

# **Annual Report 2015**

Year Ended March 31, 2015



# **Profile**

Despite a surge in the severity of competition on the global stage, NGK, in line with its commitment to being a company of excellence based on global standards, is steadily evolving to fulfill its corporate mission to constantly provide value to clients, shareholders, employees and society as a whole. Firmly grounded in distinctive ceramics technology, NGK continues to make its presence felt across the "Triple-E" business domains of Energy, Ecology and Electronics.

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# NAS and HONEYCERAM, HICERAM are trademarks of NGK INSULATORS, LTD., registered in the U.S.

NOx sensors / 2. Low-level radioactive waste treatment systems / 3. Beryllium copper / 4. Bonded wafers / 5. NAS® battery systems / 6. Diesel particulate filters /

7. HONEYCERAM® / 8. Insulators for power transmission / 9. Ceramics for semiconductor manufacturing equipment /

10. Translucent alumina ceramics HICERAM

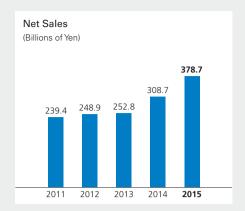


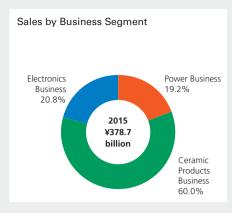
#### Forward-Looking Statements

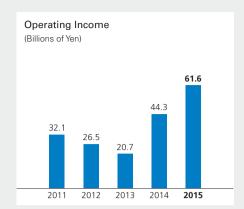
This annual report contains forward-looking statements about the future plans, strategies, beliefs and performance of NGK and its subsidiaries. These forward-looking statements are not historical facts. They are expectations, estimates, forecasts and projections based on information currently available to the Company, and are subject to a number of risks, uncertainties and assumptions, which, without limitation, include economic trends, competition in markets where the Company is active, personal consumption, market demand, the tax system and other legislation. As such, actual results may differ materially from those projected.

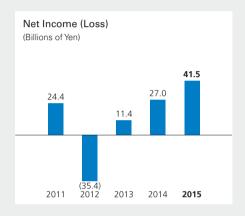
# **Financial Highlights**

NGK Insulators, Ltd. and Consolidated Subsidiaries Years Ended March 31



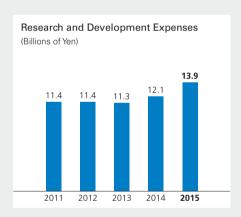


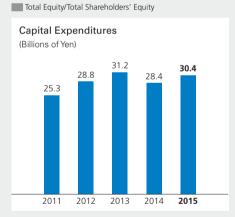


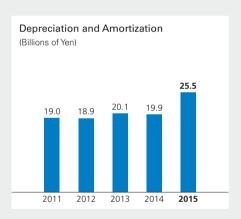


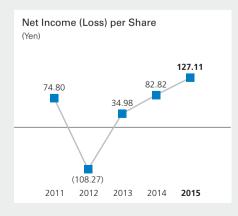


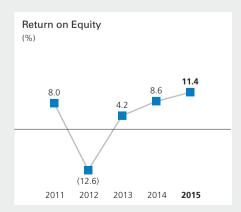


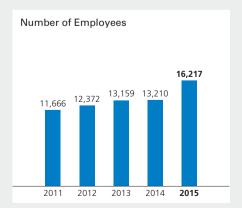












# **Message from Management**



Ceyi 1 bann Eiji Hamamoto Chairman

Taku Oshima Taku Oshima President

Left: Eiji Hamamoto Right: Taku Oshima

# **Business Performance in Fiscal 2014**

During the fiscal year ended March 31, 2015, the underlying strength of the Japanese economy increased along with an improved export environment due to a weaker yen and rising stock prices, leading to a continuing trend of moderate recovery. Overseas economies continued moderate recovery mainly in the U.S. despite the slowdown in economic growth in China and Europe.

Under such circumstances, the NGK Group (NGK INSULATORS, LTD., consolidated subsidiaries, and associates accounted for by the equity method), saw strong demand for automotive ceramics in its Ceramics Business Segment mainly due to strong automotive sales in the U.S. and Chinese markets and enhanced exhaust gas regulations around the world. In the Electronics Business Segment, demand for ceramic components for semiconductor manufacturing equipment grew thanks to the expansion of mobile devices. Furthermore, NGK Electronics Devices, Inc., which became a consolidated subsidiary on January 5, 2015, added its fourth quarter sales, contributing to revenue growth. In the Power Business Segment as well, shipments were made for large orders for overseas of NAS® (sodium-sulfur) batteries for storing electricity, further increasing sales. As a result of the above, total consolidated net sales for the fiscal year ended March 31, 2015 increased by 22.7% year on year to ¥378,665 million.

In terms of earnings, although fixed costs increased due to rising labor costs, a high level of capital investment and development input, absorption from the increased sales of automotive ceramics and ceramic components for semiconductor manufacturing equipment and the effect of the weak yen and resulted in an operating income of ¥61,577 million, a 39.2% year-on-year increase, and ordinary income of ¥61,068 million, 33.3% year-on-year increase. As for net income, although provision of reserve for loss related to competition law was recorded as extraordinary loss, gain on changes in equity in association with the listing and issuance of new shares of METAWA-TER Co., Ltd., an associate accounted for by the equity method, was posted under extraordinary income, and due to the improvement of operating income, net income increased by 53.5% year on year to ¥41,505 million.

# **Striving for Sustainable Growth**

While it is expected that business opportunities will grow in the environment surrounding the Company, uncertainty is also expected to increase, as politics, economics, and rules of trade change, while energy and environmental issues persist and technological innovation continues.

Under such circumstances, with the aim of becoming "a truly world-class, global corporation," we shall make company-wide efforts to implement these important management strategies:

1) Enhancing the competitiveness of existing businesses by "new/reformed manufacturing structures" and 2) Creating new products and new businesses by "2017 Challenge 30."

# 1) Enhancing the competitiveness of existing businesses: New/reformed manufacturing structures

The NGK Group will strive to ensure profitability from the medium- to long-term perspective. We shall establish the "ideal selves" for each business in the year 2020, and work towards the improvement of product value and development of innovative manufacturing processes based on advanced technology.

Along with supplying automotive ceramics that have high added value in response to the reinforcement of exhaust gas regulations and increased demand due to the growing sales of automobiles in various countries, we aim to achieve sustainable growth by steadily expanding our cutting edge innovative manufacturing lines overseas and thereby building a highly efficient increased production system. While there will be growing demand for ceramic components for semiconductor manufacturing equipment backed by the increase of mobile devices, demand levels from the market will be more severe, thus we shall strive to improve the performance of our products and develop innovative manufacturing methods, in an effort to improve our competitiveness.

In businesses where the struggle continues, such as insulators and products designed for use with industrial machinery, we will strive to complete business restructuring and convert to a structure that is capable of sustainably generating revenue. We will put safety first when it comes to NAS® batteries; reduce deployment costs both in design and manufacturing, and endeavor to secure continuous orders and profitability.

# 2) Creating new products and new businesses: 2017 Challenge 30

The NGK Group has established the company-wide goal of "2017 Challenge 30" to raise the ratio of sales from new products to 30% by fiscal year 2017, and is committed to the creation of new products and new businesses. In addition to steadily promoting the expansion and mass production of our new wafer product line, we will also promote early introduction to the market of new products using our core technologies, such as solid oxide fuel cells, chip type ceramic secondary batteries, and zinc secondary batteries. Also, in order to continuously create new products, we will establish full-time marketers and a sample prototype team, and promote the collaboration of our business divisions, the Headquarters, and the development division in finding precise needs.

In January of this year, we acquired all shares of NGK Electronics Devices, Inc. (formerly NIPPON STEEL & SUMIKIN Electronics Devices Inc.) from Nippon Steel & Sumitomo Metal Corporation, and entered the ceramic packages business. We now aim for even greater growth by exploiting the synergy with the NGK Group's existing technology.

# As a Member of the Global Business Society

As opportunities to do business overseas are increasing more and more, we must improve the transparency and autonomy of our management, and further enhance our corporate governance and compliance system. In addition to actively applying the Corporate Governance Code, we have been promoting the creation of an environment in which all members of the NGK Group can act in accordance with a fair set of values and evaluation criteria of an international level.

With regard to human rights, labor, the environment, and anti-corruption, we shall continue to contribute to the conservation of the global environment and sustainable growth of society. We will promote this through business activity and CSR initiatives as a member of international society, such as participating in the "United Nations Global Compact" in support of the 10 principles stated by the United Nations.

With regard to competition laws, the NGK Group is subject to an international investigation on our past situation of competition. In an effort to handle the matter fairly, we established an independent committee assembled from an outside Director, an outside Audit & Supervisory Board Member, and an outside legal counsel, and is fully cooperating with the investigation. It is expected that more time will be needed before the close of the investigation, but it has been determined that there is a high potential for meaningful losses to occur in view of the progress of the investigation so far. Potential losses have been estimated and recorded as provision for loss related to competition law. The Company has established various training grounds using the "Competition Laws Compliance Rules" and "Competition Law Compliance Handbook," a set of guidelines concerning specific actions of individuals, with the goal of achieving thorough compliance with laws and regulations from all group members, including officers and employees of our overseas group companies. For the current fiscal year, we have established a new management system to enhance the competition laws compliance. We have placed a Competition Law Compliance Officer, who manages the competition law compliance program and reports the status of the program to the independent committee. And the independent committee evaluates the status and reports it directly to the Board of Directors.

As another initiative, we have established BCP Countermeasures Headquarters as an organization to promote business continuity planning (BCP) on a company-wide basis. As our businesses expand globally, we are making capital investment with BCP in mind, and working to improve the effectives of various measures in order to take full responsibility for a stable supply of our products.

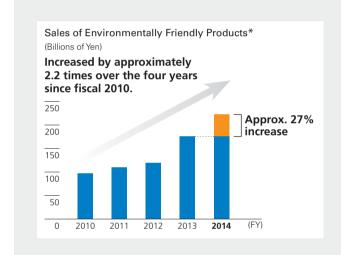
In addition, we will continue to promote activities to strengthen the Headquarters that supports global management in our administrative divisions, in order to shape the NGK Group as a corporate group capable of facing off against global competition and demonstrate the highest level of performance. As each and every one of us works day to day to improve ourselves, so too must the NGK Group as a whole focus on developing diverse human resources with flexible thinking and the ambition to face new challenges.

Through the implementation of the above initiatives, the NGK Group will continue to pursue sustainable growth and the realization of higher corporate value as it operates its businesses by placing importance on capital efficiency and shareholders.

August 2015

# Special Feature

The NGK Group is committed to developing products that help to preserve the natural environment in response to social demand for the wider adoption of exhaust purification technologies and renewable energy. We will contribute to society and the environment by expanding our production systems for environmental products and supplying them globally.



## \*Environmentally friendly products

- Ceramic products to purify automotive exhaust
- NOx sensors
- NAS® batteries
- Other

# **Ceramic Products for Purifying Automotive Exhaust**

Expanding our global production system in response to worldwide demand growth

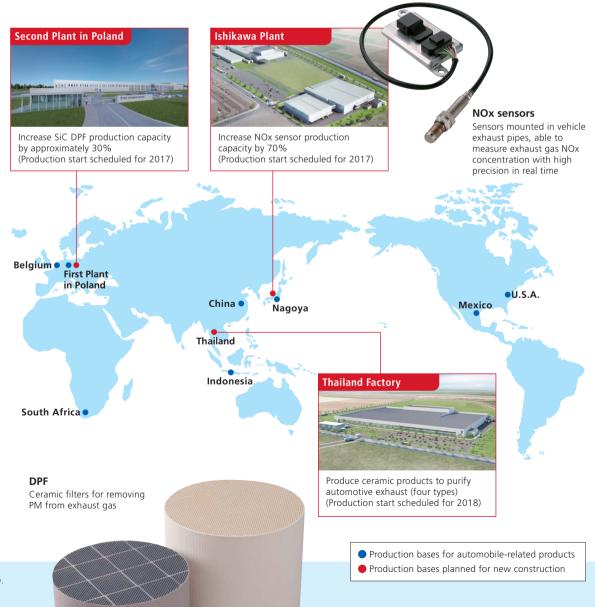
Demand for ceramics used in exhaust gas purification is growing strongly, driven by global tightening of exhaust gas regulations and an increase in automobile sales volume, particularly in emerging countries. Amid this, increasing passenger vehicle sales in Europe following the economic recovery and an increase in the ratio of diesel engine vehicles are among the factors expected to drive further demand for silicon carbide (SiC) diesel particulate filters (DPFs), which offer high thermal tolerance and can cope with tough usage conditions. In response, we will bolster our production capacity for SiC DPFs by around 30% by constructing a second plant at our manufacturing subsidiary in Poland.

Moreover, we will establish a new production base in Thailand to expand and enhance our global production system and ensure a stable supply of ceramic products to the emerging markets of Asia, where demand is expected to grow over the medium to long term.

# **High Precision In-vehicle NOx Sensor**

Vehicle exhaust gas regulations are being tightened around the world. For diesel vehicles in particular, NOx emission regulations are becoming even more stringent in addition to regulations on particulate matter (PM). The corresponding need for even higher precision exhaust gas treatment systems is expected to drive up the number of NOx sensors mounted in vehicles.

NGK is currently working to increase its annual NOx sensor production capacity from 7 million units to 10 million units by October 2015. Looking ahead, demand is expected to expand even further and exceed our production capacity. We will meet this challenge by constructing a new plant to manufacture elements for NGK CERAMIC DEVICE CO., LTD. on the site of our Ishikawa Plant. As a leading company in the field of NOx sensors, NGK will establish supply capabilities for coping with continued expansion in demand, thereby contributing to the preservation of the atmospheric environment.



# **NGK Receives an Order to Install** Large-Capacity NAS® Batteries in a Power Station

NGK received an order from Mitsubishi Electric Corporation to install a NAS battery system for energy storage inside the Buzen Power Station of Kyushu Electric Power Co., Inc.

The order is for NAS containerized batteries with a total output of 50,000 kW and a storage capacity of 300,000 kWh (enough to supply electricity to approximately 30,000 households). The completed system is expected to be the largest storage battery facility in the world and is scheduled to begin operation during the fiscal 2015. Kyushu Electric will connect the NAS battery system to its power grid to improve the electricity supplydemand balance, control the grid voltage and smooth the delivery of renewable energy to its power grid. The system will be capable of storing electricity equivalent to a pumped hydroelectric power generation facility.

NAS batteries are proven large-capacity storage batteries first commercialized by NGK in 2002. They are characterized by large capacity, high energy density, and longevity, and are capable of delivering a stable supply of high-output electricity for many hours at a time over a long service life. Since their commercial launch, NGK has delivered NAS battery systems with a total output of more than 450,000 kW and storage capacity of 3,000,000 kWh at around 190 locations worldwide. The systems are being used for load leveling and emergency power supplies, as well as to stabilize and smooth the power output of renewable energy sources. NGK continues to support the growth of renewable energy by supplying large-capacity NAS battery systems.



## NAS battery container houses

Each NAS battery container houses NAS batteries and control devices with a total output of 200 kW in a transportable 20 ft container. The containers substantially reduce the lead time and cost of installing NAS battery systems and enable installations with appropriate capability for each application worldwide.

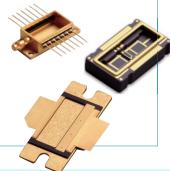
In January 2015, NGK acquired all of the issued shares of NIPPON STEEL & SUMIKIN Electronics Devices Inc., a wholly owned subsidiary of Nippon Steel & Sumitomo Metal Corporation that sells ceramics for industrial electronics, such as ceramic packages. Having converted it to a consolidated subsidiary, NGK changed the company name to NGK ELEC-TRONICS DEVICES, INC.

Ceramic packages are essential core components for mounting crystal devices, high frequency devices, and optical communication devices in PCs, mobile devices, digital consumer appliances, mobile communications base stations, and optical communication systems.

The market for such products is expected to expand continuously as information and communication equipment becomes more functional and sophisticated, and automobiles make greater use of electronics. In addition, there is increasing demand for components to be more compact and flatter, and to offer higher precision and performance to keep pace with the advances in miniaturization and low-profile design of the devices in which they are used.

By adding its own technologies in materials technologies and high-precision processing to NIPPON STEEL & SUMIKIN Electronics Devices' (currently NGK Electronics Devices) manufacturing expertise and technologies in multiple-product-type, low-cost mass production, developed over many years, NGK judged that it could achieve synergies between its technologies and those of NIPPON STEEL & SUMIKIN Electronics Devices, and that these synergies would enable further growth in its electronics business. Based on this judgment, NGK decided to make NIPPON STEEL & SUMIKIN Electronics Devices a subsidiary by acquiring its shares.

NGK and NGK Electronics Devices will work together in concert, creating synergies between their respective technologies to drive further growth in the electronics business.



# **Review of Operations**

# **Power Business Group**



This business segment covers the production and sale of insulators and devices for power companies and manufacturers of heavy electrical equipment in Japan and overseas.

The business also produces NAS® batteries that are used for large-scale power storage.

## Net Sales (Billions of Yen)

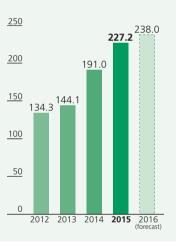


# **Ceramic Products Business Group**



This business segment encompasses three operations: automotive ceramics, where NGK is involved in the production of components essential to automotive exhaust gas purification; industrial process apparatus, in which the Company manufactures products which are highly resistant to heat and chemical corrosion; and industrial heating systems and refractories, built on NGK's sophisticated firing technologies.

# Net Sales (Billions of Yen)

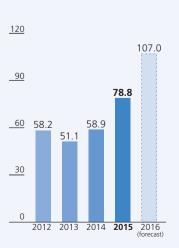


# **Electronics Business Group**



This business segment is composed of three operations: specialty metals, which deals in beryllium copper; high-performance ceramics for providing ceramic products for semiconductor manufacturing equipment; and electronic components, a business engaged in developing components by applying functional ceramics technology.

# Net Sales (Billions of Yen)



## Fiscal 2014 Business Overview

Segment sales increased by 23.5% year on year to ¥72,847 million.

Revenue from insulators increased year on year due to strong demand in North America, the Middle and Near East, and Southeast Asia, in addition to rising sales due to renewal of equipment at domestic electric power companies. Revenue from NAS batteries also increased year on year due to shipment of large orders for overseas.

In terms of earnings, due to rising sales and cost reduction, the deficit of this division shrank from operating loss of ¥3,900 million to operating loss of ¥2,352 million.

# **Fiscal 2014 Business Overview**

Segment sales increased by 19.0% year on year to ¥227,198 million.

The demand for automotive ceramics increased due to strong sales of automobiles in Europe, the U.S. and China, as well as trucks in Japan and the U.S. Following application of new exhaust gas regulations in Europe and China, demand significantly increased for ceramic substrates for catalytic conversion (HONEYCERAM® and large-size HONEYCERAM), silicon carbide diesel particulate filters (SiC DPFs), and NOx sensors. Revenue from Industrial process apparatuses slightly increased as capital investment by major domestic customers was in recovery.

Operating income increased 28.0% year on year to ¥57,614 million due to increased volume of automotive ceramics, the effect of a weaker yen, and cost reduction.

# **Fiscal 2014 Business Overview**

Segment sales increased by 33.7% year on year to ¥78,760 million.

Sales of ceramic components for semiconductor manufacturing equipment increased year on year due to improving demand backed by the expansion of mobile devices, while sales of beryllium copper products rose due to growing demand in China and emerging countries. In electronic components, NGK Electronics Devices, Inc., which became a consolidated subsidiary on January 5, 2015, added its fourth quarter sales, contributing to revenue growth. Sales of consolidated subsidiary SOSHIN ELECTRIC CO., LTD. also increased, as demand for items used in industrial machinery remained strong.

Operating income increased 102.8% year on year to ¥6,295 million driven mainly by a rise in sales of ceramics components for semiconductor manufacturing equipment.

# Fiscal 2015 Outlook

With regard to the outlook for the future economy, while there are some concerns, such as about trends in the economies of emerging countries and resource-rich countries, as well as the European debt issue, it is expected that a gradual recovery will continue.

Under such circumstances, the NGK Group, aside from expectations of increased demand for automotive ceramics and ceramic components for semiconductor manufacturing equipment, reflecting the full year financial results of NGK Electronics Devices, Inc., expects year-on-year sales increase overall. In terms of earnings, although preceding costs will occur along with enhancing capacity of automotive ceramics production, overall year-onyear increase in earnings is expected due to the effects of increased sales.

With regard to the forecast for consolidated financial results, the Company aims to achieve net sales of ¥420.0 billion (up 10.9% year on year), operating income at ¥68.0 billion (up 10.4%), ordinary income at ¥69.0 billion (up 13.0%) and net income attributable to owners of the parent company at ¥48.0 billion (up 15.6%), assuming that the yen trades at ¥115 to the dollar and ¥125 to the euro.

# **Corporate Social Responsibility**



Corporate Social Responsibility Report http://www.ngk.co.jp/ enalish/csr/

# **CSR from NGK's Perspective**

To contribute to society in a manner that embodies our corporate philosophy, the NGK Group is committed to offering products and services that help create a better social environment and bring new value to society.

By putting these activities into practice, we are working together with our customers, employees and business partners to fulfill our social responsibility as a company in every respect, an act essential to meeting the public's expectations and earning their trust.

Refer to the Corporate Social Responsibility Report for more information concerning NGK's CSR activities.

# **Corporate Governance**

NGK's basic approach to corporate governance is to establish and maintain an organization capable of swiftly responding to changes in the business environment while ensuring the legality of business activities and the transparency of management, and a fair and open management system emphasizing the interests of shareholders.

To put this approach into practice, NGK has chosen a governance structure anchored by an Audit & Supervisory Board. In addition to the General Meeting of Shareholders, the Board of Directors, and the Audit & Supervisory Board, the corporate governance system at NGK includes the Executive Committee and several other committees established to assist the President in management decision-making. These bodies help to enhance governance efficacy by deliberating and reviewing important matters.

Considering the importance of swift and optimal decision-making and its execution for responding promptly to changes in the operating environment, NGK introduced a corporate officer system, thus separating the management decision-making and supervision function from the business execution function, and clearly defining the responsibilities of both as well as strengthening their functions:

1. Overview of Corporate Management Organization Concerning Managerial Decision-Making, Execution and Supervision, and Other Corporate Governance Systems

## (1) Outline of company structure

NGK has adopted the structure of a company with an Audit & Supervisory Board system and its organization is as follows.

## [Board of Directors]

The Board of Directors, comprising twelve members as of the submission date of the annual securities report, resolves matters prescribed in the Companies Act as well as other important managerial issues, and oversees the execution of duties by directors. NGK has appointed two outside directors, in the expectation that they will play a proper role in strengthening corporate governance by providing the Board of Directors with suggestions and advice on overall management.

#### [Audit & Supervisory Board]

The Audit & Supervisory Board consists of four members, each of whom attends the Board of Directors' meetings and conducts audits of the execution of duties by directors. All four audit & supervisory board members possess abundant business experience. NGK has appointed two outside audit & supervisory board members, in order to further strengthen its corporate governance. One of its standing audit & supervisory board members spent many years engaged in NGK's financial operations, and one of its outside audit & supervisory board members has many years of operational experience in financial institutions; both possess a considerable degree of financial and accounting knowledge.

## [Executive Committee]

The Executive Committee, which consists of the President, directors, audit & supervisory board members, and vice presidents and division heads designated by the President, is a body that assists the President in decision-making by deliberating necessary matters.



# (2) Outline of the resolution of the Board of Directors on the development of systems to ensure the appropriateness of business operations

To respond to the amendments of the Companies Act and the Ordinance for Enforcement of the Companies Act and to reflect the enhancement of compliance system for competition laws, NGK resolved, at its Board of Directors' meeting held on April, 20, 2015, the systems to ensure the appropriateness of business operations as follows.

In accordance with the Companies Act and the Ordinance for Enforcement of the Companies Act, NGK establishes a system to ensure that the execution of duties by directors complies with laws and regulations and the Articles of Incorporation and other systems that are deemed necessary to ensure the appropriateness of business operations of NGK as well as the NGK Group consisting of NGK and its subsidiaries.

