 31, 2014 consisted of the following:

	Millions of yen 2014
Restructuring in the production system in its consolidated subsidiaries	¥1,421
*Loss on impairment of fixed assets in the amount of ¥184 million for the year ended March 31, 2014 was included above.	

## 21. Restructuring Costs

Restructuring costs for the year ended March 31, 2014 consisted of the following:

	Millions of yen 2014
Expense for employees' early retirement incentive plans	¥301

## 22. Provision for Surcharge Payments under Anti-Monopoly Act

The Company and its consolidated subsidiary in Singapore have been under investigation by the Competition Commission of Singapore over suspicions of violations of Singaporean Competition Law in connection with the bearings business involving Singaporean customers. With the progress of the investigations, the Company estimated the amount of loss expected in the future, and recorded a provision for surcharge payments under the Anti-Monopoly Act in the amount ¥35 million for the year ended March 31, 2014.

## 23. Other Comprehensive Income (Loss)

The following table presents the analysis of other comprehensive income (loss) for the years ended March 31, 2015 and 2014.

	Millions of yen		Thousands of U.S. dollars
	2015	2014	2015
Net unrealized holding gain on securities:			
Amount arising during the year	¥ 8,838	¥ 5,676	\$ 73,546
Reclassification adjustments for gains included in net income (loss)	—	(1,272)	—
Before tax effect	8,838	4,404	73,546
Tax effect	(2,349)	(1,541)	(19,547)
Total	6,489	2,863	53,999
Translation adjustments:			
Amount arising during the year	17,513	15,378	145,735
Reclassification adjustments for losses included in net income (loss)	—	—	—
Before tax effect	17,513	15,378	145,735
Tax effect	—	—	—
Total	17,513	15,378	145,735
Retirement benefit liability adjustments:			
Amount arising during the year	(2,223)	2,296	(18,499)
Reclassification adjustments for losses included in net income (loss)	1,888	718	15,711
Before tax effect	(335)	3,014	(2,788)
Tax effect	51	(1,193)	425
Total	(284)	1,821	(2,363)
Share of other comprehensive income of affiliates accounted for by the equity method:			
Amount arising during the year	1,023	1,980	8,513
Other comprehensive income, net	¥24,741	¥22,042	\$205,884

## 24. Income Taxes

Income taxes applicable to the Company and its domestic subsidiaries comprise corporate tax, inhabitants' taxes and enterprise tax which, in the aggregate, resulted in statutory tax rates of 35.0% and 37.4% for the years ended March 31, 2015 and 2014. Overseas subsidiaries are subject to the income taxes of the respective countries in which they operate.

The details of the differences between the statutory tax rate and effective tax rates for the year ended March 31, 2015 is omitted because the difference was less than 5% of the statutory tax rate. In addition, the details of the differences between the statutory tax rate and effective tax rates for the year ended March 31, 2014 is omitted because the Company and its consolidated subsidiaries recorded a loss before income taxes and minority interests for the year.

The tax effects of temporary differences which gave rise to significant portions of the deferred tax assets and liabilities at March 31, 2015 and 2014 are presented below:

	Millions of yen		Thousands of U.S. dollars
	2015	2014	2015
Deferred tax assets:			
Liability for retirement benefits	¥ 18,670	¥ 20,147	\$ 155,363
Inventories	3,322	1,787	27,644
Tax loss carryforwards	14,036	14,567	116,801
Accrued expenses	3,177	3,044	26,438
Other	5,361	8,688	44,612
Gross deferred tax assets	44,566	48,233	370,858
Less: valuation allowance	(1,390)	(5,011)	(11,567)
Total deferred tax assets	43,176	43,222	359,291
Deferred tax liabilities:			
Depreciation and amortization	(15,768)	(14,558)	(131,214)
Unrealized holding gain on securities	(6,697)	(4,347)	(55,729)
Reserve for deferred gain on property included in retained earnings	(1,243)	(550)	(10,344)
Retained earnings of overseas consolidated subsidiaries	(134)	(138)	(1,115)
Other	(1,463)	(2,178)	(12,174)
Total deferred tax liabilities	(25,305)	(21,771)	(210,576)
Net deferred tax assets	¥ 17,871	¥ 21,451	\$ 148,715

The "Act for Partial Amendment of the Income Tax Act" (Act No.9, 2015) and "Act for Partial Amendment of Local Tax Act" (Act No.2, 2015) were promulgated on March 31, 2015.

In line with these revisions, the Company changed the statutory tax rate to calculate deferred tax assets and liabilities from 35.0% to 32.4% and 31.5% for the temporary differences expected to be realized or settled in the year beginning April 1, 2015 and for the temporary differences expected to be realized or settled from April 1, 2016, respectively.