# 1) System to ensure that the directors of NGK execute their duties in compliance with laws and regulations and the Article of Incorporation

- i. The Board of Directors shall formulate the guidelines for corporate behavior (hereinafter the "NGK Group Guidelines for Corporate Behavior") applicable to the subsidiaries as well, and provide rules and behavior standards for directors to execute their duties pursuant to laws and regulations and the Articles of Incorporation and in accordance with corporate ethics, and the directors shall observe such guidelines.
- ii. The Board of Directors and the executive bodies overseen by the President shall be responsible for establishing and operating the internal control system. NGK shall establish the Auditing Department, a specialized internal audit body that conducts audits of the status of business execution at each operating division and the CSR Committee that is responsible for establishing, maintaining, and improving the internal control system. Moreover, NGK shall establish the Internal Controls Committee that deliberates issues concerning "Assessment and Report on Internal Control Over Financial Reporting" pursuant to the Financial Instruments and Exchange Act.
- iii. NGK shall establish the subcommittee responsible for compliance (Compliance Subcommittee) under the CSR Committee, for the purpose of establishing, maintaining, and improving the compliance system. In addition, NGK shall establish the Helpline System as a consultation and reporting route outside the normal reporting line in the event

- that any violation of laws and regulations or internal rules and any fact that is contrary to the objectives of the NGK Group Guidelines for Corporate Behavior are discovered. The System is operated pursuant to the Helpline System Operation Rules.
- iv. For thorough compliance with competition laws, NGK shall appoint a Chief Competition Law Compliance Officer who oversees the company-wide compliance with competition laws and takes responsibility for the establishment of the compliance system for competition laws. The Competition Law Compliance Committee shall establish the control system, under which the Committee receives the report from such Officer on the status of the compliance of competition laws and directly reports to the Board of Directors. An external lawyer designated in advance shall receive a whistle blowing report relating to a violation of competition laws. NGK shall endeavor to maintain and enhance the compliance system for competition laws based on such control system.
- v. Directors shall check the effectiveness of the above compliance system regularly. If a director finds any problem on the effectiveness thereof, violation of laws and regulations, or other problems on compliance, such director shall report to the Board of Directors and the Audit & Supervisory Board and shall take necessary measures.
- 2) System for storage and management of information related to the execution of duties by directors of NGK Information related to the execution of duties by directors shall be stored and managed in an appropriate and searchable manner pursuant to the document management rules, etc., and the directors and audit & supervisory board members may access such information at any time.

## 3) Rules and other systems related to the control of the risk of loss for NGK

- i. Risks associated with business operations shall be controlled at each relevant organization on a daily basis, while NGK shall avoid and prevent these risks by comprehensively examining and analyzing them in the course of budgeting, approving the implementation of capital investment, research and development, etc. and at the Strategy
- ii. With regard to material company-wide risks relating to laws and regulations, ethics, incidents, accidents, disasters, quality, environment, export control, and safety and health, each relevant organization shall perform risk management on a daily basis pursuant to the Basic Rules on Risk Management. In addition, the CSR Committee, Central Disaster Prevention and Control Headquarters, BCP Countermeasures Headquarters, Company-Wide Quality Committee, NGK Environmental Protection Committee, Security Export Control/Specified Export and Customs Clearance Control Committee, Company-Wide Safety and Health Committee, and Competition Law Compliance Committee shall be established with an eye to avoid and prevent such risks.

## 4) System to ensure efficient execution of duties by directors of NGK

- i. With regard to the business execution pursuant to the resolution by the Board of Directors, the President is responsible for supervising the business operations of NGK as a chief executive. To assist the President in decision-making, the Executive Committee, Strategy Committee, Company-Wide Education Council, Development Committee, Facilities Committee, Company-Wide Quality Committee, NGK Environmental Protection Committee, CSR Committee, and Internal Controls Committee shall be established for comprehensive deliberation and coordination.
- ii. With regard to the daily business execution by directors, the authorities are delegated by defining responsible persons, their responsibilities and details of execution procedures in the administrative authority table, Rules for Division of Duties and various rules for approval procedures to ensure efficient business execution.

# 5) System to ensure that the employees of NGK execute their duties in compliance with laws and regulations and the Articles of Incorporation

i. The Board of Directors shall formulate the NGK Group Guidelines for Corporate Behavior and provide rules and behavior standards for employees to execute their duties pursuant to laws and regulations and the Articles of Incorporation and in accordance with corporate ethics. In addition, the Board of Directors shall develop the compliance system through the implementation of compliance education for employees by the Compliance Subcommittee and the operation of the Helpline System.

- ii. In the event that an employee finds any violation of laws and regulations or other compliance issues, such employee shall immediately report to his/her supervisor, the director of the relevant division, or the internal division in charge.
- iii. The Auditing Department shall conduct internal audits to inspect the status of business execution at each division, and ensure that each division establishes and operates the system of appropriate internal control.

## 6) System to ensure the appropriateness of business operations of the NGK Group consisting of NGK and its subsidiaries

- i. System for reporting to NGK pertaining to the execution of duties by directors of subsidiaries
  - a. The divisions in charge of supervising subsidiaries shall have the subsidiaries under their supervision report the trends and changes in the operations of the subsidiaries (management system, labor management, compliance, etc.) as needed. The division in charge that received a report from the subsidiary shall report to the Corporate Strategy Office, the controlling secretariat of the NGK Group companies, for centralizing information to report to the vice presidents responsible for supervising the NGK Group companies and shall also report to the relevant divisions in the Head Office. In the event of the occurrence of any compliance issue or incident/accident related to compliance at a subsidiary, the division in charge shall report to the CSR Committee Chairman in addition to the above without delay.
  - b. If a subsidiary finds that the corporate management or quidance by NGK violates laws and regulations or causes any compliance issue, such subsidiary shall report to the CSR Committee of NGK.
- ii. Rules and other systems related to the control of the risk of loss for subsidiaries With regard to the disposal and acquisition of material property, capital investment, borrowing of funds, loans and guarantees of obligations, disposal of trade receivables, etc. in the subsidiaries, NGK shall provide in the "administrative authority table" to the effect that the subsidiaries shall obtain approval, depending on the contents and scale thereof, from the supervising divisions of NGK, the President based on the deliberation at the Executive Committee, or the Board of Directors based on its resolution, and thereby NGK shall manage the risk of loss for the subsidiaries.
- iii. System to ensure efficient execution of duties by directors of subsidiaries
  - a. The divisions in charge of supervising subsidiaries shall, under their guidance, have the subsidiaries draw up their business policies and reflect them to the resolution of their Board of Directors. With regard to the business execution of subsidiaries pursuant to the resolution of the Board of Directors, NGK delegates the supervision of the business execution to the respective presidents of subsidiaries as chief executives.
  - b. With regard to the daily business execution by directors of the subsidiaries, NGK shall have the respective subsidiaries formulate rules relating to the administrative authorities, division of duties and approval procedures, in which responsible persons, their responsibilities and details of execution procedures are defined and delegate the authorities to ensure efficient business execution.
- iv. System to ensure that the execution of duties by directors and employees of subsidiaries complies with laws and regulations and the Article of Incorporation
  - NGK shall formulate the NGK Group Guidelines for Corporate Behavior common to NGK and its subsidiaries and foster the awareness of legal compliance among directors and employees of NGK and its subsidiaries as a whole, and thereby improve the system to ensure appropriate business execution. NGK shall make an effort to maintain the risk management system and compliance system through means such as appointing NGK employees as audit & supervisory board members of the subsidiaries and conducting internal audits by the Auditing Department of NGK. While the Helpline System of NGK shall be available for the officers and employees of the subsidiaries, listed subsidiaries shall furnish their own helpline systems. Overseas subsidiaries shall develop their own helpline systems or systems supplement or alternative to the helpline system taking into consideration the situation, culture and social climate, etc. of their countries.

# 7) Matters concerning employees who assist the duties of audit & supervisory board members when the audit & supervisory board members request appointment of such employees

When audit & supervisory board members request appointment of employees who assist their duties, representative directors shall deal with the matter appropriately through consultation with the audit & supervisory board members.

## 8) Matters concerning the independence of said employees from directors of NGK

When employees who assist the duties of audit & supervisory board members are appointed, transfer, evaluation and disciplinary action of such employees shall be conducted after obtaining the consent of the Audit & Supervisory Board.

# 9) Matters related to ensuring the effectiveness of instructions given by the audit & supervisory board members to said employees

Audit & supervisory board members may give instructions to said employees at any time as necessary, and the employees shall perform their duties giving priority on such instructions.

# 10) System concerning reports to audit & supervisory board members

- i. System for directors and employees of NGK to report to audit & supervisory board members
  - a. In addition to the cases set forth in 1) above, when a director finds any matter that may cause significant damage to NGK, such director shall immediately report to audit & supervisory board members.
  - b. In addition to the cases set forth in 5) above, when an employee finds any matter that may cause significant damage to NGK, such employee shall immediately report to his/her supervisor, the director of the relevant division, or the internal division in charge. The supervisor, the director of the relevant division, or the internal division in charge that received the report shall immediately report to audit & supervisory board members.
  - c. Each division in charge shall report to audit & supervisory board members the operation status of the compliance system, the operation status of the Helpline System, the results of internal audits, and matters that audit & supervisory board members deem necessary to be reported for executing their duties.
- ii. System for directors, audit & supervisory board members and employees of subsidiaries (hereinafter "officers and employees") and any person who received a report from officers and employees to make reports to the audit & supervisory board members of NGK
  - a. When an officer or employee of the subsidiaries or the division in charge of supervising subsidiaries, which received a report from the subsidiary pursuant to the provisions in 6), i., a. above, finds any violation of laws and regulations, any compliance issue or any matter that may cause significant damage to NGK, such individual or the supervising division shall immediately report to the audit & supervisory board members of NGK.
  - b. The audit & supervisory board members of NGK shall regularly hold liaison meetings with audit & supervisory board members of the subsidiaries and have them report the operation status of the subsidiaries.
  - c. The administrative secretariat of the Helpline System, which is also available for the officers and employees of the subsidiaries, shall report the operation results of the Helpline System including cases from the subsidiaries at the Compliance Subcommittee meeting where the audit & supervisory board members of NGK are present, and report, as necessary, to the audit & supervisory board members of NGK.

# 11) System to ensure that officers and employees of NGK and its subsidiaries who made a report as stated in 10) above shall not receive disadvantageous treatment on the basis of making such report

Officers and employees of NGK and its subsidiaries who made a report to the audit & supervisory board members of NGK shall not receive any disadvantageous treatment, including dismissal, demotion, salary reduction, transfer, etc., on the basis of making such report.

# 12) Matters concerning the policy for procedures for advance payment or reimbursement of expenses incurred in the execution of duties by audit & supervisory board members of NGK and treatment of expenses or liabilities incurred in the execution of such duties

NGK shall secure budget for expenses relating to the execution of duties by audit & supervisory board members based on the details prepared by the Audit & Supervisory Board. When off-budget expenses arise, NGK shall also allow the advance payment or the reimbursement of the expenses therefor.

# 13) Other systems to ensure effective audits by audit & supervisory board members of NGK

Audit & supervisory board members may request reporting from directors and employees at any time as necessary. In addition, audit & supervisory board members shall regularly exchange opinions with representative directors and auditing firms, respectively.

## (3) Development of internal control system

The Board of Directors and the executive bodies overseen by the President are responsible for establishing and operating the internal control system. The Auditing Department, a specialized internal audit body, is responsible for auditing the business execution of each operating division. Moreover, NGK has established the Internal Controls Committee to promote the internal controls reporting system based on the Financial Instruments and Exchange Act.

In addition, the "NGK Group Guidelines for Corporate Behavior" have been formulated as guidelines for putting into practice the NGK Group's corporate and management philosophies and the code of conduct. These guidelines specify the NGK Group's stance with regard to business activities and corporate behavior to ensure it remains a company that is beneficial to society, even in the pursuit of its economic goals. The CSR Committee, which has the Compliance Subcommittee, Security Subcommittee and Social Contributions Subcommittee under its control, is responsible for a range of activities that include formulating the NGK Group Guidelines for Corporate Behavior, ensuring that compliance with laws, regulations, and corporate ethics is fully entrenched throughout the NGK Group, and developing responses to incidents and accidents that it believes could significantly impact the company. The Committee's actions are designed to maintain and improve the level of the NGK Group's internal control system.

# [NGK Group Guidelines for Corporate Behavior]

- I. Realization of Corporate Philosophy
  - 1. Providing Products that Contribute to a Better Social Environment From a long-term global perspective, we will commit ourselves to create new value by providing products and services that protect the global environment and realize safety and security in society.
    - We will gain trust from our customers and society by seeking quality and safety.

# II. How to Engage in Business Activities

2. Disclosure of Corporate Information

We will release, in an accurate and timely manner, any information sought by the public, including information on our management, finance, products and services to improve transparency in management and to gain society's trust in the NGK Group companies.

3. Thorough Enforcement of Compliance; Risk Management

We will abide by the laws and rules of each country and area and will enforce our compliance thoroughly, respecting international arrangements that are applicable to us.

We will develop human resources who are sincere and have high ethical standards. In addition, through our efforts to build an internal control system and implement risk management, we will protect our corporate assets and credit, as well as rights of third parties.

4. Respect of Humanity and Assurance of Comfortable Working Environment

We will hire and treat our people in a proper and fair manner and will provide a safe and pleasant working environment in which our people can work comfortably without sacrificing their family life.

We will make available the place and opportunities that can be challenged by people with versatile talent and will support the development of human resources through acquisition of knowledge and expertise.

We will prevent any bullying, discrimination, harassment or other acts that violate human rights and, if there is any violation, we will take appropriate actions in an expeditious manner.

5. Implementation of Fair, Free, and Transparent Transactions

As a good and equal partner, we will implement fair, free, and transparent transactions in search of co-prosperity with our business partners.

In addition, we will promote our commitment to discharge corporate responsibility for the society throughout the supply chain of the NGK Group companies.

# III. As a Member of Society

6. Preservation of Global Environment

We will contribute to the preservation of the global environment by committing ourselves to take the lead in reducing environmental burdens at every location and in every process that is involved in our business activities. We will cooperate in efforts with local communities to preserve the environment and will also actively support our employees' effort for such purposes.

- 7. Coordination with Local Communities and Promotion of Contribution to the Society We will actively commit ourselves to the contribution of society, satisfying the needs of the local communities with our interest in social tasks required by the countries and local communities, with our objective to become a corporate citizen that can be trusted by the local communities.
- 8. Communications with Stakeholders Through communications with all of our stakeholders, such as our customers, business partners, shareholders, employees, and members of the local communities, we will expand their understanding of NGK Group companies and will review corporate activities based on comments forwarded to us and will use them in our effort to accomplish our social responsibilities.

# **R&D Activities/Financial Review**

#### **R&D** Activities

The NGK Group sees R&D as an important management priority. The Group actively allocates resources to R&D, with the aim of providing high value-added, highly functional new products. R&D activities are based on materials development technology and systemization technology centered on fine ceramics. The Group has a two-part R&D structure consisting of activities at the parent company's R&D divisions, which are engaged in basic to applied R&D, and activities that are closer in nature to product development, which are conducted at business groups and subsidiaries.

The Group's overall R&D expenses in fiscal 2014 were ¥13,943 million. These expenses included costs of ¥876 million related to contract-based research undertaken outside the Group. R&D themes, achievements, and expenses for each business group are as follows.

## **Power Business**

The Power Business Group conducts R&D to reduce the manufacturing costs of insulator products, and is engaged in developing containerized NAS® battery system for electrical energy storage. In the power distribution business, consolidated subsidiary ENERGY SUPPORT CORPORATION is engaged in R&D related to developing new power distribution equipment products and reducing the cost of products.

R&D expenses in this segment totaled ¥1,078 million.

#### **Ceramic Products Business**

The Ceramic Products Business Group conducts R&D focused on several themes: developing high reliability NOx sensors for automobile exhaust emissions; developing gasoline particulate filter (GPF) products; improving production techniques and performance with respect to diesel particulate filters (DPFs); enhancing production techniques for ceramic honeycomb substrates used in catalytic converters for diesel and other automobiles; developing heating and drying systems for glass substrate and film; and refining waste treatment systems for nuclear power plants.

R&D expenses in this segment totaled ¥4,806 million.

## **Electronics Business**

Research in the Electronics Business Group includes research on applied devices based on core piezoelectric ceramics technology, ceramic components and modules for addressing the advanced functionality of semiconductor production equipment, and beryllium copper strip products for electronic parts such as connectors and relays for automobiles, industrial equipment and digital appliances.

Furthermore, this segment is making efforts to develop ceramic products for LEDs using translucent alumina ceramics and low-cost mass production technology.

Consolidated subsidiary SOSHIN ELECTRIC CO., LTD. conducts R&D focused on large-capacity capacitors and multi-layered dielectric filters, primarily for the fields of power electronics and information and communications. R&D expenses in this segment totaled ¥2,299 million.

#### Corporate R&D

The Head Office includes Corporate R&D, which is responsible for Company-wide R&D activities. Corporate R&D's primary mission is to innovate and nurture basic ceramics technology over the medium- and long-terms and to sow the seeds of new products. Corporate R&D consists of the Wafer Project, the NCM (Nano-Ceramic Membranes) Project, the Functional Materials Development Project, the SOFC Project, the ZNB (Zinc-Battery) Project, the Materials Research Laboratory, and the Future Technology Management Center.

In fiscal 2014, Corporate R&D focused on the R&D theme of gallium nitride (GaN) wafers.

R&D expenses in Corporate R&D were ¥5,760 million.

Note: The above amounts do not include consumption tax

## **Summary of Income Statements**

The NGK Group's Ceramic Products Bussiness saw increased demand due to strong sales of automobiles in Europe, the U.S. and China as well as trucks in Japan and the U.S.

In the Electronics Business, sales increased due to improving demand backed by the expansion of mobile devices.

In the Power Business, revenue from insulators increased due to strong demand in North America, the Middle and Near East, and Southeast Asia, in addition to rising sales due to renewal of equipment at domestic electric power companies. Revenue from NAS® batteries also increased due to shipment of large orders for overseas.

As a result of the above, total consolidated net sales for the fiscal year ended March 31, 2015 increased by 22.7% year on year to ¥378,665 million.

In terms of earnings, although fixed costs increased due to rising labor costs, a high level of capital investment and

development input, absorption from the increased sales of automotive ceramics and ceramic components for semiconductor manufacturing equipment and the effect of the weak yen resulted in an operating income of ¥61,577 million, a 39.2% year-on-year increase, and ordinary income of ¥61,068 million, 33.3% year-on-year increase. As for net income, although provision of reserve for loss related to competition law was recorded as extraordinary loss, gain on changes in equity in association with the listing and issuance of new shares of METAWATER Co., Ltd., an associate accounted for by the equity method, was posted under extraordinary income, and due to the improvement of operating income, net income increased by 53.5% year on year to ¥41,505 million.

#### **Financial Position**

As of March 31, 2015, total assets were increased by 14.3% from the previous fiscal year-end to ¥702,234 million. Current assets increased by 12.6% from the previous fiscal year-end to ¥397,160 million, mainly reflecting increases in cash and bank deposits, notes and accounts receivable trade, etc. Non-current assets were increased by 16.6% from the previous fiscal year-end to ¥305,074 million.

Current liabilities increased by 5.6% from the previous fiscal year-end to ¥107,126 million. This was mainly due to an increase in notes and accounts payable trade as well as the posting of provision for loss related to competition law, despite a decrease in current portion of long-term bonds payable. Long-term liabilities increased by 13.5% from the previous fiscal year-end to ¥191,107 million, driven primarily by a rise in deferred tax liabilities.

Total equity stood at ¥404,001 million, or 17.3% higher than the previous fiscal year-end. This was largely attributable to increased retained earnings boosted by net income, as well as foreign currency translation adjustments due to the weak yen and strong dollar and higher unrealized gains on available-for-sale securities.

As a result, the equity ratio to total assets as of March 31, 2015 was 55.8% (compared with 54.3% at the previous fiscal year-end), with net worth per share standing at ¥1,200.68, up ¥179.36 from the previous fiscal year-end.

## **Cash Flows**

There was a net increase ¥8,835 million in cash and cash equivalents (hereinafter, "funds") from the previous fiscal year-end to ¥128,617 million. This reflected ¥73,002 million in net cash provided by operating activities, ¥39,497 million in net cash used in investing activities, and ¥26,000 million in net cash used in financing activities.

# **Cash Flow from Operating Activities**

Funds provided by operating activities were ¥73,002 million. This was mainly attributable to posting an income before income taxes and minority interests of ¥56,391 million and depreciation and amortization, despite cash outflows mainly due to an increase in notes and accounts receivable and a decrease of provision for NAS Battery safety measures. In comparison with the previous fiscal year, funds provided by operating activities increased by ¥40,354 million. This largely reflects an increase in income before income taxes and minority interests and a decrease in reduction of provision for NAS Battery safety measures.

## **Cash Flow from Investing Activities**

Funds used in investing activities were ¥39,497 million. This was mainly due to purchases of property, plant and equipment and investments in subsidiaries. In comparison with the previous fiscal year, funds used in investing activities increased by ¥18,312 million mainly due to purchases of investments in subsidiaries.

# **Cash Flow from Financing Activities**

Funds used in financing activities were ¥26,000 million due to redemption of bonds and payment of dividends. In comparison with the previous fiscal year, net cash provided by financing activities decreased by ¥28,027 million, mainly due to a redemption of bonds.

# **Capital Expenditures**

Capital expenditures for the NGK Group totaled ¥30,366 million.

Capital expenditures in the Power Business group totaled ¥2,687 million, and were concentrated mainly on investments related to rationalization and labor-saving measures in the production of insulators and NAS® batteries.

Capital expenditures in the Ceramic Products Business group totaled ¥20,855 million and were concentrated mainly on production facilities for automotive ceramics products.

Capital expenditures in the Electronics Business group totaled ¥5,254 million, concentrated mainly on production facilities for ceramic components for electronics and semiconductor manufacturing equipment.

At the Head Office, capital expenditures were ¥1,570 million, principally for upgrading facilities.

## **Business Risks**

#### **Production Bases**

The NGK Group's main production bases are located in Aichi Prefecture and Ishikawa Prefecture in Japan, and overseas in the Americas, Europe, Asia, and other regions. The Group operates a global production system for its core products, such as ceramic honeycomb substrates for automotive catalytic converters, from the perspective of manufacturing close to demand centers and achieving optimal production. This ensures that risk is dispersed among manufacturing sites. However, irrespective of whether a production base is in Japan or overseas, if facilities at a major production base are seriously damaged by a natural disaster such as an earthquake or fire, production may stop for a considerable period of time, thereby adversely affecting the NGK Group's business performance and financial condition. Overseas operations, in particular, carry such potential risks as i) compliance with the host country's laws, regulations or taxes, ii) adverse changes in the economic environment such as fluctuations in exchange rates, iii) difficulty in securing, educating and training personnel, iv) inadequate infrastructure, and v) societal problems such as terrorism and war. The unforeseen occurrence of any of these events could adversely impact the NGK Group's business performance and financial condition.

#### **Exchange Rates, Interest Rates, and Material Prices**

The NGK Group produces and sells products worldwide. Consequently, the Group hedges the risk of short-term changes in the exchange rates of major currencies, particularly the U.S. dollar, euro and yen, with forward foreign exchange contracts and other financial instruments. However, appreciation of the yen could cause a decline in net sales and earnings, which could adversly impact the NGK Group's business performance.

The NGK Group plans to continue making the necessary capital investments to expand its businesses and improve productivity. The Group's funding needs include these capital expenditures and the redemption of corporate bonds. In the event of interest rate rises, future fund procurement costs may increase, which could adversely impact the NGK Group's business performance and financial condition.

Rises in raw materials prices have led to higher manufacturing costs at NGK Group businesses. To minimize this factor, the Group raises sales prices, cuts costs, improves productivity, and reduces business expenses. The NGK Group endeavors to absorb rises in purchasing prices, but excessive rises in the prices for raw materials may adversely impact the Group's business performance and financial condition.

#### **New Products**

The NGK Group works to create new products to secure its growth prospects. The Group makes focused investments in new products that should become pillars of growth in the future. At the same time, NGK is making capital expenditures in stages for products for which demand is expected to expand. However, in the event that these capital expenditures are not made on schedule, this may adversely impact the NGK Group's medium-term growth prospects.

## **Changes in the Business Environment**

Demand for the products that the NGK Group manufactures and sells is strongly influenced by changes in the economic climate in and outside of Japan. Such changes may adversely impact the Group's business performance and financial condition.

# **Product Quality**

Guided by its Corporate Quality Policy, the NGK Group conducts quality-related activities in a committed drive to ensure consistent high quality. These efforts notwithstanding, the Group cannot completely eliminate the possibility of quality-related issues from every product that it sells or manufactures. The occurrence of such problems could therefore have a substantial and adverse impact on the Group's business performance.

# **International Investigation related to Competitive Conditions**

The NGK Group is currently the subject of an international investigation related to competitive conditions and is giving its full cooperation. The investigation is being conducted by authorities concerned with competition, and depending on the outcome, there may be an adverse impact on the Group's business performance and financial position.