As a result of these changes, net deferred tax assets (after offsetting deferred tax liabilities) decreased by ¥982 million (\$8,172 thousand), income taxes-deferred increased by ¥1,529 million (\$12,724 thousand), and net unrealized holding gain on securities increased by ¥744 million (\$6,191 thousand), while retirement benefit liability adjustments decreased by ¥197 million (\$1,639 thousand) as of and for the year ended March 31, 2015.

## 25. Amounts per Share

Amounts per share at March 31, 2015 and 2014 and for the years then ended were as follows:

	Yen		U.S. dollars
	2015	2014	2015
Net assets	¥461.21	¥374.68	\$3.84
Net income (loss):			
Basic	43.91	(27.54)	0.37
Cash dividends	6.00	2.00	0.05

Amounts per share of net assets are computed based on the number of shares of common stock outstanding at the year end.

Basic net income or loss per share is computed based on the net income or loss attributable to shareholders of common stock and the weighted-average number of shares of common stock outstanding during the year. Diluted net income per share has not been presented because there were no potentially dilutive shares of common stock for the year ended March 31, 2015. Diluted net income per share had not been presented because there were no potentially dilutive shares of common stock and the Company and consolidated subsidiaries recorded net loss for the year ended March 31, 2014.

Cash dividends per share represent the cash dividends proposed by the Board of Directors as applicable to the respective years together with the interim cash dividends paid.



## 26. Segment Information

### 1. Outline of reporting segments

The Group's reporting segments are divisions of the Group for which separate financial information is available, and whose operating results are reviewed regularly by the highest management decision-making body (the Board of Directors meeting of the Company) in order to allocate management resources and assess performance of operations.

The Group's main business lines consist of the manufacture and sales of bearings, CVJs and precision equipments for the aftermarket, general industrial machinery market, and automotive market. Business activities in Japan are controlled by the Company (the Head Office), and overseas business activities are controlled by the General Manager responsible in each region. Business entities in each region prepare their own plans and strategies to conduct business activities while analyzing profitability and the investment efficiency of operations.

Accordingly, the Group has four reporting segments based on geographic business segmentation controlled by the Head Office or the General Managers: Japan, the Americas, Europe, and Asia and other areas. Each reporting segment engages in the manufacture and sale of bearings, CVJs, and precision equipments and other products.

### 2. Calculation methods used for net sales, income or loss, assets, liabilities and other items on each reporting segment

The accounting policies of the segments are substantially the same as those described in the significant accounting policies in Note 2. Inter-segment sales and transfer are recorded at the same prices used in transactions with third parties.

(Accounting standards for retirement benefits)

The Company and its domestic subsidiaries adopted Section 35 of "Accounting Standard for Retirement Benefits" (ASBJ Statement No. 26 of May 17, 2012) and the main clause of Section 67 of "Guidance on Accounting Standard for Retirement Benefits" (ASBJ Guidance No. 25 of March 26, 2015) effective from April 1, 2014. As a result, the methods for calculating the retirement benefit obligation and service cost have been revised in the following respects: the method for attributing projected benefits to each period has been changed from the straight-line method to the benefit formula method, and the method for determining the discount rate has been changed to use a single weighted-average discount rate reflecting the expected timing and amount of benefit payments. The impact of this change on the segment income in the "Japan" segment is insignificant.

### 3. Information as to net sales, income or loss, assets, liabilities, and other items for each reporting segment for the years ended March 31, 2015 and 2014

Reportable segment information for the years ended March 31, 2015 and 2014 are summarized as follows:

	Millions of yen						Consolidated
	2015						
	Reporting segments						
	Japan	Americas	Europe	Asia and other areas	Total	Adjustments	
<b>Sales, income and assets or liabilities by reporting segments:</b>							
Net sales:							
Sales to third parties	¥205,780	¥193,410	¥181,642	¥121,068	¥ 701,900	¥ —	¥701,900
Inter-segment sales and transfers	137,536	5,502	5,564	11,857	160,459	(160,459)	—
Total	343,316	198,912	187,206	132,925	862,359	(160,459)	701,900
Segment income	¥ 27,557	¥ 1,410	¥ 3,701	¥ 10,082	¥ 42,750	¥ 1,101	¥ 43,851
Segment assets	¥538,515	¥188,125	¥140,607	¥177,295	¥1,044,542	¥(188,265)	¥856,277
Segment liabilities	¥373,039	¥138,155	¥ 84,647	¥ 62,928	¥ 658,769	¥ (65,051)	¥593,718

#### Other items:

Depreciation and amortization	¥ 15,708	¥ 10,379	¥ 7,278	¥ 7,027	¥ 40,392	¥ —	¥ 40,392
Capital expenditures	¥ 12,957	¥ 5,186	¥ 6,072	¥ 11,887	¥ 36,102	¥ (190)	¥ 35,912

	Millions of yen				Total	Adjustments	Consolidated
	2014						
	Reporting segments						
	Japan	Americas	Europe	Asia and other areas			
<b>Sales, income and assets or liabilities by reporting segments:</b>							
Net sales:							
Sales to third parties	¥190,819	¥167,899	¥175,423	¥104,830	¥638,971	¥ —	¥638,971
Inter-segment sales and transfers	132,763	3,944	6,927	8,977	152,611	(152,611)	—
Total	323,582	171,843	182,350	113,807	791,582	(152,611)	638,971
Segment income	¥ 25,594	¥ 2,645	¥ 2,139	¥ 4,405	¥ 34,783	¥ (1,779)	¥ 33,004
Segment assets	¥487,759	¥164,059	¥171,366	¥145,870	¥969,054	¥(121,017)	¥848,037
Segment liabilities	¥385,748	¥124,918	¥125,812	¥ 54,989	¥691,467	¥ (56,799)	¥634,668

#### Other items:

Depreciation and amortization	¥ 17,013	¥ 9,338	¥ 7,141	¥ 5,823	¥ 39,315	¥ —	¥ 39,315
Capital expenditures	¥ 9,684	¥ 9,648	¥ 7,303	¥ 8,375	¥ 35,010	¥ (5)	¥ 35,005

Thousands of U.S. dollars							
2015							
Reporting segments							
	Japan	Americas	Europe	Asia and other areas	Total	Adjustments	Consolidated
<b>Sales, income and assets or liabilities by reporting segments:</b>							
Net sales:							
Sales to third parties	\$1,712,407	\$1,609,470	\$1,511,542	\$1,007,473	\$5,840,892	\$ —	\$5,840,892
Inter-segment sales and transfers	1,144,512	45,785	46,301	98,669	1,335,267	(1,335,267)	—
Total	2,856,919	1,655,255	1,557,843	1,106,142	7,176,159	(1,335,267)	5,840,892
Segment income	\$ 229,317	\$ 11,733	\$ 30,798	\$ 83,898	\$ 355,746	\$ 9,162	\$ 364,908
Segment assets	\$4,481,277	\$1,565,491	\$1,170,067	\$1,475,368	\$8,692,203	\$(1,566,656)	\$7,125,547
Segment liabilities	\$3,104,261	\$1,149,663	\$ 704,394	\$ 523,658	\$5,481,976	\$ (541,326)	\$4,940,650
<b>Other items:</b>							
Depreciation and amortization	\$ 130,715	\$ 86,369	\$ 60,564	\$ 58,476	\$ 336,124	\$ —	\$ 336,124
Capital expenditures	\$ 107,822	\$ 43,156	\$ 50,528	\$ 98,918	\$ 300,424	\$ (1,581)	\$ 298,843

The total amount of segment income is adjusted to operating income of the consolidated statements of operations.

Other than those corresponding to segment assets, adjustments relate to the elimination of inter-segment transactions. The adjustments for segment assets consist of inter-segment elimination of ¥258,544 million (\$2,151,485 thousand) and ¥222,460 million and the corporate assets of the group of ¥70,279 million (\$584,829 thousand) and ¥101,443 million for the years ended March 31, 2015 and 2014, respectively. The corporate assets are investments held by the Company, mainly cash and cash equivalents and investment securities.

#### 4. Related information

##### (1) Sales by products and service

Sales by products and service classified by the similarity of the market for the years ended March 31, 2015 and 2014 are summarized as follows:

Millions of yen				
2015				
	Aftermarket	Industrial machinery	Automotive	Total
Sale to third parties	¥112,433	¥108,993	¥480,474	¥701,900
Millions of yen				
2014				
	Aftermarket	Industrial machinery	Automotive	Total
Sale to third parties	¥103,845	¥101,181	¥433,945	¥638,971
Thousands of U.S. dollars				
2015				
	Aftermarket	Industrial machinery	Automotive	Total
Sale to third parties	\$935,616	\$906,990	\$3,998,286	\$5,840,892

##### (2) Regional information

###### (a) Sales

Sales categorized by country and region based on locations of customers within the group for the years ended March 31, 2015 and 2014 are summarized as follows:

Millions of yen				
2015				
Japan	Americas	Europe	Asia and other areas	Total
¥191,460	¥202,561	¥171,218	¥136,661	¥701,900
Millions of yen				
2014				
Japan	Americas	Europe	Asia and other areas	Total
¥179,082	¥174,566	¥166,280	¥119,043	¥638,971
Thousands of U.S. dollars				
2015				
Japan	Americas	Europe	Asia and other areas	Total
\$1,593,243	\$1,685,620	\$1,424,798	\$1,137,231	\$5,840,892

"Americas" includes the U.S.A., Canada and Central and South America. Europe includes Germany, France, the U.K. and others. Asia and other areas include China, Thailand, India and others. The sales of the "Americas" segment above include the sales to customers in the U.S.A. of ¥174,392 million (\$1,451,211 thousand) and ¥149,677 million for the years ended March 31, 2015 and 2014, respectively.