# NGK INSULATORS, LTD. AND CONSOLIDATED SUBSIDIARIES **CONSOLIDATED BALANCE SHEET** MARCH 31, 2015

| ASSETS                                          | Millions o       | f V             | Thousands of<br>U.S. Dollars<br>(Note 1) |
|-------------------------------------------------|------------------|-----------------|------------------------------------------|
| ASSETS                                          | 2015             | 2014            | 2015                                     |
| CURRENT ASSETS:                                 | 2013             | 2014            | 2013                                     |
| Cash and cash equivalents (Note 13)             | ¥ 128,617        | ¥ 119,782       | \$ 1,071,809                             |
| Time deposits (Note 13)                         | 11,416           | 9,092           | 95,133                                   |
| Marketable securities (Notes 4 and 13)          | 28,030           | 20,994          | 233,583                                  |
| Notes and accounts receivable:                  | 20,000           | 20,771          | 200,000                                  |
| Trade notes and accounts (Note 13)              | 88,979           | 72,168          | 741,492                                  |
| Other                                           | 10,773           | 8,801           | 89,775                                   |
| Allowance for doubtful accounts                 | (1,221)          | (117)           | (10,175)                                 |
| Total                                           | 98,531           | 80,852          | 821,092                                  |
| Inventories (Note 5)                            | 111,498          | 101,353         | 929,150                                  |
| Deferred tax assets (Note 10)                   | 15,253           | 15,157          | 127,108                                  |
| Prepaid expenses and other current assets       | 3,815            | 5,360           | 31,792                                   |
| Total current assets                            | 397,160          | 352,590         | 3,309,667                                |
|                                                 | <del></del>      | <del></del>     |                                          |
| PROPERTY, PLANT AND EQUIPMENT                   |                  |                 |                                          |
| Land                                            | 22,349           | 21,493          | 186,242                                  |
| Buildings and structures                        | 156,243          | 134,738         | 1,302,025                                |
| Machinery and equipment                         | 396,043          | 333,242         | 3,300,358                                |
| Construction in progress                        | 17,998           | 7,900           | 149,983                                  |
| Total                                           | 592,633          | 497,373         | 4,938,608                                |
| Accumulated depreciation                        | (393,373)        | (321,049)       | (3,278,108)                              |
|                                                 | (5,5,5,5)        | (==-,0 .>)      | (0,2:0,:00)                              |
| Net property, plant and equipment               | 199,260          | 176,324         | 1,660,500                                |
| INVESTMENTS AND OTHER ASSETS:                   |                  |                 |                                          |
| Investment securities (Notes 4 and 13)          | 61,690           | 51,767          | 514,083                                  |
| Investments in unconsolidated subsidiaries and  | 01,090           | 31,707          | 314,063                                  |
| associated companies                            | 17,166           | 13,136          | 143,050                                  |
| Intangible assets                               | 4,185            | 4,848           | 34,875                                   |
| Net defined benefit asset (Note 7)              | 14,477           | 7,491           | 120,642                                  |
| Deferred tax assets (Note 10)                   | 5,092            | 3,518           | 42,433                                   |
| · · · · · · · · · · · · · · · · · · ·           | ,                |                 | ,                                        |
| Other assets Total investments and other assets | 3,204<br>105,814 | 4,546<br>85,306 | 26,700<br>881,783                        |
| Total investments and other assets              | 105,614          | 05,500          | 001,703                                  |
| TOTAL                                           | ¥ 702,234        | ¥ 614,220       | \$ 5,851,950                             |

(Continued)

# NGK INSULATORS, LTD. AND CONSOLIDATED SUBSIDIARIES **CONSOLIDATED BALANCE SHEET** MARCH 31, 2015

See notes to consolidated financial statements.

|                                                                |                  |                  | Thousands of U.S. Dollars |
|----------------------------------------------------------------|------------------|------------------|---------------------------|
| LIABILITIES AND EQUITY                                         | Millions of      | (Note 1)         |                           |
| CV DD FIVE V V DV VEVE                                         | 2015             | 2014             | 2015                      |
| CURRENT LIABILITIES:                                           | V 4.220          | V 4005           | # 2 c 000                 |
| Short-term borrowings (Notes 6 and 13)                         | ¥ 4,320          | ¥ 4,995          | \$ 36,000                 |
| Current portion of long-term debt (Notes 6 and 13)             | 6,345            | 20,142           | 52,875                    |
| Notes and accounts payable: Trade notes and accounts (Note 13) | 35,737           | 25,613           | 297,809                   |
| Other                                                          | 35,737<br>14,040 | 25,613<br>11,907 | 117,000                   |
| Total                                                          | 49,777           | 37,520           | 414,809                   |
| Accrued expenses                                               | 15,082           | 13,778           | 125,683                   |
| Provision for NAS Battery safety measures                      | 7,343            | 10,891           | 61,192                    |
| Provision for loss related to competition law                  | 9,300            | 10,091           | 77,500                    |
| Income taxes payable (Notes 10 and 13)                         | 3,480            | 2,854            | 29,000                    |
| Other current liabilities                                      | 11,479           | 11,240           | 95,658                    |
| Total current liabilities                                      | 107,126          | 101,420          | 892,717                   |
| LONG-TERM LIABILITIES:                                         |                  |                  |                           |
| Long-term debt (Notes 6 and 13)                                | 145,538          | 142,159          | 1,212,817                 |
| Net defined benefit liability (Note 7)                         | 20,223           | 16,678           | 168,525                   |
| Provision for product warranties                               | 979              | 544              | 8,158                     |
| Deferred tax liabilities (Note 10)                             | 20,044           | 5,473            | 167,033                   |
| Other long-term liabilities                                    | 4,323            | 3,493            | 36,025                    |
| Total long-term liabilities                                    | 191,107          | 168,347          | 1,592,558                 |
| CONTINGENT LIABILITIES (Note 15)                               |                  |                  |                           |
| EQUITY (Note 8):                                               |                  |                  |                           |
| Common stock:                                                  |                  |                  |                           |
| Authorized - 735,030 thousand shares                           |                  |                  |                           |
| Issued - 327,560 thousand shares                               |                  |                  |                           |
| at March 31, 2015 and 2014                                     | 69,849           | 69,849           | 582,075                   |
| Capital surplus                                                | 72,099           | 72,092           | 600,825                   |
| Stock acquisition rights (Note 9)                              | 887              | 779              | 7,392                     |
| Retained earnings (Note 19)                                    | 224,040          | 187,734          | 1,867,000                 |
| Treasury stock - at cost: 1,033 thousand shares and            | (4.404)          |                  |                           |
| 1,020 thousand shares at March 31, 2015 and 2014, respectively | (1,403)          | (1,347)          | (11,692)                  |
| Accumulated other comprehensive income                         | 25.204           | 15.100           | 210.050                   |
| Unrealized gain on available-for-sale securities               | 26,394           | 17,492           | 219,950                   |
| Deferred gain on derivatives under hedge accounting            | 7                | 18               | 58                        |
| Foreign currency translation adjustments                       | 7,983            | (1,190)          | 66,525                    |
| Defined retirement benefit plans Total                         | (6,915)          | (11,147)         | (57,625)                  |
| 10tai                                                          | 392,941          | 334,280          | 3,274,508                 |
| Minority interests                                             | 11,060           | 10,173           | 92,167                    |
| Total equity                                                   | 404,001          | 344,453          | 3,366,675                 |
| TOTAL                                                          | V 702 224        | ¥ 614,220        | \$ 5,851,950              |
| IOIAL                                                          | ¥ 702,234        | ₹ 014,22U        | φ 5,851,950               |

(Concluded)

# NGK INSULATORS, LTD. AND CONSOLIDATED SUBSIDIARIES CONSOLIDATED STATEMENT OF INCOME YEAR ENDED MARCH 31, 2015

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Millian            | -£ ¥/            | Thousands of U.S. Dollars |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|------------------|---------------------------|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                    | 2014             | (Note 1)<br>2015          |
| NET SALES                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | ¥ 378.665          | ¥ 308.671        | \$ 3,155,542              |
| COST OF SALES (Note 11)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 254,387            | 208,052          | 2,119,892                 |
| Gross profit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 124,278            | 100,619          | 1,035,650                 |
| SELLING, GENERAL AND ADMINISTRATIVE EXPENSES (Note 11)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 62,701             | 56,367           | 522,508                   |
| Operating income                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 61,577             | 44,252           | 513,142                   |
| OTHER INCOME (EXPENSES):                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                    |                  |                           |
| Interest and dividend income                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 1,784              | 1,501            | 14,866                    |
| Interest expense                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | (2,029)            | (2,089)          | (16,908)                  |
| Gain (loss) on sales of and disposals of property, plant and                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                    |                  |                           |
| equipment - net Equity in earnings of unconsolidated subsidiaries and                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 464                | (130)            | 3,867                     |
| associated companies                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 855                | 2,157            | 7,125                     |
| Foreign exchange (loss) gain                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | (92)               | 778              | (767)                     |
| Gain on sales of investment securities - net                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 750                | 505              | 6,250                     |
| Gain on change in equity                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 3,527              | -                | 29,391                    |
| Impairment loss on fixed assets                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | (118)              | (5,406)          | (983)                     |
| Provision of reserve for loss on NAS Battery safety measures                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | -                  | (1,940)          | -                         |
| Provision of reserve for loss related to competition law (Note 15)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | (9,300)            | -                | (77,500)                  |
| Loss on liquidation of a subsidiary                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | -                  | (2,882)          | -                         |
| Other-net                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | (1,027)            | 1,159            | (8,558)                   |
| Other expenses - net                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | (5,186)            | (6,347)          | (43,217)                  |
| INCOME BEFORE INCOME TAXES AND MINORITY INTERESTS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 56,391             | 37,905           | 469,925                   |
| INCOME TAXES (Note 10):                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                    |                  |                           |
| Current                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 9,519              | 8,907            | 79.325                    |
| Current period                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 9,519              | 8,907<br>(1,404) | 19,325                    |
| Previous periods<br>Deferred                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 4,482              | 2,937            | 37,350                    |
| Total income taxes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 14,001             | 10,440           | 116,675                   |
| NET INCOME BEFORE MINORITY INTERESTS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 42,390             | 27,465           | 353,250                   |
| MINORITY INTERESTS IN NET INCOME                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 885                | 420              | 7,375                     |
| NET INCOME                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | ¥ 41,505           | ¥ 27,045         | \$ 345,875                |
| DVD SWADE OF GOLD ON GOVERNOR AND A SAME AND | Ye                 | <u>n</u>         | U.S. Dollars              |
| PER SHARE OF COMMON STOCK (Notes 2.w and 17):                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | V 107.11           | V 02.02          | o 1050                    |
| Basic net income                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | ¥ 127.11<br>126.87 | ¥ 82.82<br>82.67 | \$ 1.059                  |
| Diluted net income                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 28.00              | 82.67<br>22.00   | 1.057<br>0.233            |
| Cash dividends applicable to the year                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 28.00              | 22.00            | 0.233                     |

# NGK INSULATORS, LTD. AND CONSOLIDATED SUBSIDIARIES CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME YEAR ENDED MARCH 31, 2015

|                                                     | Millions | of Yen   | Thousands of<br>U.S. Dollars<br>(Note 1) |
|-----------------------------------------------------|----------|----------|------------------------------------------|
|                                                     | 2015     | 2014     | 2015                                     |
| NET INCOME BEFORE MINORITY INTERESTS                | ¥ 42,390 | ¥ 27,465 | \$ 353,250                               |
| OTHER COMPREHENSIVE INCOME (Note 16):               |          |          |                                          |
| Unrealized gain on available-for-sale securities    | 8,920    | 9,544    | 74,334                                   |
| Deferred loss on derivatives under hedge accounting | (11)     | (4)      | (92)                                     |
| Foreign currency translation adjustments            | 9,157    | 20,240   | 76,308                                   |
| Share of other comprehensive income in associates   | 437      | 2        | 3,642                                    |
| Defined retirement benefit plans                    | 3,987    | 560      | 33,225                                   |
| Total other comprehensive income                    | 22,490   | 30,342   | 187,417                                  |
| COMPREHENSIVE INCOME                                | ¥ 64,880 | ¥ 57,807 | \$ 540,667                               |
| TOTAL COMPREHENSIVE INCOME ATTRIBUTABLE TO:         |          |          |                                          |
| Owners of parent company                            | ¥ 63,801 | ¥ 56,968 | \$ 531,675                               |
| Minority interests                                  | 1,079    | 839      | 8,992                                    |

# NGK INSULATORS, LTD. AND CONSOLIDATED SUBSIDIARIES CONSOLIDATED STATEMENT OF CHANGES IN EQUITY YEAR ENDED MARCH 31, 2015

|                                             | Thousands                |          |          |                      |           |            |
|---------------------------------------------|--------------------------|----------|----------|----------------------|-----------|------------|
|                                             | Outstanding<br>Number of | Common   | Capital  | Stock<br>Acquisition | Retained  | Treasury   |
|                                             | Common Stock             | Stock    | Surplus  | Rights               | Earnings  | Stock      |
| Balance at April 1, 2013                    | 326,549                  | ¥ 69,849 | ¥ 85,136 | ¥ 740                | ¥ 167,220 | ¥ (14,362) |
| Net income                                  | -                        | -        | -        | -                    | 27,045    | -          |
| Cash dividends, ¥20 per share               | -                        | -        | -        | -                    | (6,531)   | -          |
| Purchase of treasury stock                  | (40)                     | -        | -        | -                    | -         | (68)       |
| Disposal of treasury stock                  | 31                       | -        | (1)      | -                    | -         | 40         |
| Retirement of treasury stock                | -                        | -        | (13,043) | -                    | -         | 13,043     |
| Net changes other than shareholders' equity |                          |          |          | 39                   |           |            |
| Balance at March 31, 2014                   |                          |          |          |                      |           |            |
| (April 1, 2014, as previously reported)     | 326,540                  | 69,849   | 72,092   | 779                  | 187,734   | (1,347)    |
| Cumulative effect of accounting change      |                          |          |          |                      | 2,965     |            |
| Balance at April 1, 2014 (as restated)      | 326,540                  | 69,849   | 72,092   | 779                  | 190,699   | (1,347)    |
| Net income                                  | -                        | -        | -        | -                    | (8,164)   | -          |
| Cash dividends, ¥25 per share               | -                        | -        | -        | -                    | 41,505    | -          |
| Purchase of treasury stock                  | (34)                     | -        | -        | -                    | -         | (84)       |
| Disposal of treasury stock                  | 21                       | -        | 7        | -                    | -         | 28         |
| Net changes other than shareholders' equity |                          |          |          | 108                  |           |            |
| Balance at March 31, 2015                   | 326,527                  | ¥ 69,849 | ¥ 72,099 | ¥ 887                | ¥ 224,040 | ¥ (1,403)  |

|                                             | Common<br>Stock | Capital<br>Surplus | Stock<br>Acquisition<br>Rights | Retained<br>Earnings | Treasury<br>Stock |
|---------------------------------------------|-----------------|--------------------|--------------------------------|----------------------|-------------------|
| Balance at March 31, 2014                   |                 | 1                  |                                |                      |                   |
| (April 1, 2014, as previously reported)     | \$ 582,075      | \$ 600,767         | \$ 6,492                       | \$ 1,564,450         | \$ (11,225)       |
| Cumulative effect of accounting change      |                 |                    |                                | 24,708               |                   |
| Balance at April 1, 2014 (as restated)      | \$ 582,075      | \$ 600,767         | \$ 6,492                       | \$ 1,589,158         | \$ (11,225)       |
| Net income                                  | -               | -                  | -                              | (68,033)             | -                 |
| Cash dividends, \$0.21 per share            | -               | -                  | -                              | 345,875              | -                 |
| Purchase of treasury stock                  | -               | -                  | -                              | -                    | (700)             |
| Disposal of treasury stock                  | -               | 58                 | -                              | -                    | 233               |
| Net changes other than shareholders' equity |                 |                    | 900                            |                      |                   |
| Balance at March 31, 2015                   | \$ 582,075      | \$ 600,825         | \$ 7,392                       | \$ 1,867,000         | \$ (11,692)       |

# Millions of Yen

|                                       |                  |                    | Comprehensive Income | Accumulated Other ( |                    |
|---------------------------------------|------------------|--------------------|----------------------|---------------------|--------------------|
|                                       |                  | Defined            | Foreign Currency     | Deferred Gain on    | Unrealized Gain on |
| Minority Total                        |                  | Retirement Benefit | Translation          | Derivatives under   | Available-for-sale |
| Interests Equ                         | Total            | Plans              | Adjustments          | Hedge Accounting    | Securities         |
| ¥ 9,661 ¥ 30                          | ¥ 293,412        | ¥ (2,127)          | ¥ (21,031)           | ¥ 22                | ¥ 7,965            |
| - 2                                   | 27,045           | -                  | -                    | -                   | -                  |
| - (                                   | (6,531)          | -                  | -                    | -                   | -                  |
| ) -                                   | (68)             | -                  | -                    | -                   | -                  |
| -                                     | 39               | -                  | -                    | -                   | -                  |
| -                                     | -                | -                  | -                    | -                   | -                  |
| 512                                   | 20,383           | (9,020)            | 19,841               | (4)                 | 9,527              |
| 10 172                                | 224.200          | (11.147)           | (1.100)              | 10                  | 17.400             |
| 10,173 34                             | 334,280          | (11,147)           | (1,190)              | 18                  | 17,492             |
| 10,173 34                             | 2,965<br>337,245 | (11,147)           | (1,190)              | 18                  | 17,492             |
| , , , , , , , , , , , , , , , , , , , |                  | (11,147)           | (1,190)              | 10                  | 17,492             |
| ·                                     | (8,164)          | -                  | -                    | -                   | -                  |
| - 4                                   | 41,505           | -                  | -                    | -                   | -                  |
| -                                     | (84)             | -                  | -                    | -                   | -                  |
| -                                     | 35               | -                  | -                    | -                   | -                  |
| 887 2                                 | 22,404           | 4,232              | 9,173                | (11)                | 8,902              |
| ¥ 11,060 ¥ 40                         | ¥ 392,941        | ¥ (6,915)          | ¥ 7,983              | ¥ 7                 | ¥ 26,394           |

# Thousands of U.S. Dollars (Note 1)

|                                          | Accumulated Other                     | Comprehensive Income            |                               | _                      |           |                        |
|------------------------------------------|---------------------------------------|---------------------------------|-------------------------------|------------------------|-----------|------------------------|
| Unrealized Gain on<br>Available-for-sale | Deferred Gain on<br>Derivatives under | Foreign Currency<br>Translation | Defined<br>Retirement Benefit | _                      | Minority  | Total                  |
| Securities                               | Hedge Accounting                      | Adjustments                     | Plans                         | Total                  | Interests | Equity                 |
| \$ 145,767                               | \$ 150                                | \$ (9,917)                      | \$ (92,892)                   | \$ 2,785,667<br>24,708 | \$ 84,775 | \$ 2,870,442<br>24,708 |
| \$ 145,767                               | \$ 150                                | \$ (9,917)                      | \$ (92,892)                   | \$ 2,810,375           | \$ 84,775 | \$ 2,895,150           |
| -                                        | -                                     | -                               | -                             | (68,033)               | -         | (68,033)               |
| -                                        | -                                     | -                               | -                             | 345,875                | -         | 345,875                |
| -                                        | -                                     | -                               | -                             | (700)                  | -         | (700)                  |
| -                                        | -                                     | -                               | -                             | 291                    | -         | 291                    |
| 74,183                                   | (92)                                  | 76,442                          | 35,267                        | 186,700                | 7,392     | 194,092                |
| \$ 219,950                               | \$ 58                                 | \$ 66,525                       | \$ (57,625)                   | \$ 3,274,508           | \$ 92,167 | \$ 3,366,675           |

# NGK INSULATORS, LTD. AND CONSOLIDATED SUBSIDIARIES CONSOLIDATED STATEMENT OF CASH FLOWS YEAR ENDED MARCH 31, 2015

| TEAN ENDED MANOIT 31, 2013                                                              |                                         |                | Thousands of                         |  |
|-----------------------------------------------------------------------------------------|-----------------------------------------|----------------|--------------------------------------|--|
|                                                                                         | Millions<br>2015                        | of Yen<br>2014 | <u>U.S. Dollars (Note 1)</u><br>2015 |  |
| OPERATING ACTIVITIES:                                                                   |                                         | 2014           | 2015                                 |  |
| Income before income taxes and minority interests                                       | ¥ 56,391                                | ¥ 37,905       | \$ 469,925                           |  |
| Adjustments for:                                                                        |                                         |                | , ,-                                 |  |
| Income taxes - paid                                                                     | (8,821)                                 | (7,218)        | (73,508)                             |  |
| Depreciation and amortization                                                           | 25,532                                  | 19,894         | 212,766                              |  |
| Impairment loss on fixed assets                                                         | 118                                     | 5,406          | 983                                  |  |
| Loss on liquidation of subsidiaries and affiliates                                      | -                                       | 2,882          | -                                    |  |
| Decrease of provision for NAS Battery safety measures                                   | (3,548)                                 | (10,127)       | (29,566)                             |  |
| Increase of provision for loss related to competition law                               | 9,300                                   | -              | 77,500                               |  |
| Equity in earnings of unconsolidated subsidiaries and associated companies              | (855)                                   | (2,157)        | (7,125)                              |  |
| Gain on change in equity Changes in assets and liabilities:                             | (3,527)                                 | -              | (29,391)                             |  |
| Increase in notes and accounts receivable - trade                                       | (6,512)                                 | (9,517)        | (54,266)                             |  |
|                                                                                         | * * * * * * * * * * * * * * * * * * * * |                |                                      |  |
| Increase in inventories                                                                 | (2,375)                                 | (1,044)        | (19,791)                             |  |
| Decrease (increase) in asset for retirement benefits                                    | 1,176                                   | (2,071)        | 9,800                                |  |
| Increase (decrease) in notes and accounts payable - trade                               | 4,360                                   | (2,053)        | 36,333                               |  |
| Other - net                                                                             | 1,763                                   | 748            | 14,691                               |  |
| Total adjustments                                                                       | 16,611<br>73,002                        | (5,257)        | 138,426<br>608,351                   |  |
| Net cash provided by operating activities                                               | 75,002                                  | 32,046         | 000,331                              |  |
| INVESTING ACTIVITIES:                                                                   |                                         |                |                                      |  |
| Purchases of marketable securities                                                      | (28,700)                                | (20,175)       | (239,166)                            |  |
| Proceeds from sales and redemption of marketable securities                             | 22,674                                  | 15,670         | 188,950                              |  |
| Proceeds from sales of property, plant and equipment                                    | 2,356                                   | 1,050          | 19,633                               |  |
| Purchases of investment securities                                                      | (4,226)                                 | (20)           | (35,216)                             |  |
| Proceeds from sales and redemption of investment securities                             | 9,461                                   | 19,534         | 78,841                               |  |
| Purchases of property, plant and equipment                                              | (30,262)                                | (27,996)       | (252,176)                            |  |
| Purchase of an investment in a subsidiary resulting in change                           | (10.700)                                |                | (00,000)                             |  |
| in scope of consolidation Increase in time deposits                                     | (10,788)<br>(1,887)                     | (8,239)        | (89,900)<br>(15,725)                 |  |
| Other - net                                                                             | 1,875                                   | (1,009)        | 15,625                               |  |
| Net cash used in investing activities                                                   | (39,497)                                | (21,185)       | (329,134)                            |  |
|                                                                                         |                                         |                |                                      |  |
| FINANCING ACTIVITIES:                                                                   | (4.440)                                 | (100)          | (0.005)                              |  |
| Decrease in short-term borrowings - net                                                 | (1,119)                                 | (432)          | (9,325)                              |  |
| Proceeds from long-term debt Repayment of long-term borrowings                          | 5,686<br>(1,899)                        | 9,400          | 47,383<br>(15,825)                   |  |
| Redemption of bonds                                                                     | (20,000)                                | _              | (166,666)                            |  |
| Cash dividends                                                                          | (8,164)                                 | (6,531)        | (68,033)                             |  |
| Other-net                                                                               | (504)                                   | (410)          | (4,200)                              |  |
| Net cash (used in) provided by financing activities                                     | (26,000)                                | 2,027          | (216,666)                            |  |
| FOREIGN CURRENCY TRANSLATION ADJUSTMENTS                                                |                                         |                |                                      |  |
| ON CASH AND CASH EQUIVALENTS                                                            | 1,330                                   | 3,447          | 11,083                               |  |
| ON CASHAND CASH EQUIVALENTS                                                             | 1,550                                   | 3,447          |                                      |  |
| NET INCREASE IN CASH AND CASH EQUIVALENTS                                               | 8,835                                   | 16,937         | 73,634                               |  |
| CASH AND CASH EQUIVALENTS, BEGINNING OF YEAR                                            | 119,782                                 | 102,845        | 998,175                              |  |
| CASH AND CASH EQUIVALENTS, END OF YEAR                                                  | ¥ 128,617                               | ¥ 119,782      | \$ 1,071,809                         |  |
| ADDITIONAL INFORMATION.                                                                 |                                         |                |                                      |  |
| ADDITIONAL INFORMATION: Assets acquired and liabilities assumed by acquisition (Note 3) |                                         |                |                                      |  |
| Current assets                                                                          | ¥ 13,844                                | _              | \$ 115,367                           |  |
| Noncurrent assets                                                                       | 10,785                                  | _              | 89,875                               |  |
| Current liabilities                                                                     | (10,842)                                | _              | (90,350)                             |  |
| Noncurrent liabilities                                                                  | (2,015)                                 | -              | (16,792)                             |  |
| Minority interests                                                                      | (180)                                   | -              | (1,500)                              |  |
| Acquisition cost                                                                        | 11,592                                  |                | 96,600                               |  |
| Cash and cash equivalents                                                               | (805)                                   |                | (6,708)                              |  |
| Payment for purchase of an investment in subsidiary                                     | ¥ 10,787                                |                | ¥ 89,892                             |  |
|                                                                                         |                                         |                |                                      |  |

# NGK INSULATORS, LTD. AND CONSOLIDATED SUBSIDIARIES

**Notes to Consolidated Financial Statements** Year Ended March 31, 2015

## 1. BASIS OF PRESENTATION OF CONSOLIDATED FINANCIAL STATEMENTS

The accompanying consolidated financial statements have been prepared in accordance with the provisions set forth in the Japanese Financial Instruments and Exchange Act and its related accounting regulations and in accordance with accounting principles generally accepted in Japan ("Japanese GAAP"), which are different in certain respects as to the application and disclosure requirements of International Financial Reporting Standards.