(b) Property, plant and equipment

Property, plant and equipment categorized by country and region within the group at March 31, 2015 and 2014 are summarized as follows:

Millions of yen				
2015				
Japan	Americas	Europe	Asia and other areas	Total
¥111,640	¥85,242	¥46,307	¥72,863	¥316,052

Millions of yen				
2014				
Japan	Americas	Europe	Asia and other areas	Total
¥117,027	¥79,148	¥52,286	¥60,930	¥309,391

Thousands of U.S. dollars				
2015				
Japan	Americas	Europe	Asia and other areas	Total
\$929,017	\$709,345	\$385,346	\$606,332	\$2,630,040

1. Property, plant and equipment in "Americas" in the amount of ¥77,890 million (\$648,165 thousand) and ¥72,557 million is located in the U.S.A at March 31, 2015 and 2014, respectively.
2. Property, plant and equipment in "Europe" in the amount of ¥35,565 million (\$295,956 thousand) and ¥40,043 million is located in France at March 31, 2015 and 2014, respectively.
3. Property, plant and equipment in "Asia and other areas" in the amount of ¥57,143 million (\$475,518 thousand) and ¥46,812 million is located in China at March 31, 2015 and 2014, respectively.

## 5. Loss on impairment of fixed assets

Loss on impairment of fixed assets by reporting segment is summarized as follows:

Millions of yen				
2014				
Japan	Americas	Europe	Asia and other areas	Total
¥688	¥1,325	¥184	¥—	¥2,197

# Report of Independent Auditors



Ernst & Young ShinNihon LLC

## Independent Auditor's Report

The Board of Directors  
NTN Corporation

We have audited the accompanying consolidated financial statements of NTN Corporation and its consolidated subsidiaries, which comprise the consolidated balance sheet as at March 31, 2015, and the consolidated statements of operations, comprehensive income, changes in net assets, and cash flows for the year then ended and a summary of significant accounting policies and other explanatory information, all expressed in Japanese yen.

### *Management's Responsibility for the Consolidated Financial Statements*

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with accounting principles generally accepted in Japan, and for designing and operating such internal control as management determines is necessary to enable the preparation and fair presentation of the consolidated financial statements that are free from material misstatement, whether due to fraud or error.

### *Auditor's Responsibility*

Our responsibility is to express an opinion on these consolidated financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in Japan. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. The purpose of an audit of the consolidated financial statements is not to express an opinion on the effectiveness of the entity's internal control, but in making these risk assessments the auditor considers internal controls relevant to the entity's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

### *Opinion*

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of NTN Corporation and its consolidated subsidiaries as at March 31, 2015, and their consolidated financial performance and cash flows for the year then ended in conformity with accounting principles generally accepted in Japan.

### *Convenience Translation*

We have reviewed the translation of these consolidated financial statements into U.S. dollars, presented for the convenience of readers, and, in our opinion, the accompanying consolidated financial statements have been properly translated on the basis described in Note 1.

June 25, 2015  
Osaka, Japan

*Ernst & Young Shin Nihon LLC*

# Investor Information

As of March 31, 2015

## Head Office

NTN Corporation  
3-17, 1-chome, Kyomachibori,  
Nishi-ku,  
Osaka 550-0003, Japan

## Investor Relations

Corporate Communications Dept.  
Phone: +81-6-6449-3528  
Fax: +81-6-6443-3226  
E-mail: [irmanager@ntn.co.jp](mailto:irmanager@ntn.co.jp)

## NTN on the Internet

NTN's Website offers a variety of corporate and product information, including the latest NTN report and financial results.  
<http://www.ntn.co.jp>

## Common Stock

(As of March 31, 2015)

Authorized 1,800,000,000 shares  
Issued and outstanding  
532,463,527 shares

## Number of Shareholders

(As of March 31, 2015)

24,244

## Transfer Agent for Common Stock

Mitsubishi UFJ Trust Banking  
Corporation 4-5, 1-chome,  
Marunouchi, Chiyoda-ku,  
Tokyo 100-8212, Japan

## Stock Exchange Listings

First Section of Tokyo Stock Exchange  
(#6472)

## Independent Accountants

Ernst & Young ShinNihon LLC

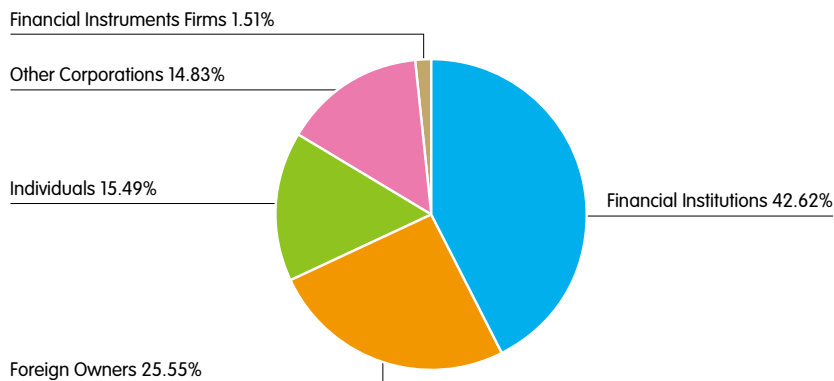
## General Meeting of Shareholders

The General Meeting of Shareholders was held on June 24, 2015 in Osaka

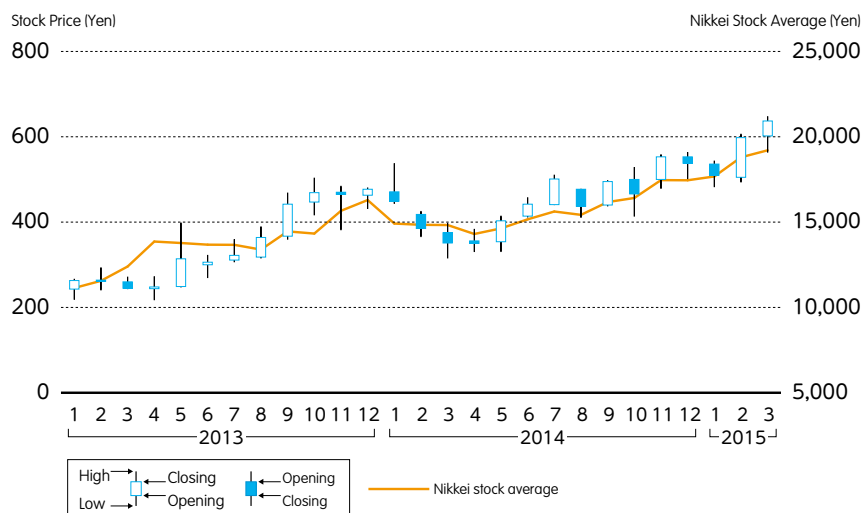
## Stock Price Range in the Fiscal Year Ended March 31, 2015