In preparing these consolidated financial statements, certain reclassifications and rearrangements have been made to the consolidated financial statements issued domestically in order to present them in a form which is more familiar to readers outside Japan. In addition, certain reclassifications have been made in the 2014 consolidated financial statements to conform to the classifications used in 2015.

The consolidated financial statements are stated in Japanese yen, the currency of the country in which NGK INSULATORS, LTD. (the "Company") is incorporated and operates. The translations of Japanese yen amounts into U.S. dollar amounts are included solely for the convenience of readers outside Japan and have been made at the rate of \\$120 to \\$1, the approximate rate of exchange at March 31, 2015. Such translations should not be construed as representations that the Japanese yen amounts could be converted into U.S. dollars at that or any other rate.

# 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

a. Consolidation—The consolidated financial statements as of March 31, 2015, include the accounts of the Company and its 58 significant (53 in 2014) subsidiaries (together, the "Group"). During the year ended March 31, 2015, the Company acquired all of the shares of NGK Electronics Devices, Inc. together with its three subsidiaries, and accounted them for as newly consolidated subsidiaries (Note 3). NGK MATERIAL USA INC. was newly established during the year ended March 31, 2015, and is also accounted for as a consolidated subsidiary.

Under the control and influence concepts, those companies in which the Company, directly or indirectly, is able to exercise control over operations are fully consolidated, and those companies over which the Group has the ability to exercise significant influence are accounted for by the equity method.

Investments in one unconsolidated subsidiary and one associated company are accounted for by the equity method in 2015 and 2014. METAWATER Co., Ltd., an associated company, offered stocks for public subscriptions and disposed of its treasury stocks during the year ended March 31, 2015. As a result, the Group recognized gain on changes in equity of ¥3,527 million (\$29,391 thousand) for the year ended March 31, 2015.

Investments in the remaining unconsolidated subsidiaries and associated companies are stated at cost. If the equity method of accounting had been applied to the investments in these companies, the effect on the accompanying consolidated financial statements would not be material.

The excess of the cost of acquisition over the fair value of the net assets of an acquired subsidiary at the date of acquisition is being amortized over a period of five years.

All significant intercompany balances and transactions have been eliminated in consolidation. All material unrealized profit included in assets resulting from transactions within the Group is also eliminated. The fiscal years of subsidiaries are not necessarily the same as that of the Company, Accounts of ten foreign consolidated subsidiaries, which have different fiscal years, are provisionally closed at March 31 for the consolidation.

- b. Unification of Accounting Policies Applied to Foreign Subsidiaries for the Consolidated Financial Statements—In May 2006, the Accounting Standards Board of Japan (the"ASBJ") issued ASBJ Practical Issues Task Force (PITF) No. 18, "Practical Solution on Unification of Accounting Policies Applied to Foreign Subsidiaries for the Consolidated Financial Statements." PITF No. 18 prescribes that the accounting policies and procedures applied to a parent company and its subsidiaries for similar transactions and events under similar circumstances should in principle be unified for the preparation of the consolidated financial statements. However, financial statements prepared by foreign subsidiaries in accordance with either International Financial Reporting Standards or generally accepted accounting principles in the United States of America tentatively may be used for the consolidation process, except for the following items that should be adjusted in the consolidation process so that net income is accounted for in accordance with Japanese GAAP, unless they are not material: (a) amortization of goodwill; (b) scheduled amortization of actuarial gain or loss of pensions that has been recorded in equity through other comprehensive income; (c) expensing capitalized development costs of R&D; (d) cancellation of the fair value model accounting for property, plant and equipment and investment properties and incorporation of the cost model of accounting; and (e) exclusion of minority interests from net income, if contained in net income (see Note 2.y).
- c. Business Combinations—In October 2003, the Business Accounting Council issued a Statement of Opinion, "Accounting for Business Combinations," and in December 2005, the ASBJ issued ASBJ Statement No. 7, "Accounting Standard for Business Divestitures" and ASBJ Guidance No. 10, "Guidance for Accounting Standard for Business Combinations and Business Divestitures." The accounting standard for business combinations allows companies to apply the pooling-of-interests method of accounting only when certain specific criteria are met such that the business combination is essentially regarded as a uniting-ofinterests. For business combinations that do not meet the uniting-of-interests criteria, the business combination is considered to be an acquisition and the purchase method of accounting is required. This standard also prescribes the accounting for combinations of entities under common control and for joint ventures.

In December 2008, the ASBJ issued a revised accounting standard for business combinations, ASBJ Statement No. 21, "Accounting Standard for Business Combinations." Major accounting changes under the revised accounting standard are as follows: (1) The revised standard requires accounting for business combinations only by the purchase method. As a result, the pooling-of-interests method of accounting is no longer allowed. (2) The previous accounting standard required research and development costs to be charged to income as incurred. Under the revised standard, in-process research and development costs acquired in the business combination are capitalized as an intangible asset. (3) The previous accounting standard provided for a bargain purchase gain (negative goodwill) to be systematically amortized over a period not exceeding 20 years. Under the revised standard, the acquirer recognizes the bargain purchase gain in profit or loss immediately on the acquisition date after reassessing and confirming that all of the assets acquired and all of the liabilities assumed have been identified after a review of the procedures used in the purchase price allocation. The revised standard was applicable to business combinations undertaken on or after April 1, 2010.

Cash Equivalents—Cash equivalents are short-term investments that are readily convertible into cash and that are exposed to insignificant risk of changes in value.

Cash equivalents include time deposits, certificates of deposit, and investment trusts that represent short-term investments, all of which mature or become due within three months of the date of acquisition.

- *Inventories*—Inventories are stated at the lower of cost, determined principally by the average method for finished products, work in process, and raw materials, or net selling value (see Note 5). Write-downs of inventories in the amounts of ¥913 million (\$7,608 thousand) and ¥1,208 million for the years ended March 31, 2015 and 2014, respectively, were included in cost of sales. Costs of contracts in progress are stated at cost, determined by the specific identification method.
- f. Allowance for Doubtful Accounts —To provide for the loss from doubtful accounts, the allowance for doubtful accounts is calculated using the historical rate of actual losses for normal receivables and the estimated nonrecoverable amount for specific doubtful receivables after considering the recoverability of each account.
- Marketable and Investment Securities—Marketable and investment securities are classified and accounted for, depending on management's intent, as follows: (1) held-to-maturity debt securities, for which there is the positive intent and ability to hold to maturity, are reported at amortized cost; and (2) available-for-sale securities, which are not classified as held-to-maturity debt securities, are reported at fair value, with unrealized gains and losses, net of applicable taxes, reported in a separate component of equity.

Nonmarketable available-for-sale securities are stated at cost, determined by the moving-average method. For other-than-temporary declines in fair value, investment securities are reduced to net realizable value by a charge to income.

h. Property, Plant, and Equipment—Property, plant, and equipment are stated at cost. Depreciation of property, plant and equipment of the Company and its consolidated subsidiaries is computed by the straight-line method.

The range of useful lives is principally from 15 to 50 years for buildings and structures and from three to 12 years for machinery and equipment. The useful lives for lease assets are the terms of the respective leases.

- i. Long-Lived Assets—The Group reviews its long-lived assets for impairment whenever events or changes in circumstance indicate the carrying amount of an asset or asset group may not be recoverable. An impairment loss is recognized if the carrying amount of an asset or asset group exceeds the sum of the undiscounted future cash flows expected to result from the continued use and eventual disposition of the asset or asset group. The impairment loss would be measured as the amount by which the carrying amount of the asset exceeds its recoverable amount, which is the higher of the discounted cash flows from the continued use and eventual disposition of the asset or the net selling price at disposition.
- Intangible Assets—Depreciation is computed by the straight-line method, based on the estimated useful lives of the asset. The useful life of software is five years.
- Retirement and Pension Plans Net defined benefit liability (asset) is accounted for based on the projected benefit obligations and plan assets at the balance sheet date. The projected benefit obligations are attributed to periods on a benefit-formula basis. Actuarial gains and losses are amortized and charged to expense on a straight-line basis over 10 years within the expected average remaining service period of the employees from the consolidated fiscal year following the year when they occur. Past service costs are amortized and charged to expense on a straight-line basis, mainly over 10 years, within the expected average remaining service period of the employees.

In some consolidated subsidiaries in the United States, the costs of postretirement benefits other than pension plans are allocated to each period based on the estimated service period of employees, and are included in net defined benefit liability because they are similar to retirement benefits.

Certain domestic consolidated subsidiaries apply the simplified method to state the liability based on the amount that would be paid if employees retired at the consolidated balance sheet date.

In May 2012, the ASBJ issued ASBJ Statement No. 26, "Accounting Standard for Retirement Benefits" and ASBJ Guidance No. 25, "Guidance on Accounting Standard for Retirement Benefits," which replaced the accounting standard for retirement benefits that had been issued by the Business Accounting Council in 1998 with an effective date of April 1, 2000, and the other related practical guidance, and were followed by partial amendments from time to time through 2009.

- (a) Under the revised accounting standard, actuarial gains and losses and past service costs that are yet to be recognized in profit or loss are recognized within equity (accumulated other comprehensive income), after adjusting for tax effects, and any resulting deficit or surplus is recognized as a liability (net defined benefit liability) or asset (net defined benefit asset).
- (b) The revised accounting standard does not change how to recognize actuarial gains and losses and past service costs in profit or loss. Those amounts are recognized in profit or loss over a certain period no longer than the expected average remaining service period of the employees. However, actuarial gains and losses and past service costs that arose in the current period and have not yet been recognized in profit or loss are included in other comprehensive income and actuarial gains and losses and past service costs that were recognized in other comprehensive income in prior periods and then recognized in profit or loss in the current period shall be treated as reclassification adjustments.
- (c) The revised accounting standard also made certain amendments relating to the method of attributing expected benefit to periods, the discount rate, and expected future salary increases.

This accounting standard and the guidance for (a) and (b) above are effective for the end of annual periods beginning on or after April 1, 2013, and for (c) above are effective for the beginning of annual periods beginning on or after April 1, 2014, or for the beginning of annual periods beginning on or after April 1, 2015, subject to certain disclosure in March 2015, all with earlier application being permitted from the beginning of annual periods beginning on or after April 1, 2013. However, no retrospective application of this accounting standard to consolidated financial statements in prior periods is required.

The Group applied the revised accounting standard and guidance for retirement benefits for (a) and (b) above, effective March 31, 2014, and for (c) above, effective April 1, 2014.

With respect to (c) above, the Group changed the method of attributing the expected benefit to periods from a straight-line basis to a benefit-formula basis and the method of determining the discount rate from using the period which approximates the expected average remaining service period to using a single weighted average discount rate reflecting the estimated timing and amount of benefit payment, and recorded the effect of (c) above as of April 1, 2014, in retained earnings.

As a result, as of April 1, 2014, net defined benefit asset increased by ¥4,598 million (\$38,317 thousand), net defined benefit liability decreased by ¥717 million (\$5,975

- thousand), and retained earnings increased by \(\frac{\pma}{2}\). The effect of this change on the consolidated financial of income for the year ended March 31, 2015 is immaterial.
- Stock Options—In December 2005, the ASBJ issued ASBJ Statement No. 8, "Accounting Standard for Stock Options" and related guidance. The new standard and guidance are applicable to stock options newly granted on and after May 1, 2006. This standard requires companies to measure the cost of employee stock options based on the fair value at the date of grant and recognize compensation expenses over the vesting period as consideration for receiving goods or services. The standard also requires companies to account for stock options granted to nonemployees based on the fair value of either the stock option or the goods or services received. In the balance sheet, the stock option is presented as a stock acquisition right as a separate component of equity until exercised. The standard covers equity-settled, share-based payment transactions, but does not cover cash-settled, share-based payment transactions.
- Research and Development Costs—Research and development costs are charged to income as incurred.
- n. Provision for Product Warranties Costs—The Company and some consolidated subsidiaries estimate and accrue the costs of warranty repair for products sold in reserve for future expenses.
- Provision for NAS Battery Safety Measures—In September 2012, the Company-manufactured NAS® (sodium-sulfur) batteries used for storing electricity caught fire. The Company, in connection with this incident, reserved an allowance as "Provision for NAS Battery safety measures" for anticipated future expenses related to safety measures necessary to expand NAS battery business to the extent that such amount can be reasonably estimated.
- Provision for Loss Related to Competition Law—The Company estimated and recorded an allowance for estimated losses related to competition law.
- q. Revenue Recognition The Group recognizes revenue mainly upon the delivery of products, based on the contract terms and other relevant factors.
- r. Construction Contracts—In December 2007, the ASBJ issued ASBJ Statement No. 15, "Accounting Standard for Construction Contracts" and ASBJ Guidance No. 18, "Guidance on Accounting Standard for Construction Contracts." Under this accounting standard, construction revenue and construction costs should be recognized by the percentage-of-completion method if the outcome of a construction contract can be estimated reliably. When total construction revenue, total construction costs and the stage of completion of the contract at the balance sheet date can be reliably measured, the outcome of a construction contract is deemed to be estimated reliably. If the outcome of a construction contract cannot be reliably estimated, the completed-contract method should be applied. When it is probable that the total construction costs will exceed total construction revenue, an estimated loss on the contract should be immediately recognized by providing for a loss on construction contracts.
- *Income Taxes*—The provision for current income taxes is computed based on the pretax income included in the consolidated statement of income. The asset and liability approach is used to recognize deferred tax assets and liabilities for the expected future tax consequences of temporary differences between the carrying amounts and the tax bases of assets and liabilities. Deferred taxes are measured by applying currently enacted income tax rates to the temporary differences.

- Foreign Currency Transactions—All short-term and long-term monetary receivables and payables denominated in foreign currencies are translated into Japanese ven at the exchange rates at the balance sheet date. The foreign exchange gains and losses from translation are recognized in the consolidated statement of income to the extent that they are not hedged by forward exchange contracts.
- u. Foreign Currency Financial Statements—The balance sheet accounts of the consolidated foreign subsidiaries are translated into Japanese ven at the current exchange rate as of the balance sheet date, except for equity, which is translated at the historical rate. Differences arising from such translation are shown as "Foreign currency translation adjustments" under accumulated other comprehensive income in a separate component of equity. Revenue and expense accounts of consolidated foreign subsidiaries are translated into yen at the average exchange rate.
- v. Derivatives and Hedging Activities—The Group uses derivative financial instruments to manage its exposures to fluctuations in foreign exchange and interest rates. Foreign exchange forward contracts, interest rate and currency swaps, and interest rate swaps are utilized by the Group to reduce foreign currency exchange and interest rate risks. The Group does not enter into derivatives for trading or speculative purposes.

Derivative financial instruments are classified and accounted for as follows: (1) all derivatives are recognized as either assets or liabilities and measured at fair value, and gains or losses on derivative transactions are recognized in the consolidated statement of income; and (2) for derivatives used for hedging purposes, if such derivatives qualify for hedge accounting because of high correlation and effectiveness between the hedging instruments and the hedged items, gains or losses on derivatives are deferred until maturity of the hedged transactions.

Foreign currency forward contracts employed to hedge foreign exchange exposures for export sales and purchases are measured at fair value and the unrealized gains/losses are recognized in income. Forward contracts applied for forecasted (or committed) transactions are also measured at fair value but the unrealized gains/losses are deferred until the underlying transactions are completed.

Receivables or payables denominated in foreign currencies for which foreign exchange forward contracts are used to hedge the foreign currency fluctuations are translated at the contracted rate if the forward contracts qualify for hedge accounting.

Long-term debt denominated in foreign currencies for which currency and interest rate swaps are used to hedge the foreign currency and interest rate fluctuations is also translated at the contracted rate if the forward contracts qualify for hedge accounting.

Interest rate swaps which qualify for hedge accounting and meet specific matching criteria are not remeasured at market value, but the differential paid or received under the swap agreements is recognized and included in interest expense.

Per-Share Information—Basic net income per share is computed by dividing net income available to common shareholders by the weighted-average number of common shares outstanding for the period, retroactively adjusted for stock splits.

Diluted net income per share reflects the potential dilution that could occur if securities were exercised or converted into common stock. Diluted net income per share of common stock assumes full conversion of the outstanding convertible notes and bonds at the beginning of the year (or at the time of issuance) with an applicable adjustment for related interest expense, net of tax, and full exercise of outstanding stock acquisition rights.

Cash dividends per share presented in the accompanying consolidated statement of income are dividends applicable to the respective fiscal years, including dividends to be paid after the end of the year.

x. Accounting Changes and Error Corrections—In December 2009, the ASBJ issued ASBJ Statement No. 24, "Accounting Standard for Accounting Changes and Error Corrections" and ASBJ Guidance No. 24, "Guidance on Accounting Standard for Accounting Changes and Error Corrections." Accounting treatments under this standard and guidance are as follows: (1) Changes in Accounting Policies—When a new accounting policy is applied following revision of an accounting standard, the new policy is applied retrospectively unless the revised accounting standard includes specific transitional provisions, in which case the entity shall comply with the specific transitional provisions. (2) Changes in Presentation—When the presentation of financial statements is changed, prior-period financial statements are reclassified in accordance with the new presentation. (3) Changes in Accounting Estimates—A change in an accounting estimate is accounted for in the period of the change if the change affects that period only, and is accounted for prospectively if the change affects both the period of the change and future periods. (4) Corrections of Prior-Period Errors—When an error in prior-period financial statements is discovered, those statements are restated.

# New Accounting Pronouncements

Accounting Standards for Business Combinations and Consolidated Financial Statements— In September 2013, the ASBJ issued revised ASBJ Statement No. 21, "Accounting Standard for Business Combinations," revised ASBJ Guidance No. 10, "Guidance on Accounting Standards for Business Combinations and Business Divestitures," and revised ASBJ Statement No. 22, "Accounting Standard for Consolidated Financial Statements." Major accounting changes are as follows:

- (a) Transactions with noncontrolling interest—A parent's ownership interest in a subsidiary might change if the parent purchases or sells ownership interests in its subsidiary. The carrying amount of minority interest is adjusted to reflect the change in the parent's ownership interest in its subsidiary while the parent retains its controlling interest in its subsidiary. Under the current accounting standard, any difference between the fair value of the consideration received or paid and the amount by which the minority interest is adjusted is accounted for as an adjustment of goodwill or as profit or loss in the consolidated statement of income. Under the revised accounting standard, such difference shall be accounted for as capital surplus as long as the parent retains control over its subsidiary.
- (b) Presentation of the consolidated balance sheet—In the consolidated balance sheet, "minority interest" under the current accounting standard will be changed to "noncontrolling interest" under the revised accounting standard.
- (c) Presentation of the consolidated statement of income—In the consolidated statement of income, "income before minority interest" under the current accounting standard will be changed to "net income" under the revised accounting standard, and "net income" under the current accounting standard will be changed to "net income attributable to owners of the parent" under the revised accounting standard.
- (d) Provisional accounting treatments for a business combination—If the initial accounting for a business combination is incomplete by the end of the reporting period in which the business combination occurs, an acquirer shall report in its financial statements provisional amounts for the items for which the accounting is incomplete. Under the current accounting standard guidance, the impact of adjustments to provisional amounts recorded in a business combination on profit or loss is recognized as profit or loss in the

year in which the measurement is completed. Under the revised accounting standard guidance, during the measurement period, which shall not exceed one year from the acquisition, the acquirer shall retrospectively adjust the provisional amounts recognized at the acquisition date to reflect new information obtained about facts and circumstances that existed as of the acquisition date and that would have affected the measurement of the amounts recognized as of that date. Such adjustments shall be recognized as if the accounting for the business combination had been completed at the acquisition date.

(e) Acquisition-related costs—Acquisition-related costs are costs, such as advisory fees or professional fees, which an acquirer incurs to effect a business combination. Under the current accounting standard, the acquirer accounts for acquisition-related costs by including them in the acquisition costs of the investment. Under the revised accounting standard, acquisition-related costs shall be accounted for as expenses in the periods in which the costs are incurred.

The above accounting standards and guidance for (a) transactions with noncontrolling interest, (b) presentation of the consolidated balance sheet, (c) presentation of the consolidated statement of income, and (e) acquisition-related costs are effective for the beginning of annual periods beginning on or after April 1, 2015. Earlier application is permitted from the beginning of annual periods beginning on or after April 1, 2014, except for (b) presentation of the consolidated balance sheet and (c) presentation of the consolidated statement of income. In the case of earlier application, all accounting standards and guidance above, except for (b) presentation of the consolidated balance sheet and (c) presentation of the consolidated statement of income, should be applied simultaneously.

Either retrospective or prospective application of the revised accounting standards and guidance for (a) transactions with noncontrolling interest and (e) acquisition-related costs is permitted. In retrospective application of the revised standards and guidance, the accumulated effects of retrospective adjustments for all (a) transactions with noncontrolling interest and (e) acquisition-related costs which occurred in the past shall be reflected as adjustments to the beginning balance of capital surplus and retained earnings for the year of the first-time application. In prospective application, the new standards and guidance shall be applied prospectively from the beginning of the year of the first-time application.

The revised accounting standards and guidance for (b) presentation of the consolidated balance sheet and (c) presentation of the consolidated statement of income shall be applied to all periods presented in financial statements containing the first-time application of the revised standards and guidance.

The revised standards and guidance for (d) provisional accounting treatments for a business combination are effective for a business combination which occurs on or after the beginning of annual periods beginning on or after April 1, 2015. Earlier application is permitted for a business combination which occurs on or after the beginning of annual periods beginning on or after April 1, 2014.

The Company expects to apply the revised accounting standards and guidance for (a), (b), (c) and (e) above from April 1, 2015, and for (d) above for a business combination which will occur on or after April 1, 2015, and is in the process of measuring the effects of applying the revised accounting standards and guidance in future applicable periods are not determined.

#### **BUSINESS COMBINATION** 3.

On January 5, 2015, the Company acquired all of the shares of NGK Electronics Devices, Inc. (former company name: NIPPON STEEL & SUMIKIN Electronics Devices Inc. (NSSED)), which manufactures and sells ceramics for industrial electronics, such as ceramic packages, from Nippon Steel & Sumitomo Metal Corporation. As a result, NGK Electronics Devices, Inc. became a consolidated subsidiary of the Company because the Company acquired 100% of the voting rights of NSSED. By adding the Company's technologies in materials technologies and high-precision processing to NSSED's manufacturing expertise and technologies developed over many years in multiple-product-type, low-cost mass production, the Company believes that it will be able to achieve synergies between its technologies and those of NSSED, and that these synergies will enable further growth in its electronics business.

The results of operations for NGK Electronics Devices, Inc. are included in the Company's consolidated financial statements from the deemed acquisition date (January 1, 2015).

The Company accounted for this business combination by the purchase method of accounting. The breakdown of the acquisition cost was as follows:

|                            | Million | Millions of Yen Thousands o |    |        |  |  |
|----------------------------|---------|-----------------------------|----|--------|--|--|
| Considerations paid (Cash) | ¥       | 11,500                      | \$ | 95,833 |  |  |
| Acquisition-related cost   |         | 92                          |    | 767    |  |  |
| Acquisition cost           | ¥       | 11,592                      | \$ | 96,600 |  |  |

Total cost of acquisition has been allocated to the assets acquired and the liabilities assumed based on their respective fair values. No goodwill or negative goodwill was recognized. The estimated fair values of the assets acquired and the liabilities assumed at the acquisition date were as follows:

|                       | Million | Millions of Yen |    | ds of U.S.<br>ollars |
|-----------------------|---------|-----------------|----|----------------------|
| Current assets        | ¥       | 13,844          | \$ | 115,367              |
| Noncurrent assets     |         | 10,785          |    | 89,875               |
| Total assets          | ¥       | 24,629          | \$ | 205,242              |
|                       |         |                 |    |                      |
| Current liabilities   | ¥       | 10,842          | \$ | 90,350               |
| Long-term liabilities |         | 2,015           |    | 16,792               |
| Total liabilities     | ¥       | 12,857          | \$ | 107,142              |
|                       |         |                 |    |                      |

If this business combination had been completed as of April 1, 2014, the beginning of the current fiscal year, the unaudited effect on the consolidated statement of income for the year ended March 31, 2015, would be as follows:

| Net sales | Millions | of Yen | Thousands of U.S. Dollars |  |  |
|-----------|----------|--------|---------------------------|--|--|
| Net sales | ¥        | 22,860 | \$<br>190,500             |  |  |

(Method of calculating the unaudited effect on the consolidated statement of income) The unaudited effect is the difference between sales calculated under the assumption that the Company acquired NSSED at the beginning of the fiscal year and those recognized in the consolidated income statement for the year ended March 31, 2015. Effects on each category of profits or losses are omitted as they are immaterial.