High: ¥647  
Low: ¥331

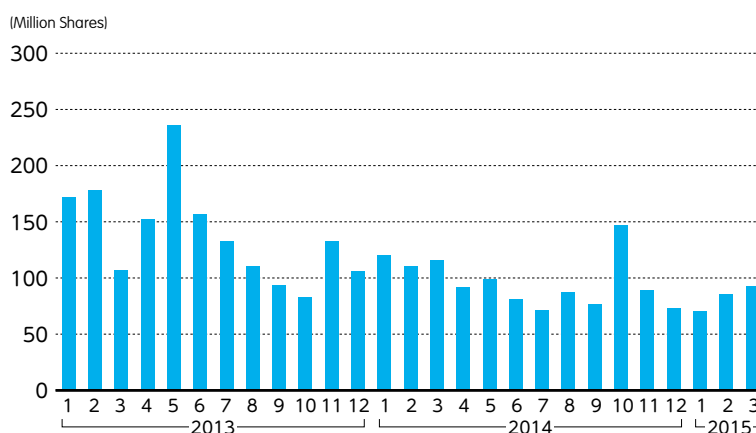
## Shareholders by Category



## Tokyo Stock Price Range



## Monthly Volume Traded



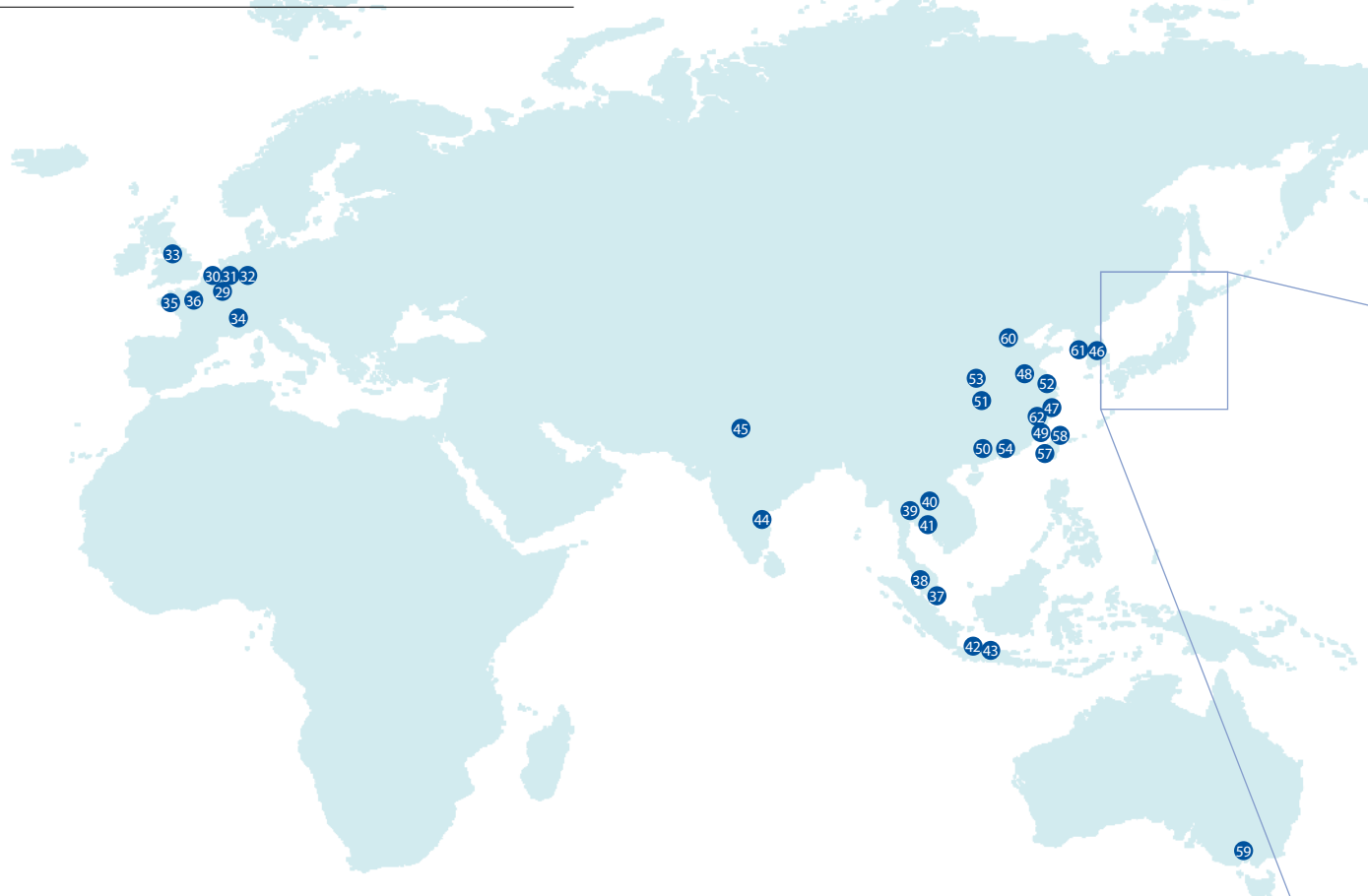


# Global Network

As of March 31, 2015

Consolidated Subsidiaries	Paid-in Capital	Holding as percentage (%)
<b>Consolidated Subsidiaries</b>		
① NTN BEARING SERVICE CORPORATION	¥480,000,000	100
② NTN MIE CORP.	¥3,000,000,000	100
③ NTN KONGO CORP.	¥1,000,000,000	100
④ NTN HOUDATSU SHIMIZU CORP.	¥1,250,000,000	100
⑤ NTN NOTO CORP.	¥1,000,000,000	100
⑥ NTN FUKUROI CORP.	¥1,500,000,000	100
⑦ NTN AKAIWA CORP.	¥1,250,000,000	100
⑧ NTN MIKUMO COMPANY LTD.	¥450,000,000	100
⑨ NTN OMAEZAKI CORP.	¥266,000,000	97.4
⑩ NTN ENGINEERING PLASTICS CORP.	¥100,000,000	100
⑪ NTN POWDER METAL CORP	¥400,000,000	100
⑫ NIPPON KAGAKU YAKIN CO., LTD.	¥100,000,000	98.1
⑬ NTN CASTING CORP.	¥450,000,000	100
⑭ NTN KINAN CORP.	¥450,000,000	100
⑮ NTN KAMIINA CORP.	¥725,000,000	80
⑯ NTN Technical Service Corp.	¥200,000,000	100
⑰ NTN LOGISTICS CO., LTD.	¥10,000,000	100 (100)
⑱ NTN USA CORP.	US. \$181,120,000	100
⑲ NTN BEARING CORP. OF AMERICA	US. \$24,700,000	100 (100)
⑳ NTN DRIVESHAFT, INC.	US. \$54,580,000	100 (100)