# 4. MARKETABLE AND INVESTMENT SECURITIES

Marketable and investment securities as of March 31, 2015 and 2014, consisted of the following:

|                             | Millions | Millions of Yen |            |  |
|-----------------------------|----------|-----------------|------------|--|
|                             | 2015     | 2014            | 2015       |  |
| Current:                    |          |                 |            |  |
| Investment trusts and other | ¥ 10,528 | ¥ 8,840         | \$ 87,733  |  |
| Debt securities             | 17,502   | 12,154          | 145,850    |  |
| Total                       | ¥ 28,030 | ¥ 20,994        | \$ 233,583 |  |
| Noncurrent:                 |          |                 |            |  |
| Equity securities and other | ¥ 57,789 | ¥ 40,459        | \$ 481,575 |  |
| Debt securities             | 3,901    | 11,308          | 32,508     |  |
| Total                       | ¥ 61,690 | ¥ 51,767        | \$ 514,083 |  |

The costs and aggregate fair values of marketable and investment securities at March 31, 2015 and 2014, were as follows:

|                             | Millions of Yen |            |                 |               |  |
|-----------------------------|-----------------|------------|-----------------|---------------|--|
|                             |                 | Unrealized | Unrealized      | Fair          |  |
| March 31, 2015              | Cost            | Gains      | Losses          | Value         |  |
| Securities classified as:   |                 |            |                 |               |  |
| Available-for-sale:         |                 |            |                 |               |  |
| Equity securities           | ¥ 19,000        | ¥ 36,726   | ¥ 48            | ¥ 55,678      |  |
| Investment trusts and other | 9,625           | 944        | 41              | 10,528        |  |
| Held-to-maturity:           |                 |            |                 |               |  |
| Debt securities             | 21,402          | 272        | 2               | 21,672        |  |
|                             |                 | 24.11.     | P <b>X</b> 7    |               |  |
|                             |                 |            | ns of Yen       | т.            |  |
| Manch 21 2014               | Cost            | Unrealized | Unrealized      | Fair<br>Value |  |
| March 31, 2014              | Cost            | Gains      | Losses          | Value         |  |
| Securities classified as:   |                 |            |                 |               |  |
| Available-for-sale:         | W 12 207        | W 04 007   | X7 40           | V 20 251      |  |
| Equity securities           | ¥ 13,397        | ¥ 24,997   | ¥ 43            | ¥ 38,351      |  |
| Investment trusts and other | 8,408           | 528        | 96              | 8,840         |  |
| Held-to-maturity:           | 22.462          | 200        | 4               | 22.746        |  |
| Debt securities             | 23,462          | 288        | 4               | 23,746        |  |
|                             |                 |            |                 |               |  |
|                             |                 | Thousands  | of U.S. Dollars |               |  |
|                             |                 | Unrealized | Unrealized      | Fair          |  |
| March 31, 2015              | Cost            | Gains      | Losses          | Value         |  |
| Securities classified as:   |                 |            |                 |               |  |
| Available-for-sale:         |                 |            |                 |               |  |
| Equity securities           | \$ 158,333      | \$ 306,050 | \$ 400          | \$ 463,983    |  |
| Investment trusts and other | 80,208          | 7,867      | 342             | 87,733        |  |
| Held-to-maturity:           |                 |            |                 |               |  |
| Debt securities             | 178,350         | 2,267      | 17              | 180,600       |  |
|                             |                 |            |                 |               |  |

Available-for-sale securities whose fair values are not readily determinable as of March 31, 2015 and 2014, were as follows:

|                             | C        |          |                           |
|-----------------------------|----------|----------|---------------------------|
|                             | Millions | of Von   | Thousands of U.S. Dollars |
|                             | 2015     | 2014     | 2015                      |
| Associable for color        | 2013     | 2014     | 2013                      |
| Available-for-sale:         |          | ** * 100 | A 1 = 100                 |
| Equity securities and other | ¥ 2,112  | ¥ 2,108  | \$ 17,600                 |

Proceeds from sales of available-for-sale securities (including marketable securities and investment securities) for the years ended March 31, 2015 and 2014, were ¥2,039 million (\$16,992 thousand) and ¥1,748 million, respectively. Realized gains on these sales, computed on the moving-average cost basis, were ¥841 million (\$7,008 thousand) and ¥752 million for the years ended March 31, 2015 and 2014, respectively.

The amount of impairment loss on investment securities for the years ended March 31, 2015 and 2014, are not presented because of it is immaterial.

The carrying values of debt securities and investment trusts and other by contractual maturities for securities classified as available-for-sale and held-to-maturity at March 31, 2015, were as follows:

|                                                    | Million                                  | s of Yen | Thousands of U.S. Dollars |                      |  |
|----------------------------------------------------|------------------------------------------|----------|---------------------------|----------------------|--|
|                                                    | Available- Held-to-<br>for-Sale Maturity |          | Available-<br>for-Sale    | Held-to-<br>Maturity |  |
| Due in one year or less Due after one year through | -                                        | ¥ 17,502 | -                         | \$ 145,850           |  |
| five years                                         | -                                        | 3,901    | -                         | 32,508               |  |
| Total                                              | -                                        | ¥ 21,403 |                           | \$ 178,358           |  |

# 5. INVENTORIES

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

|                               |      | Millions  | Thousands of U.S. Dollars |         |      |         |
|-------------------------------|------|-----------|---------------------------|---------|------|---------|
|                               | 20   | 2015 2014 |                           |         | 2015 |         |
| Finished products             | ¥ 5  | 5,639     | ¥                         | 54,340  | \$   | 463,658 |
| Work in process               | 1    | 1,855     |                           | 9,239   |      | 98,792  |
| Raw materials and supplies    | 4    | 3,439     |                           | 37,582  |      | 361,992 |
| Cost of contracts in progress |      | 565       |                           | 192     |      | 4,708   |
| Total                         | ¥ 11 | 1,498     | ¥                         | 101,353 | \$   | 929,150 |

#### 6. SHORT-TERM BORROWINGS AND LONG-TERM DEBT

Short-term borrowings at March 31, 2015 and 2014, consisted of notes to banks. The weighted-average interest rates on short-term borrowings as of March 31, 2015 and 2014, were 0.5% and 0.6%, respectively.

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

| _                                                                                                                                                     | Millions  | ousands of<br>.S. Dollars |                 |
|-------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|---------------------------|-----------------|
|                                                                                                                                                       | 2015      | 2014                      | 2015            |
| Borrowings from banks and other financial institutions due serially through 2028, with weighted-average interest rates of 1.3% (2015) and 1.2% (2014) | ¥ 151,883 | ¥ 142,301                 | \$<br>1,265,692 |
| Unsecured 0.734% Japanese yen bonds,                                                                                                                  |           |                           |                 |
| due December 4, 2014                                                                                                                                  |           | 20,000                    |                 |
| Total                                                                                                                                                 | 151,883   | 162,301                   | 1,265,692       |
| Less: portion due within one year                                                                                                                     | (6,345)   | (20,142)                  | (52,875)        |
| Long-term debt, less current portion                                                                                                                  | ¥ 145,538 | ¥ 142,159                 | \$<br>1,212,817 |

Annual maturities of long-term debt at March 31, 2015, were as follows:

| Year ending March 31 | Millions of Yen | Thousands of U.S. Dollars |
|----------------------|-----------------|---------------------------|
| 2016                 | ¥ 6,345         | \$ 52,875                 |
| 2017                 | 20,923          | 174,358                   |
| 2018                 | 7,481           | 62,342                    |
| 2019                 | 9,925           | 82,708                    |
| 2020                 | 25,254          | 210,450                   |
| 2021 and thereafter  | 81,955          | 682,959                   |
| Total                | ¥ 151,883       | \$ 1,265,692              |

#### 7. RETIREMENT AND PENSION PLANS

The Company and certain consolidated subsidiaries have severance payment plans for employees, directors, and Audit & Supervisory Board members.

The Company and certain domestic subsidiaries have unfunded lump-sum payment plans, defined benefit pension plans, smaller enterprise retirement allowance mutual aid plans, and specific retirement allowance mutual aid plans.

Certain domestic subsidiaries participate in multiemployer pension plans.

During the year ended March 31, 2015, the Group received reimbursement for the securities that had been contributed to the employee retirement benefit trust because of constant surplus in the plan.

Furthermore, additional retirement benefits that are not included in net defined benefit liability are paid in certain cases.

Some of the domestic subsidiaries participate in multiemployer contributory funded plans, and the plans are accounted for as if the plans were defined contribution plans in the case that the plan assets attributable to the contributions by the subsidiaries cannot be rationally determined.

Certain U.S. subsidiaries have defined benefit plans and defined contribution plans. The simplified calculation method was applied to measure the liability and the cost of defined benefit plans and lump-sum payment plans in immaterial domestic subsidiaries.

# a. Defined Benefit Pension Plans

1. The changes in defined benefit obligation for the years ended March 2015 and 2014 (except for the plans to which the simplified method was applied), were as follows:

|                                                       | Millions of Yen |         |      | Thousands of U.S. Dollars |    |          |
|-------------------------------------------------------|-----------------|---------|------|---------------------------|----|----------|
|                                                       |                 | 2015    | 2014 |                           |    | 2015     |
| Balance at beginning of year (as previously reported) | ¥               | 85,335  | ¥    | 85,363                    | \$ | 711,125  |
| Cumulative effect of accounting change                |                 | (5,316) |      | -                         |    | (44,300) |
| Balance at beginning of year (as restated)            | ¥               | 80,019  | ¥    | 85,363                    | \$ | 666,825  |
| Current service cost                                  |                 | 2,657   |      | 2,507                     |    | 22,141   |
| Interest cost                                         |                 | 1,472   |      | 1,510                     |    | 12,267   |
| Actuarial losses (gains)                              |                 | 3,214   |      | (770)                     |    | 26,783   |
| Benefits paid                                         |                 | (4,179) |      | (4,041)                   |    | (34,825) |
| Past service cost                                     |                 | 0       |      | 44                        |    | 0        |
| Defined benefit obligation of newly                   |                 |         |      |                           |    |          |
| consolidated subsidiary                               |                 | 1,518   |      | -                         |    | 12,650   |
| Others                                                |                 | 1,844   |      | 722                       |    | 15,367   |
| Balance at end of year                                | ¥               | 86,545  | ¥    | 85,335                    | \$ | 721,208  |

2. The changes in plan assets for the years ended March 2015 and 2014 (except for the plans to which the simplified method was applied), were as follows:

|                                                   | Millions of Yen |         |      |         | Thousands of U.S. Dollars |          |  |      |
|---------------------------------------------------|-----------------|---------|------|---------|---------------------------|----------|--|------|
|                                                   | 2015            |         | 2014 |         | 2015 2014                 |          |  | 2015 |
| Balance at beginning of year                      | ¥               | 77,989  | ¥    | 71,920  | \$                        | 649,909  |  |      |
| Expected return on plan assets                    |                 | 1,513   |      | 1,359   |                           | 12,608   |  |      |
| Actuarial gains                                   |                 | 7,161   |      | 3,103   |                           | 59,675   |  |      |
| Contributions from the employer                   |                 | 4,977   |      | 4,771   |                           | 41,475   |  |      |
| Benefits paid                                     |                 | (3,763) |      | (3,648) |                           | (31,358) |  |      |
| Refund from the employee retirement benefit trust |                 | (6,180) |      | _       |                           | (51,500) |  |      |
| Plan assets of newly consolidated subsidiary      |                 | 111     |      | _       |                           | 925      |  |      |
| Others                                            |                 | 1,003   |      | 484     |                           | 8,358    |  |      |
| Balance at end of year                            | ¥               | 82,811  | ¥    | 77,989  | \$                        | 690,092  |  |      |

3. The changes in net defined benefit liability, where the simplified method was applied to measure the liability, for the years ended March 31, 2015 and 2014, were as follows:

|                                | Millions of Yen |       |      |       | Thousands of U.S. Dollars |         |
|--------------------------------|-----------------|-------|------|-------|---------------------------|---------|
|                                | 2015            |       | 2014 |       | 2015                      |         |
| Balance at beginning of year   | ¥               | 1,840 | ¥    | 1,785 | \$                        | 15,333  |
| Pension costs                  |                 | 401   |      | 237   |                           | 3,342   |
| Benefits paid                  |                 | (149) |      | (100) |                           | (1,241) |
| Contributions to pension plans |                 | (80)  |      | (81)  |                           | (667)   |
| Balance at end of year         | ¥               | 2,012 | ¥    | 1,841 | \$                        | 16,767  |

4. Reconciliation between the asset and the liability recorded in the consolidated balance sheet and the balances of defined benefit obligation and plan assets as of March 31, 2015 and 2014, were as follows:

|                                            | Million  | Thousands of U.S. Dollars |            |
|--------------------------------------------|----------|---------------------------|------------|
|                                            | 2015     | 2014                      | 2015       |
| Funded defined benefit obligation          | ¥ 79,298 | ¥ 77,255                  | \$ 660,817 |
| Plan assets                                | (83,660) | (78,785)                  | (697,167)  |
|                                            | (4,362)  | (1,530)                   | (36,350)   |
| Unfunded defined benefit obligation        | 10,108   | 10,717                    | 84,233     |
| Net liability arising from defined benefit |          |                           |            |
| obligation                                 | ¥ 5,746  | ¥ 9,187                   | \$ 47,883  |

|                                                         | Millions of Yen |                    |      |                   | Thousands of U.S. Dollars |
|---------------------------------------------------------|-----------------|--------------------|------|-------------------|---------------------------|
|                                                         |                 | 2015               | 2014 |                   | 2015                      |
| Net defined benefit liability Net defined benefit asset | ¥               | 20,223<br>(14,477) | ¥    | 16,678<br>(7,491) | \$168,525<br>(120,642)    |
| Net liability arising from defined benefit obligation   | ¥               | 5,746              | ¥    | 9,187             | \$47,883                  |

5. The components of net periodic benefit costs for the years ended March 31, 2015, and 2014 were as follows:

|                                                 | Millions of Yen |         |      |         | Thousands of U.S. Dollars |          |
|-------------------------------------------------|-----------------|---------|------|---------|---------------------------|----------|
| ·                                               |                 | 2015    | 2014 |         |                           | 2015     |
| Service cost                                    | ¥               | 2,657   | ¥    | 2,507   | \$                        | 22,141   |
| Interest cost                                   |                 | 1,472   |      | 1,510   |                           | 12,267   |
| Expected return on plan assets                  |                 | (1,513) |      | (1,359) |                           | (12,608) |
| Recognized actuarial losses                     |                 | 4,457   |      | 1,432   |                           | 37,141   |
| Amortization of past service cost               |                 | (493)   |      | (482)   |                           | (4,108)  |
| Benefit costs measured by the simplified method |                 | 401     |      | 237     |                           | 3,342    |
| Others                                          |                 | 21      |      | 44      |                           | 175      |
| Net periodic benefit costs                      | ¥               | 7,002   | ¥    | 3,889   | \$                        | 58,350   |

Note: Recognized actuarial losses for the year ended March 31, 2015, include the actuarial loss of ¥2,879 million (\$23,992 thousand) that resulted from the cancellation of employee retirement benefit trusts.

6. Amounts recognized in other comprehensive income (before income tax effect) in respect of defined retirement benefit plans for the years ended March 31, 2015 and 2014, were as follows:

|                            | Millions of Yen |       |    |      | Thousands of U.S. Dollars |         |
|----------------------------|-----------------|-------|----|------|---------------------------|---------|
|                            |                 | 2015  | 20 | 014  |                           | 2015    |
| Actuarial gains            | ¥               | 7,854 | ¥  | 906  | \$                        | 65,450  |
| Prior service cost         |                 | (506) |    | (44) |                           | (4,217) |
| Net periodic benefit costs | ¥               | 7,348 | ¥  | 862  | \$                        | 61,233  |

7. Amounts recognized in accumulated other comprehensive income (before tax effect) in respect of defined retirement benefit plans as of March 31, 2015 and 2014, were as follows:

|                                | Millions of Yen |         |   |          | Thousands of U.S. Dollars |
|--------------------------------|-----------------|---------|---|----------|---------------------------|
|                                |                 | 2015    |   | 2014     | 2015                      |
| Unrecognized actuarial gains   | ¥               | (8,859) | ¥ | (16,498) | \$(73,825)                |
| Unrecognized past service cost |                 | 768     |   | 1,040    | 6,400                     |
| Total                          | ¥               | (8,091) | ¥ | (15,458) | \$(67,425)                |

#### 8. Plan assets

(1) Components of plan assets

Plan assets as of March 31, 2015 and 2014, consisted of the following:

|                                        | 2015 |   | 2014 |   |
|----------------------------------------|------|---|------|---|
| Assets in an insurer's general account | 38   | % | 37   | % |
| Equity investments                     | 26   | % | 29   | % |
| Debt investments                       | 26   | % | 23   | % |
| Cash and cash equivalents              | 2    | % | 2    | % |
| Others                                 | 8    | % | 9    | % |
| Total                                  | 100  | % | 100  | % |

6.7% of total plan assets as of March 31, 2014 consisted of those contributed to the employee retirement benefit trusts.

- (2) Method of determining the expected rate of return on plan assets The expected rate of return on plan assets is determined considering the long-term rates of return which are expected currently and in the future from the various components of the plan assets.
- 9. Assumptions used for the years ended March 31, 2015 and 2014, were set forth as follows:

|                                         | 2015                  | 2014                  |
|-----------------------------------------|-----------------------|-----------------------|
| Discount rate                           | Primarily 1.5%        | Primarily 1.5%        |
| Expected rate of return on plan assets  | Primarily 1.5%        | Primarily 1.4%        |
| Expected rate of future salary increase | Primarily 1.9% — 5.9% | Primarily 1.9% — 6.4% |

#### b. Funded Status of the Multiemployer Contributory Funded Pension Plans

Some subsidiaries participate in a multiemployer plan where the amount of plan assets corresponding to the contributions made by the subsidiaries cannot be reasonably calculated. Therefore, it is accounted for using the same method as a defined contribution plan.

The contributions to such multiemployer plan, which are accounted for using the same method as a defined contribution plan, were ¥141 million (\$1,175 thousand) and ¥165 million for the years ended March 31, 2015 and 2014, respectively.

(1) The funded status of the multiemployer plan as of March 31, 2015 and 2014, was as follows:

|                                                          | Millions  | Millions of Yen |              |  |  |
|----------------------------------------------------------|-----------|-----------------|--------------|--|--|
|                                                          | 2015      | 2014            | 2015         |  |  |
| Plan assets                                              | ¥ 303,721 | ¥ 281,339       | \$ 2,531,008 |  |  |
| Sum of actuarial liabilities of pension plan and minimum |           |                 |              |  |  |
| actuarial reserve*                                       | (299,821) | (290,987)       | (2,498,508)  |  |  |
| Net balance                                              | ¥ 3,900   | ¥ (9,648)       | \$ 32,500    |  |  |

<sup>\*</sup> This item was presented as "Amount of benefit obligation on pension plan" as of March 31, 2014.

The net balance above is mainly a result of the following:

|                    |          |                 | Thousands of |  |  |
|--------------------|----------|-----------------|--------------|--|--|
|                    | Millions | Millions of Yen |              |  |  |
|                    | 2015     | 2014            | 2015         |  |  |
| Prior service cost | ¥ 20,430 | ¥ 21,968        | \$ 170,250   |  |  |
| Retained earnings  | 12,010   | 12,320          | 100,083      |  |  |
| General reserve    | 12,320   | -               | 102,667      |  |  |

Prior service cost under the plan is amortized on a straight-line basis over 20 years.

(2) The contribution ratio of the Group in the multiemployer plan for the years ended March 31, 2015 and 2014, was 1.9%. The ratio does not represent the actual actuarial liability ratio of the Group.

# c. Defined Contribution Pension Plans

The Group's contributions to defined contribution pension plan funds for the years ended March 31, 2015 and 2014 were ¥121 million (\$1,008 thousand) and ¥132 million, respectively.

#### 8. EQUITY

Japanese companies are subject to the Companies Act of Japan (the "Companies Act"). The significant provisions in the Companies Act that affect financial and accounting matters are summarized below:

## a. Dividends

Under the Companies Act, companies can pay dividends at any time during the fiscal year in addition to the year-end dividend upon resolution at the shareholders' meeting. For companies that meet certain criteria including (1) having a Board of Directors, (2) having independent auditors, (3) having an Audit & Supervisory Board, and (4) the term of service of the directors being prescribed as one year rather than the normal two-year term by its articles of incorporation, the Board of Directors may declare dividends (except for dividends-in-kind) at any time during the fiscal year if the company has prescribed so in its articles of incorporation. However, the Company cannot do so because it does not meet all the above criteria.

Semiannual interim dividends may also be paid once a year upon resolution by the Board of Directors if the articles of incorporation of the company so stipulate. The Companies Act provides certain limitations on the amounts available for dividends or the purchase of treasury stock. The limitation is defined as the amount available for distribution to the

shareholders, but the amount of net assets after dividends must be maintained at no less than ¥3 million.

# d. Increases/Decreases and Transfer of Common Stock, Reserve and Surplus

The Companies Act requires that an amount equal to 10% of dividends must be appropriated as a legal reserve (a component of retained earnings) or as additional paid-in capital (a component of capital surplus), depending on the equity account charged upon the payment of such dividends, until the aggregate amount of legal reserve and additional paid-in capital equals 25% of the common stock. Under the Companies Act, the total amount of additional paid-in capital and legal reserve may be reversed without limitation. The Companies Act also provides that common stock, legal reserve, additional paid-in capital, other capital surplus, and retained earnings can be transferred among the accounts within equity under certain conditions upon resolution of the shareholders.

# Treasury Stock and Treasury Stock Acquisition Rights

The Companies Act also provides for companies to purchase treasury stock and dispose of such treasury stock by resolution of the Board of Directors. The amount of treasury stock purchased cannot exceed the amount available for distribution to the shareholders which is determined by a specific formula. Under the Companies Act, stock acquisition rights are presented as a separate component of equity. The Companies Act also provides that companies can purchase both treasury stock acquisition rights and treasury stock. Such treasury stock acquisition rights are presented as a separate component of equity or deducted directly from stock acquisition rights.

# 9. STOCK OPTIONS

The stock options outstanding as of March 31, 2015, were as follows:

| Stock<br>Option<br>Scheme                  | Persons<br>Originally<br>Granted                                         | Number of<br>Options<br>Originally<br>Granted | Date of<br>Grant   | Exercise<br>Price | Exercise<br>Period                             |
|--------------------------------------------|--------------------------------------------------------------------------|-----------------------------------------------|--------------------|-------------------|------------------------------------------------|
| 2005<br>Stock<br>Option<br>Scheme          | 12 directors 2 full-time audit and supervisory board members 10 officers | Common<br>shares<br>180,000<br>shares         | August 5, 2005     | ¥1 (\$0.01)       | From<br>August 5, 2005<br>to<br>June 30, 2035  |
| 2006<br>Stock<br>Option<br>Scheme<br>(2-1) | 12 directors 2 full-time audit and supervisory board members             | Common<br>shares<br>113,000<br>shares         | August 11,<br>2006 | ¥1 (\$0.01)       | From<br>August 12, 2006<br>to<br>June 30, 2036 |
| 2006<br>Stock<br>Option<br>Scheme<br>(2-2) | 10 officers                                                              | Common<br>shares<br>41,000<br>shares          | August 11, 2006    | ¥1<br>(\$0.01)    | From<br>August 12, 2006<br>to<br>June 30, 2036 |
| 2007<br>Stock<br>Option<br>Scheme          | 12 directors<br>10 officers                                              | Common<br>shares<br>62,000<br>shares          | August 30,<br>2007 | ¥1 (\$0.01)       | From<br>August 31, 2007<br>to<br>June 30, 2037 |
| 2008<br>Stock<br>Option<br>Scheme          | 11 directors<br>9 officers                                               | Common<br>shares<br>57,000<br>shares          | August 13, 2008    | ¥1 (\$0.01)       | From<br>August 14, 2008<br>to<br>June 30, 2038 |
| 2009<br>Stock<br>Option<br>Scheme          | 12 directors<br>10 officers                                              | Common<br>shares<br>62,000<br>shares          | August 17, 2009    | ¥1 (\$ 0.01)      | From<br>August 18, 2009<br>to<br>June 30, 2039 |
| 2010<br>Stock<br>Option<br>Scheme          | 12 directors<br>11 officers                                              | Common<br>shares<br>64,000<br>shares          | August 16,<br>2010 | ¥1 (\$0.01)       | From<br>August 17, 2010<br>to<br>June 30, 2040 |
| 2011<br>Stock<br>Option<br>Scheme          | 11 directors<br>11 officers                                              | Common<br>shares<br>62,000<br>shares          | August 15, 2011    | ¥1 (\$0.01)       | From<br>August 16, 2011<br>to<br>June 30, 2041 |

| Stock<br>Option<br>Scheme | Persons<br>Originally<br>Granted | Number<br>of<br>Options<br>Originally<br>Granted | Date of<br>Grant   | Exercise<br>price | Exercise<br>Period            |
|---------------------------|----------------------------------|--------------------------------------------------|--------------------|-------------------|-------------------------------|
| 2012<br>Stock<br>Option   | 10 directors<br>14 officers      | Common shares 66,000                             | August 15, 2012    | ¥1                | From<br>August 16, 2012<br>to |
| Scheme                    |                                  | shares                                           |                    | (\$0.01)          | June 30, 2042                 |
| 2013<br>Stock<br>Option   | 9 directors<br>16 officers       | Common shares 61,000                             | August 16, 2013    | ¥1                | From<br>August 17, 2013<br>to |
| Scheme                    |                                  | Shares                                           |                    | (\$0.01)          | June 30, 2043                 |
| 2014<br>Stock<br>Option   | 10 directors<br>13 officers      | Common<br>shares<br>57,000                       | August 19,<br>2014 | ¥1                | From<br>August 20, 2014<br>to |
| Scheme                    |                                  | Shares                                           |                    | (\$0.01)          | June 30, 2044                 |

|                                                                                                                                                                                                                                                                                                                                                 | 2005                                                            | 2006                                            | 2006                                         | 2007                                                                                                  | 2008                                                            | 2009                                                                                | 2010                                                                                        | 2011                                         | 2012                                                                  | 2013                                         | 2014                                                   |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|-------------------------------------------------|----------------------------------------------|-------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|----------------------------------------------|-----------------------------------------------------------------------|----------------------------------------------|--------------------------------------------------------|
|                                                                                                                                                                                                                                                                                                                                                 | Stock                                                           | Stock                                           | Stock                                        | Stock                                                                                                 | Stock                                                           | Stock                                                                               | Stock                                                                                       | Stock                                        | Stock                                                                 | Stock                                        | Stock                                                  |
|                                                                                                                                                                                                                                                                                                                                                 |                                                                 |                                                 |                                              |                                                                                                       |                                                                 |                                                                                     |                                                                                             |                                              |                                                                       |                                              |                                                        |
|                                                                                                                                                                                                                                                                                                                                                 | Option                                                          | Option                                          | Option                                       | Option                                                                                                | Option                                                          | Option                                                                              | Option                                                                                      | Option                                       | Option                                                                | Option                                       | Option                                                 |
|                                                                                                                                                                                                                                                                                                                                                 |                                                                 | (2-1)                                           | (2-2)                                        |                                                                                                       |                                                                 | (Shares)                                                                            |                                                                                             |                                              |                                                                       |                                              |                                                        |
| For the year ended                                                                                                                                                                                                                                                                                                                              | 1 March 31, 20                                                  | 014                                             |                                              |                                                                                                       |                                                                 | (Shares)                                                                            |                                                                                             |                                              |                                                                       |                                              |                                                        |
| Non-vested                                                                                                                                                                                                                                                                                                                                      |                                                                 |                                                 |                                              |                                                                                                       |                                                                 |                                                                                     |                                                                                             |                                              |                                                                       |                                              |                                                        |
| April 1, 2013                                                                                                                                                                                                                                                                                                                                   |                                                                 |                                                 |                                              |                                                                                                       |                                                                 |                                                                                     |                                                                                             |                                              |                                                                       |                                              |                                                        |
| -Outstanding                                                                                                                                                                                                                                                                                                                                    | _                                                               | -                                               | _                                            | -                                                                                                     | _                                                               | _                                                                                   | _                                                                                           | _                                            | _                                                                     | _                                            | _                                                      |
| Granted                                                                                                                                                                                                                                                                                                                                         | _                                                               | -                                               | _                                            | -                                                                                                     | _                                                               | _                                                                                   | _                                                                                           | _                                            | -                                                                     | 61,000                                       | _                                                      |
| Canceled                                                                                                                                                                                                                                                                                                                                        | _                                                               | -                                               | _                                            | -                                                                                                     | _                                                               | _                                                                                   | _                                                                                           | _                                            | _                                                                     | 61,000                                       | _                                                      |
| Vested                                                                                                                                                                                                                                                                                                                                          | _                                                               | -                                               | _                                            | -                                                                                                     | _                                                               | _                                                                                   | _                                                                                           | _                                            | _                                                                     | -                                            | _                                                      |
| March 31, 2014                                                                                                                                                                                                                                                                                                                                  |                                                                 |                                                 |                                              |                                                                                                       |                                                                 |                                                                                     |                                                                                             |                                              |                                                                       |                                              |                                                        |
| -Outstanding                                                                                                                                                                                                                                                                                                                                    | _                                                               | -                                               | _                                            | -                                                                                                     | _                                                               | _                                                                                   | _                                                                                           | _                                            | _                                                                     | _                                            | _                                                      |
| Vested                                                                                                                                                                                                                                                                                                                                          |                                                                 |                                                 |                                              |                                                                                                       |                                                                 |                                                                                     |                                                                                             |                                              |                                                                       |                                              |                                                        |
| April 1, 2013                                                                                                                                                                                                                                                                                                                                   |                                                                 |                                                 |                                              |                                                                                                       |                                                                 |                                                                                     |                                                                                             |                                              |                                                                       |                                              |                                                        |
| -Outstanding                                                                                                                                                                                                                                                                                                                                    | 107,000                                                         | 71,000                                          | 28,000                                       | 47,000                                                                                                | 55,000                                                          | 62,000                                                                              | 64,000                                                                                      | 62,000                                       | 66,000                                                                | _                                            | _                                                      |
| Vested                                                                                                                                                                                                                                                                                                                                          | -                                                               | -                                               |                                              | -                                                                                                     | -                                                               | -                                                                                   | -                                                                                           | -                                            | -                                                                     | 61,000                                       | _                                                      |
| Exercised                                                                                                                                                                                                                                                                                                                                       | 12,000                                                          | 8,000                                           | 4,000                                        | 5,000                                                                                                 | 2,000                                                           | _                                                                                   | _                                                                                           | _                                            | _                                                                     | -                                            | _                                                      |
| Canceled                                                                                                                                                                                                                                                                                                                                        | -                                                               | -                                               | -                                            | -                                                                                                     | -                                                               | _                                                                                   | _                                                                                           | _                                            | _                                                                     | _                                            | _                                                      |
| March 31, 2014                                                                                                                                                                                                                                                                                                                                  |                                                                 |                                                 |                                              |                                                                                                       |                                                                 |                                                                                     |                                                                                             |                                              |                                                                       |                                              |                                                        |
|                                                                                                                                                                                                                                                                                                                                                 | 05.000                                                          | 63,000                                          | 24,000                                       | 42,000                                                                                                | 53,000                                                          | 62,000                                                                              | 64,000                                                                                      | 62,000                                       | 66,000                                                                | 61,000                                       | _                                                      |
| <ul><li>Outstanding</li></ul>                                                                                                                                                                                                                                                                                                                   | 95,000                                                          | 05,000                                          | 2.,000                                       | .2,000                                                                                                | 33,000                                                          | 02,000                                                                              | 0.,000                                                                                      | ,                                            | ,                                                                     | ,                                            |                                                        |
| J                                                                                                                                                                                                                                                                                                                                               | ,                                                               |                                                 | 21,000                                       | 12,000                                                                                                | 33,000                                                          | 02,000                                                                              | 01,000                                                                                      | ,                                            | ,                                                                     | ,                                            |                                                        |
| For the year ended                                                                                                                                                                                                                                                                                                                              | ,                                                               |                                                 | 2.,000                                       | .2,000                                                                                                | 33,000                                                          | 02,000                                                                              | 0.,000                                                                                      | ,                                            | ,                                                                     | 0-,000                                       |                                                        |
| For the year ended Non-vested                                                                                                                                                                                                                                                                                                                   | ,                                                               |                                                 | 2 1,000                                      | .2,000                                                                                                | 33,000                                                          | 02,000                                                                              | 0.,000                                                                                      |                                              | 23,333                                                                | 23,000                                       |                                                        |
| For the year ended Non-vested March 31, 2014                                                                                                                                                                                                                                                                                                    | ,                                                               |                                                 | -                                            | -                                                                                                     | -                                                               | -                                                                                   | -                                                                                           | -                                            | -                                                                     | -                                            | _                                                      |
| For the year ended<br>Non-vested<br>March 31, 2014<br>—Outstanding                                                                                                                                                                                                                                                                              | ,                                                               |                                                 | -<br>-                                       |                                                                                                       |                                                                 | -<br>-                                                                              | -<br>-                                                                                      | -                                            | -                                                                     | -                                            | 57.000                                                 |
| For the year ended Non-vested March 31, 2014 —Outstanding Granted                                                                                                                                                                                                                                                                               | ,                                                               |                                                 | -<br>-<br>-                                  | -<br>-<br>-                                                                                           | -<br>-<br>-                                                     | -<br>-<br>-                                                                         | -<br>-<br>-                                                                                 | -<br>-<br>-                                  | -<br>-<br>-                                                           | -                                            | 57,000                                                 |
| For the year ended Non-vested March 31, 2014 —Outstanding Granted Canceled                                                                                                                                                                                                                                                                      | ,                                                               |                                                 | -<br>-<br>-<br>-                             | -<br>-<br>-<br>-                                                                                      | -<br>-<br>-<br>-                                                | -<br>-<br>-<br>-                                                                    | -<br>-<br>-<br>-                                                                            | -<br>-<br>-<br>-                             | -<br>-<br>-<br>-                                                      | -<br>-                                       | -                                                      |
| For the year ended Non-vested March 31, 2014 —Outstanding Granted Canceled Vested                                                                                                                                                                                                                                                               | ,                                                               |                                                 | -<br>-<br>-<br>-                             | -<br>-<br>-<br>-                                                                                      | -<br>-<br>-<br>-                                                | -<br>-<br>-<br>-                                                                    | -<br>-<br>-<br>-                                                                            | -<br>-<br>-<br>-                             | -<br>-<br>-                                                           | -<br>-<br>-                                  |                                                        |
| For the year ended Non-vested March 31, 2014 —Outstanding Granted Canceled Vested March 31, 2015                                                                                                                                                                                                                                                | ,                                                               |                                                 | -<br>-<br>-<br>-                             | -<br>-<br>-<br>-                                                                                      | -<br>-<br>-<br>-                                                | -<br>-<br>-<br>-                                                                    | -<br>-<br>-<br>-                                                                            | -<br>-<br>-<br>-                             | -<br>-<br>-                                                           | -<br>-<br>-                                  | -                                                      |
| For the year ended Non-vested March 31, 2014 —Outstanding Granted Canceled Vested March 31, 2015 —Outstanding                                                                                                                                                                                                                                   | ,                                                               |                                                 | -<br>-<br>-<br>-                             | -<br>-<br>-<br>-                                                                                      | -<br>-<br>-<br>-                                                | -<br>-<br>-<br>-                                                                    | -<br>-<br>-<br>-                                                                            |                                              | -<br>-<br>-                                                           | -<br>-<br>-                                  | -                                                      |
| For the year endec<br>Non-vested<br>March 31, 2014<br>— Outstanding<br>Granted<br>Canceled<br>Vested<br>March 31, 2015<br>— Outstanding<br>Vested                                                                                                                                                                                               | ,                                                               |                                                 | -<br>-<br>-<br>-                             | -<br>-<br>-<br>-                                                                                      | -<br>-<br>-<br>-                                                | -<br>-<br>-<br>-                                                                    | -<br>-<br>-<br>-                                                                            |                                              | -<br>-<br>-                                                           | -<br>-<br>-                                  | -                                                      |
| For the year ended Non-vested March 31, 2014  Outstanding Granted Canceled Vested March 31, 2015  Outstanding Vested March 31, 2015                                                                                                                                                                                                             |                                                                 |                                                 | -                                            | -<br>-<br>-<br>-                                                                                      | -                                                               | -                                                                                   | -                                                                                           | -                                            | -<br>-<br>-<br>-                                                      | -<br>-<br>-<br>-                             | -                                                      |
| For the year ended Non-vested March 31, 2014  - Outstanding Granted Canceled Vested March 31, 2015  - Outstanding Vested March 31, 2015  - Outstanding Vested March 31, 2014  - Outstanding                                                                                                                                                     | ,                                                               |                                                 | 24,000                                       | 42,000                                                                                                | 53,000                                                          | 62,000                                                                              | -<br>-<br>-<br>-<br>-<br>64,000                                                             | 62,000                                       | -<br>-<br>-                                                           | -<br>-<br>-                                  | 57,000                                                 |
| For the year ended Non-vested March 31, 2014  - Outstanding Granted Canceled Vested March 31, 2015  - Outstanding Vested March 31, 2014  - Outstanding Vested Vested Vested March 31, 2014  - Outstanding Vested Vested Vested                                                                                                                  | 95,000                                                          | 63,000                                          | 24,000                                       | 42,000                                                                                                | 53,000                                                          | 62,000                                                                              | -<br>-<br>-<br>-<br>64,000                                                                  | -<br>-<br>-<br>-<br>62,000                   | -<br>-<br>-<br>-<br>-                                                 | -<br>-<br>-<br>-<br>-<br>61,000              | 57,000                                                 |
| For the year ended Non-vested March 31, 2014 —Outstanding Granted Canceled Vested March 31, 2015 —Outstanding Vested March 31, 2014 —Outstanding Vested March 31, 2014 —Outstanding Vested Exercised                                                                                                                                            | 95,000                                                          | 63,000                                          | -<br>-<br>-<br>-<br>24,000                   | -<br>-<br>-<br>-<br>-<br>42,000                                                                       | -<br>-<br>-<br>-<br>53,000                                      | -<br>-<br>-<br>-<br>62,000                                                          | -<br>-<br>-<br>-<br>-<br>64,000                                                             | 62,000                                       | -<br>-<br>-<br>-<br>-<br>66,000                                       | 61,000                                       | 57,000<br>57,000                                       |
| For the year ended Non-vested March 31, 2014  Outstanding Granted Canceled Vested March 31, 2015  Outstanding Vested March 31, 2014  Outstanding Vested Exercised Canceled                                                                                                                                                                      | 95,000 - 4,000                                                  | 63,000<br>- 4,000                               | -<br>-<br>-<br>-<br>24,000                   | -<br>-<br>-<br>-<br>42,000<br>-<br>4,000                                                              | -<br>-<br>-<br>-<br>53,000                                      | -<br>-<br>-<br>-<br>62,000<br>-<br>3,000                                            | -<br>-<br>-<br>-<br>64,000<br>-<br>3,000                                                    | 62,000                                       | 66,000                                                                | 61,000                                       | 57,000<br>57,000                                       |
| For the year ended Non-vested March 31, 2014  Outstanding Granted Canceled Vested March 31, 2015  Outstanding Vested March 31, 2014  Outstanding Vested Exercised Canceled March 31, 2014                                                                                                                                                       | 95,000<br>-<br>4,000                                            | 63,000                                          | -<br>-<br>-<br>-<br>24,000<br>-<br>-         | 42,000                                                                                                | 53,000                                                          | 62,000                                                                              | 64,000                                                                                      | 62,000                                       | 66,000                                                                | 61,000                                       | -<br>57,000<br>-<br>57,000<br>-                        |
| For the year ended Non-vested March 31, 2014  Outstanding Granted Canceled Vested March 31, 2015  Outstanding Vested March 31, 2014  Outstanding Vested Exercised Canceled                                                                                                                                                                      | 95,000<br>-<br>4,000<br>-<br>91,000                             | 63,000<br>-<br>4,000<br>-<br>59,000             | 24,000<br>-<br>-<br>24,000                   | -<br>-<br>-<br>-<br>42,000<br>-<br>4,000<br>-<br>38,000                                               | 53,000<br>-<br>3,000<br>-<br>50,000                             | 62,000<br>-<br>3,000<br>-<br>59,000                                                 | -<br>-<br>-<br>-<br>64,000<br>-<br>3,000<br>-<br>61,000                                     | 62,000<br>-<br>-<br>62,000                   | -<br>-<br>-<br>-<br>66,000<br>-<br>-<br>-<br>66,000                   | 61,000<br>-<br>-<br>61,000                   | 57,000<br>-<br>57,000<br>-<br>57,000                   |
| For the year endec<br>Non-vested<br>March 31, 2014<br>— Outstanding<br>Granted<br>Canceled<br>Vested<br>March 31, 2015<br>— Outstanding<br>Vested<br>March 31, 2014<br>— Outstanding<br>Vested<br>Exercised<br>Canceled<br>March 31, 2015<br>— Outstanding                                                                                      | 95,000<br>-<br>4,000<br>-<br>91,000<br>¥1                       | 015  63,000 - 4,000 - 59,000 ¥1                 | 24,000<br>-<br>-<br>24,000<br>41             | -<br>-<br>-<br>-<br>42,000<br>-<br>4,000<br>-<br>38,000<br>¥1                                         | 53,000<br>-<br>3,000<br>-<br>50,000<br>¥1                       | 62,000<br>-<br>3,000<br>-<br>59,000<br>¥1                                           | 64,000<br>-<br>3,000<br>-<br>61,000<br>¥1                                                   | 62,000<br>-<br>62,000<br>1<br>62,000<br>¥1   | -<br>-<br>-<br>-<br>66,000<br>-<br>-<br>-<br>66,000<br>¥1             | 61,000<br>-<br>-<br>61,000<br>¥1             | 57,000<br>-<br>57,000<br>-<br>57,000<br>¥1             |
| For the year endec<br>Non-vested<br>March 31, 2014<br>— Outstanding<br>Granted<br>Canceled<br>Vested<br>March 31, 2015<br>— Outstanding<br>Vested<br>March 31, 2014<br>— Outstanding<br>Vested<br>Exercised<br>Canceled<br>March 31, 2015<br>— Outstanding                                                                                      | 95,000<br>-<br>4,000<br>-<br>91,000<br>¥1<br>(\$0.01)           | 015  63,000 - 4,000 - 59,000 ¥1 (\$0.01)        | 24,000<br>-<br>-<br>24,000<br>¥1<br>(\$0.01) | -<br>-<br>-<br>-<br>42,000<br>-<br>4,000<br>-<br>38,000<br>\frac{\pmathbf{x}}{1}<br>(\pmathbf{x}).01) | 53,000<br>-<br>3,000<br>-<br>50,000<br>¥1<br>(\$0.01)           | 62,000<br>-<br>3,000<br>-<br>59,000<br>¥1<br>(\$0.01)                               | 64,000<br>-<br>3,000<br>-<br>61,000<br>¥1<br>(\$0.01)                                       | 62,000<br>-<br>-<br>62,000<br>¥1<br>(\$0.01) | -<br>-<br>-<br>-<br>66,000<br>-<br>-<br>-<br>66,000<br>¥1<br>(\$0.01) | 61,000<br>-<br>-<br>61,000<br>¥1<br>(\$0.01) | 57,000<br>-<br>57,000<br>-<br>57,000<br>¥1<br>(\$0.01) |
| For the year endec<br>Non-vested<br>March 31, 2014<br>— Outstanding<br>Granted<br>Canceled<br>Vested<br>March 31, 2015<br>— Outstanding<br>Vested<br>March 31, 2014<br>— Outstanding<br>Vested<br>Exercised<br>Canceled<br>March 31, 2015<br>— Outstanding<br>Vested<br>Exercised<br>Canceled<br>March 31, 2015<br>— Outstanding                | 95,000<br>-<br>4,000<br>-<br>91,000<br>¥1<br>(\$0.01)<br>¥2,011 | 015  63,000 - 4,000 - 59,000 ¥1 (\$0.01) ¥2,011 | 24,000<br>-<br>-<br>24,000<br>41             | 42,000<br>-<br>4,000<br>-<br>38,000<br>¥1<br>(\$0.01)<br>¥2,321                                       | 53,000<br>-<br>3,000<br>-<br>50,000<br>¥1<br>(\$0.01)<br>¥2,424 | -<br>-<br>-<br>-<br>62,000<br>-<br>3,000<br>-<br>59,000<br>¥1<br>(\$0.01)<br>¥2,011 | -<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>- | 62,000<br>-<br>62,000<br>1<br>62,000<br>¥1   | -<br>-<br>-<br>-<br>66,000<br>-<br>-<br>-<br>66,000<br>¥1             | 61,000<br>-<br>-<br>61,000<br>¥1             | 57,000<br>-<br>57,000<br>-<br>57,000<br>¥1             |
| For the year ended Non-vested March 31, 2014 —Outstanding Granted Canceled Vested March 31, 2015 —Outstanding Vested March 31, 2014 —Outstanding Vested Exercised Canceled March 31, 2015 —Outstanding Vested Exercised Canceled March 31, 2015 —Outstanding Vested Exercised Canceled March 31, 2015 —Outstanding Exercise price Average stock | 95,000<br>-<br>4,000<br>-<br>91,000<br>¥1<br>(\$0.01)           | 015  63,000 - 4,000 - 59,000 ¥1 (\$0.01)        | 24,000<br>-<br>-<br>24,000<br>¥1<br>(\$0.01) | -<br>-<br>-<br>-<br>42,000<br>-<br>4,000<br>-<br>38,000<br>\frac{\pmathbf{x}}{1}<br>(\pmathbf{x}).01) | 53,000<br>-<br>3,000<br>-<br>50,000<br>¥1<br>(\$0.01)           | 62,000<br>-<br>3,000<br>-<br>59,000<br>¥1<br>(\$0.01)                               | 64,000<br>-<br>3,000<br>-<br>61,000<br>¥1<br>(\$0.01)                                       | 62,000<br>-<br>-<br>62,000<br>¥1<br>(\$0.01) | -<br>-<br>-<br>-<br>66,000<br>-<br>-<br>-<br>66,000<br>¥1<br>(\$0.01) | 61,000<br>-<br>-<br>61,000<br>¥1<br>(\$0.01) | 57,000<br>-<br>57,000<br>-<br>57,000<br>¥1<br>(\$0.01) |

# The Assumptions Used to Measure the Fair Value of the 2014 Stock Option

Estimate method: Black-Scholes option-pricing model Volatility of stock price: 41.02% Estimated remaining outstanding period: Four-and-a-half years Estimated dividend: ¥22 per share Risk-free interest rate: 0.146%

#### 10. INCOME TAXES

The Company and its domestic subsidiaries are subject to Japanese national and local income taxes which, in the aggregate, resulted in normal effective statutory tax rates of approximately 35.4% and 37.8% for the years ended March 31, 2015 and 2014, respectively.