Consolidated Subsidiaries	Paid-in Capital	Holding as percentage (%)
㉑ AMERICAN NTN BEARING MFG. CORP.	US. \$24,330,000	100 (100)
㉒ NTN-BOWER CORP.	US. \$117,000,000	100 (100)
㉓ NTK PRECISION AXLE CORP.	US. \$15,000,000	60 (60)
㉔ NTA PRECISION AXLE CORP.	US. \$20,000,000	62.5 (62.5)
㉕ NTN BEARING CORP. OF CANADA LTD.	CAN. \$20,100,000	100
㉖ NTN-SUDAMERICANA, S.A.	US. \$700,000	100
㉗ NTN MANUFACTURING DE MEXICO, S.A.DE C.V.	Mex. \$231,195,369	100 (5)
㉘ NTN do Brasil Produção de Semi-Eixos Ltda.	BRL 79,479,763	100 (13.37)
㉙ NTN Wälzlager (Europa) G.m.b.H.	EURO14,500,000	100
㉚ NTN Kugellagerfabrik (Deutschland) G.m.b.H	EURO 18,500,000	100
㉛ NTN Antriebstechnik G.m.b.H.	EURO 50,000	75
㉜ NTE Gardelegen G.m.b.H.	EURO 1,500,000	100
㉝ NTN BEARINGS (UK) LTD.	STG. £2,600,000	100 (0.04)
㉞ NTN-SNR ROULEMENTS	EURO 123,599,542	100
㉟ NTN TRANSMISSIONS EUROPE	EURO 82,843,207	100
㊱ NTN TRANSMISSIONS EUROPE CREZANCY	EURO 9,000,000	100 (100)



Consolidated Subsidiaries	Paid-in Capital	Holding as percentage (%)	
37 NTN BEARING-SINGAPORE (PTE) LTD.	S. \$36,000,000	100	(0.969)
38 NTN BEARING-MALAYSIA SDN. BHD.	M. \$10,000,000	60	(60)
39 NTN BEARING-THAILAND CO., LTD.	BAHT 780,000,000	100	(99.999)
40 NTN MANUFACTURING (THAILAND) CO., LTD.	BAHT 1,311,000,000	100	(99.999)
41 NTPPT CO., LTD.	BAHT 700,000,000	75	(10.73)
42 PT. NTN BEARING INDONESIA	US. \$7,300,000	100	(100)
43 PT. NTN MANUFACTURING INDONESIA	US. \$17,250,000	100	(0.006)
44 NTN BEARING INDIA PRIVATE LTD.	INR 300,000,000	100	(0.1)
45 NTN NEI Manufacturing India Private LTD.	INR 3,238,000,000	96.14	(0.002)
46 NTN KOREA CO., LTD.	WON 500,000,000	100	
47 NTN (CHINA) Investment Corp.	US. \$256,545,000	100	
48 Nanjing NTN Corp.	US. \$180,000,000	100	(86.67)
49 Shanghai NTN Corp.	US. \$166,500,000	95	(15.72)
50 Guangzhou NTN-Yulon Drivetrain Co., Ltd.	US. \$12,500,000	60	(12)
51 Xiangyang NTN-Yulon Drivetrain Co., Ltd.	US. \$34,000,000	60	(60)
52 NTN-RAB (Changzhou) Corp.	US. \$28,440,000	100	

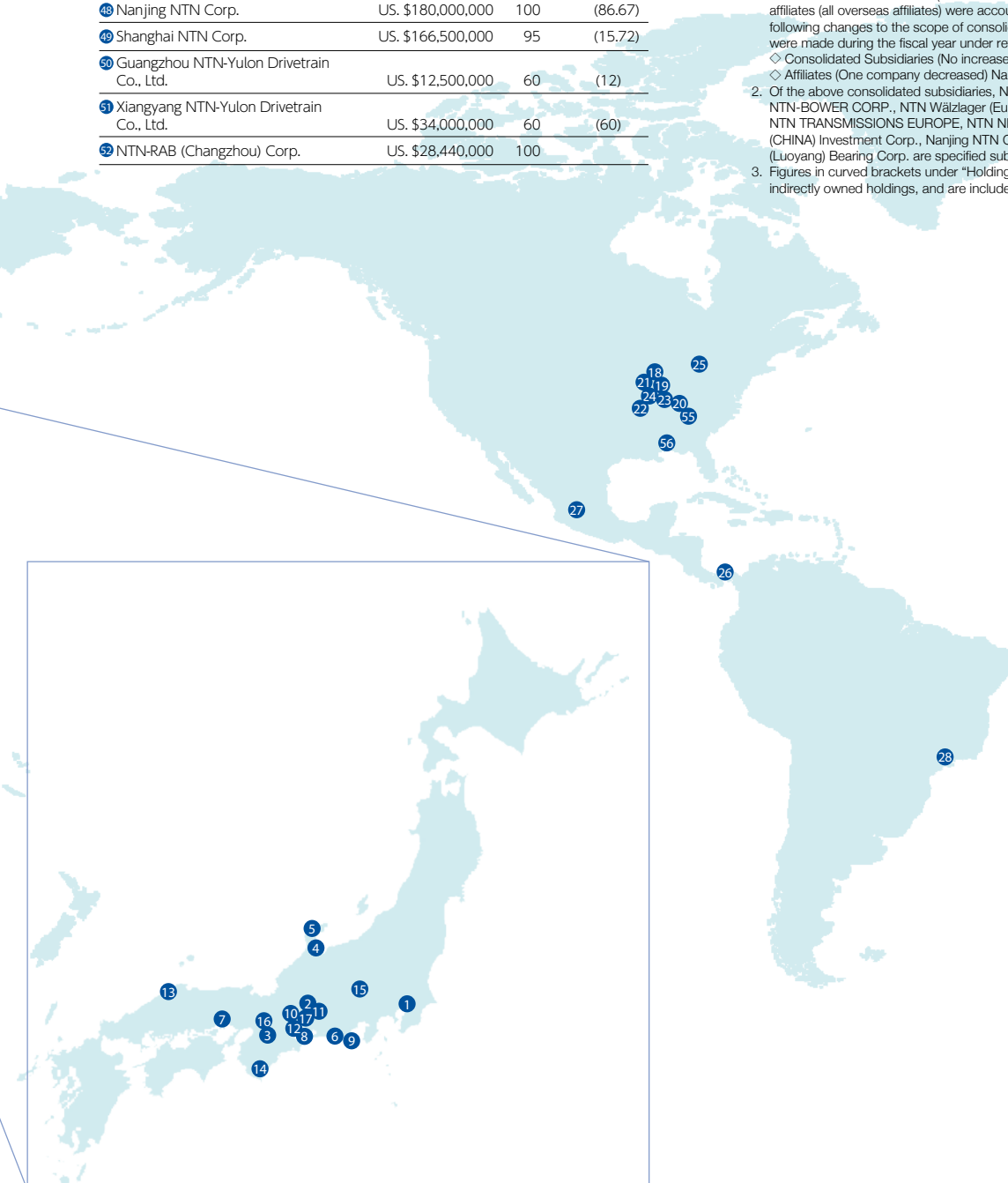
Consolidated Subsidiaries	Paid-in Capital	Holding as percentage (%)	
53 NTN-LYC (Luoyang) Bearing Corp.	US. \$73,800,000	50	(50)
54 NTN CHINA LTD.	HK. \$2,500,000	100	

Other than above, other 11 companies

#### Affiliated Companies Accounted for by the Equity Method

55 ASAHU FORGE OF AMERICA CORP.	US. \$7,100,000	28.2	(28.2)
56 Seohan-NTN Driveshaft USA CORP.	US. \$6,000,000	49	
57 TUNG PEI INDUSTRIAL CO., LTD.	NT. \$1,257,232,620	27.35	
58 TAIWAY Industry CO., LTD.	NT. \$160,000,000	36.25	
59 UNIDRIVE PTY LTD.	A. \$5,000,000	40	
60 Beijing NTN-Seohan Driveshaft Co., Ltd.	US. \$6,000,000	40	(6.67)
61 Seohan-NTN Bearing CO., LTD.	WON 71,200,000,000	49	
62 NTN-DONGPAI (Shanghai) Bearing Sales Corp.	US. \$1,460,000	25	(25)

- Notes 1. The scope of consolidation as of March 31, 2015 consisted of NTN Corporation and 65 consolidated subsidiaries (17 domestic and 48 overseas subsidiaries). A total of 8 affiliates (all overseas affiliates) were accounted for by the equity method. The following changes to the scope of consolidation and application of the equity method were made during the fiscal year under review.
- ◇ Consolidated Subsidiaries (No increases, decreases)
  - ◇ Affiliates (One company decreased) Nanjing Puzhen NTN Railway Bearing Co., Ltd.
2. Of the above consolidated subsidiaries, NTN USA CORP., NTN DRIVESHAFT, INC., NTN-BOWER CORP., NTN Wälzlager (Europa) G.m.b.H., NTN-SNR ROULEMENTS, NTN TRANSMISSIONS EUROPE, NTN NEI Manufacturing India Private LTD., NTN (CHINA) Investment Corp., Nanjing NTN Corp., Shanghai NTN Corp. and NTN-LYC (Luoyang) Bearing Corp. are specified subsidiaries.
3. Figures in curved brackets under "Holding as percentage" indicate the percentage of indirectly owned holdings, and are included in the total holding.



For New Technology Network



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