The tax effects of significant temporary differences and tax loss carryforwards which resulted in deferred tax assets and liabilities at March 31, 2015 and 2014, were as follows:

|                                           |   | Millions  | s of Ye | n        |      | ousands of<br>S. Dollars |
|-------------------------------------------|---|-----------|---------|----------|------|--------------------------|
| -                                         |   | 2015 2014 |         |          | 2015 |                          |
| Deferred tax assets:                      |   |           |         |          |      |                          |
| Inventories                               | ¥ | 10,576    | ¥       | 9,948    | \$   | 88,133                   |
| Allowance for bad debt                    |   | 595       |         | 106      |      | 4,958                    |
| Accounts payable and accrued expenses     |   | 3,312     |         | 3,403    |      | 27,600                   |
| Enterprise taxes payable                  |   | 278       |         | 110      |      | 2,317                    |
| Accrued bonuses to employees              |   | 616       |         | 479      |      | 5,133                    |
| Property, plant and equipment             |   | 7,274     |         | 7,737    |      | 60,617                   |
| Pension and severance cost                |   | 6,931     |         | 6,735    |      | 57,758                   |
| Tax loss carryforwards                    |   | 3,671     |         | 12,763   |      | 30,592                   |
| Investment securities                     |   | 2,103     |         | 1,351    |      | 17,525                   |
| Tax deduction of a foreign subsidiary     |   | 3,144     |         | 3,831    |      | 26,200                   |
| Provision for NAS Battery safety measures |   | 2,390     |         | 3,854    |      | 19,917                   |
| Other                                     |   | 3,304     |         | 2,127    |      | 27,532                   |
| Total                                     |   | 44,194    |         | 52,444   |      | 368,282                  |
| Less: valuation allowance                 |   | (14,821)  |         | (18,478) |      | (123,508)                |
| Offset with deferred tax liabilities      |   | (9,028)   |         | (15,291) |      | (75,233)                 |
| Net deferred tax assets                   | ¥ | 20,345    | ¥       | 18,675   | \$   | 169,541                  |
|                                           |   |           |         |          |      |                          |
| Deferred tax liabilities:                 |   |           |         |          |      |                          |
| Unrealized gain on                        |   |           |         |          |      |                          |
| available-for-sale securities             | ¥ | 10,810    | ¥       | 7,705    | \$   | 90,083                   |
| Deferred gains on sales of property       |   | 1,173     |         | 1,300    |      | 9,775                    |
| Undistributed earnings of                 |   | 6,502     |         | 5,669    |      | 54,183                   |
| foreign subsidiaries                      |   |           |         |          |      |                          |
| Fixed asset                               |   | 1,901     |         | 1,073    |      | 15,842                   |
| Net defined benefit asset                 |   | 5,027     |         | 3,204    |      | 41,892                   |
| Securities contributed to                 |   | 1,499     |         | _        |      | 12,492                   |
| retirement benefit trust                  |   |           |         |          |      |                          |
| Other                                     |   | 2,247     |         | 1,851    |      | 18,725                   |
| Total                                     |   | 29,159    |         | 20,802   |      | 242,992                  |
| Offset with deferred tax assets           |   | (9,028)   |         | (15,291) |      | (75,233)                 |
| Net deferred tax liabilities              | ¥ | 20,131    | ¥       | 5,511    | \$   | 167,759                  |

A reconciliation between the normal effective statutory tax rates and the actual effective tax rates reflected in the accompanying consolidated statements of income for the year ended March 31, 2015, with the corresponding figures for 2014 is as follows:

|                                                                            | 2015   | 2014   |
|----------------------------------------------------------------------------|--------|--------|
| Normal effective statutory tax rate                                        | 35.4 % | 37.8 % |
| Expenses not deductible for income tax purposes                            | 7.1    | 1.2    |
| Income excluded from income tax such as dividends received                 | (3.4)  | (2.2)  |
| Decrease in valuation allowance                                            | (5.8)  | (3.2)  |
| Undistributed earnings of foreign subsidiaries                             | 1.5    | 3.0    |
| Effect of tax rate reduction                                               | 0.8    | 2.1    |
| Lower income tax rates applicable to income in certain foreign countries   | (4.4)  | (2.5)  |
| Tax credit of foreign subsidiaries                                         | (4.5)  | (3.3)  |
| Tax credit of research and development costs                               | (1.3)  | (0.1)  |
| Equity in earnings of unconsolidated subsidiaries and associated companies | (0.3)  | (2.2)  |
| Income taxes for previous periods                                          | -      | (3.7)  |
| Other - net                                                                | (0.3)  | 0.6    |
| Actual effective tax rate                                                  | 24.8 % | 27.5 % |

New tax reform laws enacted in 2015 in Japan changed the normal effective statutory tax rate for the fiscal year beginning on or after April 1, 2015, to approximately 32.9% and for the fiscal year beginning on or after April 1, 2016, to approximately 32.3%.

The effect of these changes was to increase deferred tax assets, net of deferred tax liabilities, by ¥680 million (\$5,667 thousand) and accumulated other comprehensive income for unrealized gain on available-for-sale securities by ¥1,057 million (\$8,808 thousand), to decrease accumulated other comprehensive income for defined retirement benefit plans by \\$84 million (\$700 thousand) in the consolidated balance sheet as of March 31, 2015 and to increase income taxes – deferred in the consolidated statement of income for the year then ended by ¥292 million (\$2,433 thousand).

#### 11. RESEARCH AND DEVELOPMENT COSTS

Research and development costs charged to income were ¥13,943 million (\$116,192 thousand) and ¥12,060 million for the years ended March 31, 2015 and 2014, respectively, which included consigned research costs of ¥876 million (\$7,300 thousand) and ¥822 million for the years ended March 31, 2015 and 2014, respectively.

#### 12. LEASES

The minimum rental commitments under noncancelable operating leases at March 31, 2015, were as follows:

|                     | Millions of Yen |       |    | Thousands of U.S. Dollars |  |  |
|---------------------|-----------------|-------|----|---------------------------|--|--|
| Due within one year | ¥               | 374   | \$ | 3,117                     |  |  |
| Due after one year  |                 | 912   |    | 7,600                     |  |  |
| Total               | ¥               | 1,286 | \$ | 10,717                    |  |  |

#### 13. FINANCIAL INSTRUMENTS AND RELATED DISCLOSURES

(1) Group policy for financial instruments

The Group raises funds through borrowings from banks or other financial institutions. Temporary excess funds are invested mainly in low-risk financial assets. It is the Group's policy to use derivatives not for speculation, but for hedging the risks from operating receivables, payables, and borrowings.

(2) Nature and extent of risks arising from financial instruments and risk management for financial instruments

The credit risks from receivables, such as trade notes and trade accounts, are managed by each business unit according to the characteristics of the customers. Although receivables in foreign currencies are exposed to the market risk of fluctuation in foreign currency exchange rates, a certain percentage of the position, net of payables in foreign currencies, is hedged by using forward foreign currency contracts.

Marketable and investment securities, which consist mainly of held-to-maturity bonds and the capital stocks of customers or suppliers, are exposed to market risk. The risk is insignificant with respect to the held-to-maturity bonds because investments in bonds are limited to highly rated bonds. To manage the risk, the market price and the financial position of the issuers are reviewed constantly. Moreover, with respect to those other than held-to-maturity, the portfolio is constantly reviewed considering market circumstances and relationships with the issuers.

Payment terms of almost all trade payables, including notes and accounts, are less than four months.

The borrowings from banks and other financial institutions are principally raised for capital investment, and their maximum maturities do not exceed 12 years and 11 months after the balance sheet date. All such long-term debts carry fixed-interest rates. However, a part of such fixed-interest rates is converted to floating rates by using interest-rate swap derivatives and is exposed to the market risks of rising interest rates.

Derivatives consist of forward currency contracts, which are for hedging currency risks from the trade receivables and payables denominated in foreign currencies, currency and interest rate swaps, which are for hedging foreign exchange risks from the borrowings denominated in foreign currencies, and interest rate swaps, which are for reducing cash outflow from interest payments of borrowings. The Company's management believes that the credit risks from those transactions are not significant because the transactions are entered into only with highly rated financial institutions. Derivative transactions are strictly managed complying with internal policies for approval and reporting. For more details about hedge accounting, including hedging instruments, hedged items, hedge policies, and hedge effectiveness, please see Note 2.v.

(3) Supplemental remarks on fair values of financial instruments

The contract or notional amounts of derivatives that are shown in Note 14 do not represent the amounts exchanged by the parties and do not measure the Group's exposure to credit or market risk.

# (a) Fair values of financial instruments

|                                          |           | Millions of yen | 1          |
|------------------------------------------|-----------|-----------------|------------|
| M 21 2015                                | Carrying  | D. L.           | Unrealized |
| March 31, 2015                           | amount    | Fair value      | gain/loss  |
| Cash and cash equivalents                | ¥ 128,617 | ¥ 128,617       | -          |
| Time deposits                            | 11,416    | 11,416          | -          |
| Notes and accounts receivable:           |           |                 |            |
| Trade notes and accounts                 | 88,979    | 88,957          | ¥ (22)     |
| Marketable and investment securities     | 104,444   | 106,305         | 1,861      |
| Short-term borrowings                    | (4,320)   | (4,320)         | -          |
| Notes and accounts payable:              |           |                 |            |
| Trade notes and accounts                 | (35,737)  | (35,735)        | 2          |
| Income taxes payable                     | (3,480)   | (3,480)         | -          |
| Long-term debt, including current potion | (151,883) | (157,175)       | (5,292)    |
| Derivatives                              | 157       | 157             | -          |

|                                          | Millions of yen |            |                         |  |  |  |
|------------------------------------------|-----------------|------------|-------------------------|--|--|--|
| March 31, 2014                           | Carrying amount | Fair value | Unrealized<br>gain/loss |  |  |  |
| Cash and cash equivalents                | ¥ 119,782       | ¥ 119,782  |                         |  |  |  |
| Time deposits                            | 9,092           | 9,092      | -                       |  |  |  |
| Notes and accounts receivable:           |                 |            |                         |  |  |  |
| Trade notes and accounts                 | 72,168          | 72,082     | ¥ (86)                  |  |  |  |
| Short-term borrowings                    | (3,063)         | (3,063)    | -                       |  |  |  |
| Marketable and investment securities     | 70,653          | 70,938     | 285                     |  |  |  |
| Notes and accounts payable:              |                 |            |                         |  |  |  |
| Trade notes and accounts                 | (25,613)        | (25,613)   | -                       |  |  |  |
| Income taxes payable                     | (2,854)         | (2,854)    | -                       |  |  |  |
| Long-term debt, including current potion | (162,301)       | (164,867)  | (2,566)                 |  |  |  |
| Derivatives                              | (2)             | (2)        | -                       |  |  |  |

|                                          | Thousands of U.S. Dollars |              |                         |  |  |  |
|------------------------------------------|---------------------------|--------------|-------------------------|--|--|--|
| March 31, 2015                           | Carrying amount           | Fair value   | Unrealized<br>gain/loss |  |  |  |
| Cash and cash equivalents                | \$ 1,071,809              | \$ 1,071,809 | -                       |  |  |  |
| Time deposits                            | 95,133                    | 95,133       | -                       |  |  |  |
| Notes and accounts receivable:           |                           |              |                         |  |  |  |
| Trade notes and accounts                 | 741,492                   | 741,309      | \$ (183)                |  |  |  |
| Marketable and investment securities     | 870,367                   | 885,875      | 15,508                  |  |  |  |
| Notes and accounts payable:              |                           |              |                         |  |  |  |
| Trade notes and accounts                 | (297,808)                 | (297,791)    | 17                      |  |  |  |
| Short-term borrowings                    | (36,000)                  | (36,000)     | -                       |  |  |  |
| Income taxes payable                     | (29,000)                  | (29,000)     | -                       |  |  |  |
| Long-term debt, including current potion | (1,265,692)               | (1,309,792)  | (44,100)                |  |  |  |
| Derivatives                              | 1,308                     | 1,308        | -                       |  |  |  |
|                                          |                           |              |                         |  |  |  |

### Cash and cash equivalents and time deposits

The carrying values of cash and cash equivalents and time deposits approximate fair value because of their short maturities.

#### Notes and accounts receivable

The fair values of the majority of receivables are measured at the carrying amount because of their short maturities while those of some receivables are measured at the amount to be received at maturity discounted at the Group's assumed discount rate determined considering credit risks.

# Marketable and investment securities

The fair values of the majority of marketable and investment securities are measured at the quoted market price while those of some securities approximate the carrying amount because they are approximately equal. The fair value information for the marketable and investment securities by classification is included in Note 4.

#### Notes and accounts payables, short-term borrowings, and income taxes payable

The fair values of these financial instruments approximate the carrying amount because of their short maturities.

# Long-term debt, including current portion

The fair values of long-term debt, including the current portion, are determined by discounting the cash flows related to the debt at the Group's assumed corporate borrowing rate.

The long-term loan payables with floating interest rates and hedged with interest rate swaps are accounted for together with the hedging swaps, and the fair values of such loan payables are measured by discounting the total cash flows from the payables and hedging swaps at the Group's assumed corporate borrowing rate.

#### **Derivatives**

The fair value information for derivatives is included in Note 14.

#### (b) Financial instruments whose fair values cannot be reliably determined

|                                                                                              | Millions | Thousands of U.S. Dollars |          |  |
|----------------------------------------------------------------------------------------------|----------|---------------------------|----------|--|
|                                                                                              | 2015     | 2014                      | 2015     |  |
| Investments in equity instruments that do not have a quoted market price in an active market |          |                           |          |  |
| Stock of associated companies                                                                | ¥ 331    | ¥ 13,136                  | \$ 2,758 |  |
| Other                                                                                        | 2,112    | 2,108                     | 17,600   |  |

## (4) Maturity analysis for financial assets and securities with contractual maturities

|                                                                                           | Millions of Yen |                                  |                                    |           |  |  |
|-------------------------------------------------------------------------------------------|-----------------|----------------------------------|------------------------------------|-----------|--|--|
|                                                                                           | Due in one      | Due after<br>one year<br>through | Due after<br>five years<br>through | Due after |  |  |
| March 31, 2015                                                                            | year or less    | five years                       | 10 years                           | 10 years  |  |  |
| Cash and cash equivalents                                                                 | ¥ 128,617       |                                  |                                    |           |  |  |
| Notes and accounts receivable:<br>Trade notes and accounts<br>Held-to-maturity securities | 88,818          | ¥ 161                            | -                                  | -         |  |  |
| Debt securities                                                                           | 17,502          | 3,901                            | -                                  | -         |  |  |
|                                                                                           |                 | Thousands of U.S. Do             |                                    |           |  |  |
|                                                                                           | Due in one      | Due after<br>one year<br>through | Due after<br>five years<br>through | Due after |  |  |
| March 31, 2015                                                                            | year or less    | five years                       | 10 years                           | 10 years  |  |  |
| Cash and cash equivalents                                                                 | \$ 1,071,809    | -                                |                                    |           |  |  |
| Notes and accounts receivable:<br>Trade notes and accounts<br>Held-to-maturity securities | 740,150         | \$ 1,342                         | -                                  | -         |  |  |
| Debt securities                                                                           | 145,850         | 32,508                           | -                                  | -         |  |  |

Please see Note 6 for annual maturities of long-term debt.

# 14. DERIVATIVES

The Group enters into derivative financial instruments ("derivatives"), including foreign exchange forward contracts, interest rate and currency swap, and interest rate swap contracts. The foreign exchange forward contracts are entered into in order to hedge foreign exchange risk associated with certain assets and liabilities denominated in foreign currencies. The interest rate and currency swaps are entered into as a means of managing interest rate risk and foreign exchange risk for loans denominated in foreign currencies. The interest rate swap contracts are entered into as a means of managing the interest rate risk for loans from financial institutions. The Group does not hold or issue derivatives for trading or speculative purposes.

Because the counterparties to these derivatives are limited to major international financial institutions, the Group does not anticipate any losses arising from credit risk.

Derivative transactions entered into by the Group have been made in accordance with internal policies that require approval and reporting of all derivative transactions.

Derivative transactions to which hedge accounting is not applied at March 31, 2015 and 2014, were as follows:

|                     |          |              | Millions               | of Yen       |         |             |      |
|---------------------|----------|--------------|------------------------|--------------|---------|-------------|------|
|                     |          |              | Contract<br>Amount Due |              |         |             |      |
|                     | Contract |              | After One              |              |         | Unrealized  |      |
| At March 31, 2015   | Aı       | <u>nount</u> | Year                   | <u> Fair</u> | r Value | Gain/(Loss) |      |
| Foreign currency    |          |              |                        |              |         |             |      |
| forward contracts:  |          |              |                        |              |         |             |      |
| Selling U.S.\$      | ¥        | 6,092        | -                      | ¥            | (26)    | ¥           | (26) |
| Selling Euro        |          | 5,637        | -                      |              | 182     |             | 182  |
| Selling Swiss franc |          | 0            | -                      |              | (0)     |             | (0)  |
| Buying U.S.\$       |          | 196          | -                      |              | (10)    |             | (10) |
| Buying Euro         |          | 72           | -                      |              | 0       |             | 0    |
| Buying Japanese yen |          | 10           |                        |              | (0)     |             | (0)  |
| Total               | ¥        | 12,007       | -                      | ¥            | 146     | ¥           | 146  |

|                     |                    |        | Millions               | of Yen |         |                        |      |
|---------------------|--------------------|--------|------------------------|--------|---------|------------------------|------|
|                     |                    |        | Contract<br>Amount Due |        |         |                        |      |
| At March 31, 2014   | Contract<br>Amount |        | After One<br>Year      | Fair   | · Value | Unrealized Gain/(Loss) |      |
| Foreign currency    |                    | _      |                        | ·      |         |                        |      |
| forward contracts:  |                    |        |                        |        |         |                        |      |
| Selling U.S.\$      | ¥                  | 7,206  | -                      | ¥      | 3       | ¥                      | 3    |
| Selling Euro        |                    | 4,224  | -                      |        | (21)    |                        | (21) |
| Selling Swiss franc |                    | 16     | -                      |        | (0)     |                        | (0)  |
| Buying U.S.\$       |                    | 270    | -                      |        | (9)     |                        | (9)  |
| Buying Euro         |                    | 11     | -                      |        | (0)     |                        | (0)  |
| Buying Japanese yen |                    | 8      | -                      |        | 0       |                        | 0    |
| Total               | ¥                  | 11,735 |                        | ¥      | (27)    | ¥                      | (27) |

| At March 31, 2015   |    | ontract<br>mount | Contract<br>Amount Due<br>After One<br>Year | Fair Value |       | Unrealized<br>Gain/(Loss) |       |
|---------------------|----|------------------|---------------------------------------------|------------|-------|---------------------------|-------|
| Foreign currency    |    |                  |                                             |            |       |                           |       |
| forward contracts:  |    |                  |                                             |            |       |                           |       |
| Selling U.S.\$      | \$ | 50,767           | -                                           | \$         | (217) | \$                        | (217) |
| Selling Euro        |    | 46,975           | -                                           |            | 1,517 |                           | 1,517 |
| Selling Swiss franc |    | 0                | -                                           |            | (0)   |                           | (0)   |
| Buying U.S.\$       |    | 1,633            | -                                           |            | (83)  |                           | (83)  |
| Buying Euro         |    | 600              | -                                           |            | 0     |                           | 0     |
| Buying Japanese yen |    | 83               | <u> </u>                                    |            | (0)   |                           | (0)   |
| Total               | \$ | 100,058          | -                                           | \$         | 1,217 | \$                        | 1,217 |

The fair value of derivative transactions is measured at the quoted price obtained from the financial institutions.

Derivative transactions to which hedge accounting is applied at March 31, 2015 and 2014, were as follows:

|                                     |             |                    | Millions of Yen                             |            |
|-------------------------------------|-------------|--------------------|---------------------------------------------|------------|
| At March 31, 2015 Foreign currency  | Hedged Item | Contract<br>Amount | Contract<br>Amount Due<br>After One<br>Year | Fair Value |
| forward contracts:                  |             |                    |                                             |            |
| Selling U.S.\$                      | Receivables | ¥ 36               |                                             | <u>-</u>   |
|                                     |             |                    | Millions of Yen                             |            |
|                                     |             | Contract           | Contract<br>Amount Due<br>After One         |            |
| At March 31, 2014                   | Hedged Item | Amount             | Year                                        | Fair Value |
| Foreign currency forward contracts: |             |                    |                                             |            |
| Selling U.S.\$                      | Receivables | ¥ 41               | -                                           | -          |
|                                     |             | Th                 | ousands of U.S. Dol                         | lars       |
|                                     |             |                    | Contract<br>Amount Due                      |            |
|                                     |             | Contract           | After One                                   |            |
| At March 31, 2015                   | Hedged Item | Amount             | <u>Year</u>                                 | Fair Value |
| Foreign currency forward contracts: |             |                    |                                             |            |
| Selling U.S.\$                      | Receivables | \$ 300             |                                             | -          |

The fair value of derivative transactions is measured at the quoted price obtained from the financial institution.

The contract or notional amounts of derivatives which are shown in the above table do not represent the amounts exchanged by the parties and do not measure the Group's exposure to credit or market risk.

Forward exchange contracted amounts, which are assigned to associated assets or liabilities and are reflected in the balance sheet at year-end, are not subject to the disclosure of market value information.

|                                                                                       |                                                     |                    | Millions of Yen                             |            |
|---------------------------------------------------------------------------------------|-----------------------------------------------------|--------------------|---------------------------------------------|------------|
| At March 31, 2015                                                                     | Hedged Item                                         | Contract<br>Amount | Contract<br>Amount Due<br>After One<br>Year | Fair Value |
| Interest rate swaps:<br>(Floating rate payment,<br>fixed-rate receipt)                | Current portion of long-term debt                   | ¥ 1,000            | -                                           | ¥10        |
| Interest rate swaps: (Fixed rate payment, floating rate receipt) (※)                  | Long-term<br>debt (including<br>current<br>portion) | 41,231             | 35,231                                      | -          |
| Total                                                                                 |                                                     | ¥ 42,231           | ¥ 35,231                                    | ¥ 10       |
|                                                                                       |                                                     |                    | Millions of Yen                             |            |
|                                                                                       |                                                     | Contract           | Contract<br>Amount Due<br>After One         |            |
| At March 31, 2014                                                                     | Hedged Item                                         | Amount             | <u>Year</u>                                 | Fair Value |
| Interest rate swaps: (Floating rate payment, fixed-rate receipt) Interest rate swaps: | Long-term debt                                      | ¥ 1,000            | ¥ 1,000                                     | ¥ 29       |
| (Fixed rate payment, floating rate receipt)                                           | Long-term debt                                      | 39,765             | 39,765                                      | -          |
| Total                                                                                 |                                                     | ¥ 40,765           | ¥ 40,765                                    | ¥ 29       |
|                                                                                       |                                                     | T                  | housands of U.S. Dol                        | lars       |
|                                                                                       |                                                     | Contract           | Contract<br>Amount Due<br>After One         |            |
| At March 31, 2015                                                                     | Hedged Item                                         | Amount             | Year                                        | Fair Value |
| Interest rate swaps: (Floating rate payment, fixed-rate receipt)                      | Current<br>portion of<br>long-term<br>debt          | \$ 8,333           | -                                           | \$ 83      |
| Interest rate swaps: (Fixed rate payment, floating rate receipt) (※)                  | Long-term<br>debt (including<br>current<br>portion) | 343,592            | 293,592                                     | -          |
| Total                                                                                 | r/                                                  | \$ 351,925         | \$ 293,592                                  | \$ 83      |
|                                                                                       |                                                     |                    |                                             |            |

<sup>(\*</sup>X) The above interest rate swaps that qualify for hedge accounting and meet specific matching criteria are not premeasured at market value, but the differential paid or received under the swap agreements is recognized and included in interest expense or income. In addition, the fair value of such interest rate swaps is included in that of hedged items (i.e., long-term debt) in Note 13.

|                                                                                                                          |                   |                    | Millions of Yen                             |            |
|--------------------------------------------------------------------------------------------------------------------------|-------------------|--------------------|---------------------------------------------|------------|
| At March 31, 2015                                                                                                        | Hedged Item       | Contract<br>Amount | Contract<br>Amount Due<br>After One<br>Year | Fair Value |
| Interest rate and currency swaps: (Fixed rate payment, floating rate receipt) (Japanese yen payment, U.S.\$ receipt) (※) | Long-term<br>debt | ¥ 10,000           | ¥ 10,000                                    | -          |
|                                                                                                                          |                   |                    | Millions of Yen                             |            |
| At March 31, 2014                                                                                                        | Hedged Item       | Contract<br>Amount | Contract<br>Amount Due<br>After One<br>Year | Fair Value |
| Interest rate and currency swaps: (Fixed rate payment, floating rate receipt) (Japanese yen payment, U.S.\$ receipt) (※) | Long-term debt    | ¥ 10,000           | ¥ 10,000                                    | -          |
|                                                                                                                          |                   | Tl                 | housands of U.S. Doll                       | lars       |
| At March 31, 2015                                                                                                        | Hedged Item       | Contract<br>Amount | Contract<br>Amount Due<br>After One<br>Year | Fair Value |
| Interest rate and currency                                                                                               | Heagea Item       | Amount             | <u>rear</u>                                 | rair value |
| swaps: (Fixed rate payment, floating rate receipt) (Japanese yen payment, U.S.\$ receipt)                                | Long-term<br>debt | \$ 83,333          | \$ 83,333                                   | -          |

<sup>(\*)</sup> The above interest rate and currency swaps that qualify for hedge accounting and meet specific matching criteria are not premeasured at market value, but the differential paid or received under the swap agreements are recognized and included in interest expense or income. In addition, the fair value of such interest rate swaps is included in that of hedged items (i.e., long-term debt) in Note 13.

(※)

# 15. GUARANTEES OBLIGATION AND OTHER

#### a. Guarantees obligation

At March 31, 2015, the Group had guarantees obligations as follows:

|                                             |   | lions of<br>Yen | usands of<br>Dollars |
|---------------------------------------------|---|-----------------|----------------------|
| Guarantees for bank borrowings of employees | ¥ | 36              | \$<br>300            |
| Guarantees for bank borrowings              |   |                 |                      |
| of a business-related company               |   | 219             | 1,825                |

# b. Contingent liability

The NGK Group is subject to an international investigation on the situation of competition, and the investigation is ongoing. The NGK Group recognized the currently estimated amount for potential losses as "Provision of reserve for loss related to competition law" under extraordinary loss, however, additional losses may arise if new facts become known. Detailed information of this investigation is not disclosed because it may influence the investigation and result in putting the NGK Group at an extreme disadvantage.

# 16. COMPREHENSIVE INCOME

The components of other comprehensive income for the years ended March 31, 2015 and 2014, were as follows:

|                                                       |          |          | Thousands of |
|-------------------------------------------------------|----------|----------|--------------|
|                                                       | Millions | s of Yen | U.S. Dollars |
|                                                       | 2015     | 2014     | 2015         |
| Unrealized gain on available-for-sale securities:     |          |          |              |
| Gains arising during the year                         | ¥13,040  | ¥14,504  | \$108,667    |
| Reclassification adjustments to profit or loss        | (850)    | (582)    | (7,083)      |
| Amount before income tax effect                       | 12,190   | 13,922   | 101,584      |
| Income tax effect                                     | (3,270)  | (4,378)  | (27,250)     |
| Total                                                 | ¥ 8,920  | ¥ 9,544  | \$74,334     |
| Deferred gains on derivatives under hedge accounting: |          |          |              |
| (Losses) gains arising during the year                | ¥ (2)    | ¥ 10     | \$ (17)      |
| Reclassification adjustments to profit or loss        | (16)     | (16)     | (133)        |
| Amount before income tax effect                       | (18)     | (6)      | (150)        |
| Income tax effect                                     | 7        | 2        | 58           |
| Total                                                 | ¥ (11)   | ¥ (4)    | \$ (92)      |
| Foreign currency translation adjustments:             |          |          |              |
| Adjustments arising during the year                   | ¥ 9,879  | ¥ 20,237 | \$82,325     |
| Reclassification adjustments to profit or loss        | (722)    | 3        | (6,017)      |
| Total                                                 | ¥ 9,157  | ¥ 20,240 | \$76,308     |
| Share of other comprehensive income in associates—    |          |          |              |
| Gains arising during the year                         | ¥ 437    | ¥ 2      | \$3,642      |
| Defined retirement benefit plans:                     |          |          |              |
| Gains arising during the year                         | ¥3,384   | ¥503     | \$28,200     |
| Reclassification adjustments to profit or loss        | 3,964    | 359      | 33,033       |
| Amount before income tax effect                       | 7,348    | 862      | 61,233       |
| Income tax effect                                     | (3,361)  | (302)    | (28,008)     |
| Total                                                 | ¥ 3,987  | ¥ 560    | \$33,225     |
| Total other comprehensive income                      | ¥22,490  | ¥30,342  | \$187,417    |

# 17. NET INCOME PER SHARE

Reconciliation of the differences between basic and diluted net income per share ("EPS") for the years ended March 31, 2015 and 2014, was as follows:

|                                                                                      | Millions of Yen | Thousands of Shares            | Yen      | U.S.<br>Dollars |
|--------------------------------------------------------------------------------------|-----------------|--------------------------------|----------|-----------------|
| Year Ended March 31, 2015                                                            | Net<br>Income   | Weighted-<br>Average<br>Shares | E        | PS              |
| Basic EPS—Net income available to common shareholders Effect of dilutive securities: | ¥ 41,505        | 326,539                        | ¥ 127.11 | \$ 1.059        |
| Stock options                                                                        |                 | 612                            | _        |                 |
| Diluted EPS—Net income for computation                                               | ¥ 41,505        | 327,151                        | ¥ 126.87 | \$ 1.057        |
| Year Ended March 31, 2014                                                            |                 |                                |          |                 |
| Basic EPS—Net income available to common shareholders Effect of dilutive securities: | ¥ 27,045        | 326,555                        | ¥ 82.82  | _               |
| Stock options                                                                        |                 | 575                            |          |                 |
| Diluted EPS—Net income for computation                                               | ¥ 27,045        | 327,130                        | ¥ 82.67  | _               |

# 18. RELATED-PARTY DISCLOSURES

# (1) Transactions with related parties

The Company had the following transactions with related parties for the years ended March 31, 2015 and 2014:

# For the year ended March 31, 2015

| Category                                                                                                                                              | Company<br>Name/Na<br>me | Address              | Capital                              | Content of business/Oc cupation                      | Ratio of<br>voting<br>rights | Relationship              | Summary of transactions                                                                                                   | Amount                              | Account items | Balance at<br>the end of<br>fiscal year |
|-------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|----------------------|--------------------------------------|------------------------------------------------------|------------------------------|---------------------------|---------------------------------------------------------------------------------------------------------------------------|-------------------------------------|---------------|-----------------------------------------|
| Executive                                                                                                                                             | Hiroyuki<br>Kamano       | -                    | -                                    | Outside<br>Director                                  | -                            | -                         | Payment of<br>consideration<br>and expenses<br>relating to the<br>charge of<br>chairman of an<br>independent<br>committee | (\$ 392<br>thousand)                | -             | -                                       |
| Executive                                                                                                                                             | Setsuo<br>Tanaka         | -                    | -                                    | Outside<br>Audit &<br>Supervisory<br>Board<br>Member | -                            | -                         | Payment of<br>consideration<br>and expenses<br>relating to the<br>charge of a<br>member of an<br>independent<br>committee | ¥25 million<br>(\$ 208<br>thousand) | -             | -                                       |
| Company owned<br>by the directors<br>and their close<br>relatives, holding<br>the majority of<br>the voting rights<br>(including its<br>subsidiaries) | Yoshimura<br>Sangyo      | Ena-shi,<br>Gifu-ken | ¥10<br>million<br>(\$83<br>thousand) | Manufacture<br>of clay for<br>ceramics               | (Held)<br>Direct<br>0.0%     | Purchase of raw materials | Purchase of clay/silica sand                                                                                              | ¥13 million<br>(\$108<br>thousand)  | -             | -                                       |

For the year ended March 31, 2014

| Category  Executive                                                                                                                                   | Company<br>name  Hiroyuki<br>Kamano | Address              |                | Content of<br>business/Oc<br>cupation  Outside<br>Director | Ratio of<br>voting<br>rights | Relationship<br>-         | Summary of transactions  Payment of consideration and expenses relating to the charge of chairman of an                                             | Amount ¥47 million | Account<br>items                                                     | Balance at<br>the end of<br>fiscal year |
|-------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|----------------------|----------------|------------------------------------------------------------|------------------------------|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|----------------------------------------------------------------------|-----------------------------------------|
| Executive                                                                                                                                             | Setsuo<br>Tanaka                    | -                    | -              | Outside<br>Audit &<br>Supervisory<br>Board<br>Member       | -                            | -                         | independent<br>committee  Payment of<br>consideration<br>and expenses<br>relating to the<br>charge of a<br>member of an<br>independent<br>committee | ¥29 million        | Notes and<br>accounts<br>payable -<br>Other                          | ¥2 million                              |
| Company owned<br>by the directors<br>and their close<br>relatives, holding<br>the majority of<br>the voting rights<br>(including its<br>subsidiaries) | Sangyo                              | Ena-shi,<br>Gifu-ken | ¥10<br>million | Manufacture<br>of clay for<br>ceramics                     | (Held)<br>Direct<br>0.0%     | Purchase of raw materials | Purchase of clay/silica sand                                                                                                                        | ¥132<br>million    | Notes and<br>accounts<br>payable -<br>Trade notes<br>and<br>accounts | ¥4 million                              |

- 1. The above "Amount" does not include consumption tax; the balance includes consumption tax.
- 2. Transaction terms and policy for determining transaction terms Transactions stated above were determined through negotiations with reference to the prevailing market price.
- 3. As ex-director Atoshi Yoshimura retired at the Annual Shareholders' Meeting held on June 27, 2014, Yoshimura Sangyo Kabushiki Kaisha was excluded from the disclosure of related parties at the same date. Therefore, the amount of the transactions with Yoshimura Sangyo Kabushiki Kaisha for the year ended March 31, 2015 covers the period up to June 27, 2014.

A consolidated subsidiary had the following transactions with related parties for the years ended March 31, 2015 and 2014, as follows:

For the year ended March 31, 2015

| Content of                             |                          |                                       | Summary of                                                   |                                                                                    | Account                                                                                      | the end of                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|----------------------------------------|--------------------------|---------------------------------------|--------------------------------------------------------------|------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| business                               | voting<br>rights         | Relationship                          | transactions                                                 | Amount                                                                             | items                                                                                        | fiscal year                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|                                        |                          |                                       |                                                              |                                                                                    |                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Manufacture<br>of clay for<br>ceramics | (Held)<br>Direct<br>0.0% | Purchase of raw materials             | Purchase of                                                  | (\$150                                                                             | -                                                                                            | -                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| ]                                      | Manufacture of clay for  | Manufacture (Held) of clay for Direct | Manufacture (Held) Purchase of clay for Direct raw materials | Manufacture (Held) of clay for Direct ceramics 0.0% raw materials clay/silica sand | Manufacture (Held) of clay for Direct ceramics 0.0% raw materials clay/silica sand thousand) | Manufacture (Held) of clay for Direct Purchase of Purchase of \$\pmathbb{\text{\$\frac{\pmathbb{\text{\$\frac{\pmathbb{\text{\$\frac{\pmathbb{\text{\$\frac{\pmathbb{\text{\$\frac{\pmathbb{\text{\$\frac{\pmathbb{\text{\$\frac{\pmathbb{\text{\$\frac{\pmathbb{\text{\$\frac{\pmathbb{\text{\$\frac{\pmathbb{\text{\$\frac{\pmathbb{\text{\$\frac{\pmathbb{\text{\$\frac{\pmathbb{\text{\$\frac{\pmathbb{\text{\$\frac{\pmathbb{\text{\$\frac{\pmathbb{\text{\$\frac{\pmathbb{\text{\$\frac{\pmathbb{\text{\$\frac{\pmathbb{\text{\$\frac{\pmathbb{\text{\$\frac{\pmathbb{\text{\$\frac{\pmathbb{\text{\$\frac{\pmathbb{\text{\$\frac{\pmathbb{\text{\$\frac{\pmathbb{\text{\$\frac{\pmathbb{\text{\$\frac{\pmathbb{\text{\$\frac{\pmathbb{\text{\$\frac{\pmathbb{\text{\$\frac{\pmathbb{\text{\$\frac{\pmathbb{\text{\$\frac{\pmathbb{\text{\$\frac{\pmathbb{\text{\$\frac{\pmathbb{\text{\$\frac{\pmathbb{\text{\$\frac{\pmathbb{\text{\$\frac{\pmathbb{\text{\$\frac{\pmathbb{\text{\$\frac{\pmathbb{\text{\$\frac{\pmathbb{\text{\$\frac{\pmathbb{\text{\$\frac{\pmathbb{\text{\$\frac{\pmathbb{\text{\$\frac{\pmathbb{\text{\$\frac{\pmathbb{\text{\$\frac{\pmathbb{\text{\$\frac{\pmathbb{\text{\$\frac{\pmathbb{\text{\$\frac{\pmathbb{\text{\$\frac{\pmathbb{\text{\$\frac{\pmathbb{\text{\$\frac{\emtricex{\$\frac{\emtrac{\pmathbb{\text{\$\frac{\emtrac{\pmathbb{\text{\$\frac{\emtrac{\emtrac{\emticlex{\$\frac{\emtrac{\emtrac{\emticlex{\$\frac{\emticlex{\$\frac{\emticlex{\$\frac{\emticlex{\$\frac{\emticlex{\$\frac{\emticlex{\$\frac{\emticlex{\$\frac{\emticlex{\$\frac{\emticlex{\$\frac{\emticlex{\$\frac{\emticlex{\$\frac{\emticlex{\$\frac{\emticlex{\$\frac{\emticlex{\$\frac{\emticlex{\$\frac{\emticlex{\$\frac{\emticlex{\$\frac{\emticlex{\$\frac{\emticlex{\$\frac{\emticlex{\$\frac{\emticlex{\$\frac{\emticlex{\$\frac{\emticlex{\$\emticlex{\$\frac{\emticlex{\$\frac{\emticlex{\$\frac{\emticlex{\$\frac{\emticlex{\$\frac{\emticlex{\$\frac{\emticlex{\$\frac{\emticlex{\$\frac{\emticlex{\$\frac{\emticlex{\$\frac{\emticlex{\$\frac{\emticlex{\$\frac{\emticlex{\$\emticlex{\$\emticlex{\$\emticlex{\$\frac{\emticlex{\$\emticlex{\$\emticlex{\$\emticlex{\$\frac{\emticlex{\$\frac{\ |

For the year ended March 31, 2014

|                    |           |          |         |             | Ratio of |               |                  |             |           | Balance at  |
|--------------------|-----------|----------|---------|-------------|----------|---------------|------------------|-------------|-----------|-------------|
|                    | Company   |          |         | Content of  | voting   |               | Summary of       |             | Account   | the end of  |
| Category           | name      | Address  | Capital | business    | rights   | Relationship  | transactions     | Amount      | items     | fiscal year |
| Company owned      |           |          |         |             |          |               |                  |             |           |             |
| by the directors   |           |          |         |             |          |               |                  |             |           |             |
| and their close    | Yoshimura |          | ¥10     | Manufacture | (Held)   |               |                  | ¥ 63        | Notes and |             |
| relatives, holding | Sangyo    | Ena-shi, | million | of clay for | Direct   | Purchase of   | Purchase of      | million     | accounts  | ¥ 6 million |
| the majority the   | Kabushiki | Gifu-ken | шшш     | ceramics    | 0.0%     | raw materials | clay/silica sand | IIIIIIIIIII | payable   |             |
| voting rights      | Kaisya    |          |         | cerannes    | 0.070    |               |                  |             | payable   |             |
| (including its     |           |          |         |             |          |               |                  |             |           |             |
| subsidiaries)      |           |          |         |             |          |               |                  |             |           |             |

#### Notes

- 1. The above "Amount" does not include consumption tax; the balance includes consumption tax.
- 2. Transaction terms and policy for determining transaction terms Transactions stated above were determined through negotiations with reference to the prevailing market price.
- 3. As ex-director Atoshi Yoshimura retired at the Annual Shareholders' Meeting held on June 27, 2014, Yoshimura Sangyo Kabushiki Kaisha was excluded from the disclosure of related parties at the same date. Therefore, the amount of the transactions with Yoshimura Sangyo Kabushiki Kaisha for the year ended March 31, 2015 covers the period up to June 27, 2014.

# (2) Summary of financial information of significant associated company

Condensed financial information of Metawater Co., Ltd. for the year ended March 31, 2014, was as follows:

|                                                        | Millions of Yen          |  |  |  |
|--------------------------------------------------------|--------------------------|--|--|--|
|                                                        | 2014                     |  |  |  |
| Total current assets Total noncurrent assets           | ¥ 61,644<br>11,580       |  |  |  |
| Total current liabilities Total noncurrent liabilities | 49,831<br>2,540          |  |  |  |
| Total equity                                           | 20,853                   |  |  |  |
| Sales Net income before income taxes Net income        | 95,146<br>7,481<br>4,327 |  |  |  |

The information above for the year ended March 31, 2015 was omitted since Metawater Co., Ltd. was no longer within the scope of the disclosure.

# 19. SUBSEQUENT EVENTS

# **Appropriations of Retained Earnings**

The following appropriation of retained earnings at March 31, 2015, was approved at the Company's shareholders' meeting held on June 26, 2015:

|                                                 | Millions of | Thousands of |
|-------------------------------------------------|-------------|--------------|
|                                                 | Yen         | U.S. Dollars |
| Year-end cash dividends, ¥15 (\$0.13) per share | ¥ 4,897     | \$ 40,808    |

#### 20. SEGMENT INFORMATION

Under ASBJ Statement No. 17, "Accounting Standard for Segment Information Disclosures" and ASBJ Guidance No. 20, "Guidance on Accounting Standard for Segment Information Disclosures," an entity is required to report financial and descriptive information about its reportable segments. Reportable segments are operating segments or aggregations of operating segments that meet specified criteria. Operating segments are components of an entity about which separate financial information is available and such information is evaluated regularly by the chief operating decision maker in deciding how to allocate resources and in assessing performance. Generally, segment information is required to be reported on the same basis as is used internally for evaluating operating segment performance and deciding how to allocate resources to operating segments.

# (1) Description of Reportable Segments

The Group's reportable segments are components of the Group about which separate financial information is available that is evaluated regularly by the Company's management in deciding how to allocate resources and in assessing performance. The Group develops and conducts its operations under three business groups: Power Business Group, Ceramics Products Business Group, and Electronics Business Group, while planning a comprehensive strategy for domestic and overseas markets. Consequently, the Group defines those three business groups as its reportable segments.

| Business segment  | Main products                                                                                                                                                                                                              |
|-------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Power             | Insulators, hardware for insulator assemblies, current limiting arching horns, bushing shells, fuse cut-outs, APM, line arresters, and NAS ® (sodium sulfur) batteries                                                     |
| Ceramics products | Automotive ceramics for exhaust gas purification, corrosion-resistant ceramic apparatuses for chemical industries, gas analyzers, industrial heating systems, refractory products, and radioactive waste treatment systems |
| Electronics       | Beryllium-copper-wrought products, molds, and ceramic components for electronics and semiconductor manufacturing equipment                                                                                                 |

# (2) Methods of Measurement for the Amounts of Sales, Profit (Loss), Assets and Other Items for Each Reportable Segment

The accounting policies of each reportable segment are consistent with those disclosed in Note 2, "SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES."

# (3) Information about Sales, Profit (Loss), Assets, and Other Items

| _                                                                                                                                                       | Millions of Yen                                            |                                                        |                                                    |                                                           |                             |                                               |  |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|--------------------------------------------------------|----------------------------------------------------|-----------------------------------------------------------|-----------------------------|-----------------------------------------------|--|--|
| _                                                                                                                                                       | 2015                                                       |                                                        |                                                    |                                                           |                             |                                               |  |  |
| _                                                                                                                                                       |                                                            | Reportable                                             | segment                                            |                                                           |                             |                                               |  |  |
| _                                                                                                                                                       | Power                                                      | Ceramics                                               | Electronics                                        | Total                                                     | Reconciliations             | Consolidated                                  |  |  |
| Sales to customers                                                                                                                                      | ¥ 72,804                                                   | ¥ 227,101                                              | ¥ 78,760                                           | ¥ 378,665                                                 | -                           | ¥ 378,665                                     |  |  |
| Intersegment                                                                                                                                            |                                                            |                                                        |                                                    |                                                           |                             |                                               |  |  |
| sales or transfers                                                                                                                                      | 43                                                         | 97                                                     | -                                                  | 140                                                       | ¥ (140)                     | -                                             |  |  |
| Total                                                                                                                                                   | ¥ 72,847                                                   | ¥ 227,198                                              | ¥ 78,760                                           | ¥ 378,805                                                 | ¥ (140)                     | ¥ 378,665                                     |  |  |
| Segment (loss) profit                                                                                                                                   | ¥ (2,352)                                                  | ¥57,614                                                | ¥ 6,295                                            | ¥ 61,557                                                  | ¥ 20                        | ¥ 61,577                                      |  |  |
| Segment assets                                                                                                                                          | 93,938                                                     | 293,416                                                | 97,871                                             | 485,225                                                   | 217,009                     | 702,234                                       |  |  |
| Other:                                                                                                                                                  |                                                            |                                                        |                                                    |                                                           |                             |                                               |  |  |
| Depreciation and                                                                                                                                        |                                                            |                                                        |                                                    |                                                           |                             |                                               |  |  |
| amortization<br>Impairment losses on                                                                                                                    | 3,110                                                      | 18,844                                                 | 3,578                                              | 25,532                                                    | -                           | 25,532                                        |  |  |
| assets                                                                                                                                                  | -                                                          | _                                                      | 118                                                | 118                                                       | -                           | 118                                           |  |  |
| Increase in property,                                                                                                                                   |                                                            |                                                        |                                                    |                                                           |                             |                                               |  |  |
| plant, and equipment<br>and intangible assets                                                                                                           | 2,687                                                      | 20,855                                                 | 5,254                                              | 28,796                                                    | 1,570                       | 30,366                                        |  |  |
|                                                                                                                                                         | Millions of Yen                                            |                                                        |                                                    |                                                           |                             |                                               |  |  |
|                                                                                                                                                         |                                                            |                                                        | N                                                  | lillions of Yen                                           |                             |                                               |  |  |
|                                                                                                                                                         |                                                            |                                                        | N                                                  | Tillions of Yen<br>2014                                   |                             |                                               |  |  |
|                                                                                                                                                         |                                                            | Reportable                                             |                                                    |                                                           |                             |                                               |  |  |
| -<br>-                                                                                                                                                  |                                                            | •                                                      | segment                                            | 2014                                                      |                             |                                               |  |  |
|                                                                                                                                                         | Power                                                      | Reportable  Ceramics                                   |                                                    |                                                           | Reconciliations             | Consolidated                                  |  |  |
| Sales                                                                                                                                                   |                                                            | Ceramics                                               | Electronics                                        | 2014  Total                                               |                             |                                               |  |  |
| Sales to customers                                                                                                                                      | Power¥ 58,985                                              | •                                                      | segment                                            | 2014                                                      |                             | Consolidated ¥ 308,671                        |  |  |
|                                                                                                                                                         |                                                            | <u>Ceramics</u> ¥ 190,761                              | Electronics                                        | 2014<br>Total<br>¥ 308,671                                | Reconciliations _           |                                               |  |  |
| Sales to customers Intersegment                                                                                                                         | ¥ 58,985<br>19                                             | Ceramics                                               | Electronics ¥ 58,925                               | 2014  Total  ¥ 308,671  238                               |                             | ¥ 308,671                                     |  |  |
| Sales to customers Intersegment sales or transfers Total                                                                                                | ¥ 58,985<br>19<br>¥ 59,004                                 | Ceramics ¥ 190,761 217                                 | Electronics ¥ 58,925                               | 2014<br>Total<br>¥ 308,671                                | Reconciliations  -  ¥ (238) | ¥ 308,671                                     |  |  |
| Sales to customers Intersegment sales or transfers Total                                                                                                | ¥ 58,985<br>19<br>¥ 59,004                                 | Ceramics  ¥ 190,761  217  ¥ 190,978                    | Electronics  ¥ 58,925  2  ¥ 58,927                 | 2014  Total  ¥ 308,671  238  ¥ 308,909                    | Reconciliations             | ¥ 308,671<br>¥ 308,671                        |  |  |
| Sales to customers Intersegment sales or transfers Total Segment (loss) profit Segment assets Other:                                                    | ¥ 58,985<br>19<br>¥ 59,004<br>¥ (3,900)                    | Ceramics  ¥ 190,761  217  ¥ 190,978  ¥ 44,998          | Electronics  ¥ 58,925  2  ¥ 58,927  ¥ 3,104        | 2014  Total  ¥ 308,671  238  ¥ 308,909  ¥ 44,202          | Reconciliations             | ¥ 308,671<br>¥ 308,671<br>¥ 44,252            |  |  |
| Sales to customers Intersegment sales or transfers Total Segment (loss) profit Segment assets                                                           | ¥ 58,985<br>19<br>¥ 59,004<br>¥ (3,900)                    | Ceramics  ¥ 190,761  217  ¥ 190,978  ¥ 44,998          | Electronics  ¥ 58,925  2  ¥ 58,927  ¥ 3,104        | 2014  Total  ¥ 308,671  238  ¥ 308,909  ¥ 44,202          | Reconciliations             | ¥ 308,671<br>¥ 308,671<br>¥ 44,252            |  |  |
| Sales to customers Intersegment sales or transfers Total Segment (loss) profit Segment assets Other: Depreciation and amortization                      | ¥ 58,985<br>19<br>¥ 59,004<br>¥ (3,900)                    | Ceramics  ¥ 190,761  217  ¥ 190,978  ¥ 44,998          | Electronics  ¥ 58,925  2  ¥ 58,927  ¥ 3,104        | 2014  Total  ¥ 308,671  238  ¥ 308,909  ¥ 44,202          | Reconciliations             | ¥ 308,671<br>¥ 308,671<br>¥ 44,252            |  |  |
| Sales to customers Intersegment sales or transfers Total Segment (loss) profit Segment assets Other: Depreciation and amortization Impairment losses on | ¥ 58,985<br>19<br>¥ 59,004<br>¥ (3,900)<br>90,148<br>3,258 | Ceramics  ¥ 190,761  217  ¥ 190,978  ¥ 44,998  262,638 | Electronics  ¥ 58,925  2  ¥ 58,927  ¥ 3,104 67,907 | 2014  Total  ¥ 308,671  238  ¥ 308,909  ¥ 44,202  420,693 | Reconciliations             | ¥ 308,671<br>¥ 308,671<br>¥ 44,252<br>614,220 |  |  |
| Sales to customers Intersegment sales or transfers Total Segment (loss) profit Segment assets Other: Depreciation and amortization                      | ¥ 58,985<br>19<br>¥ 59,004<br>¥ (3,900)<br>90,148          | Ceramics  ¥ 190,761  217  ¥ 190,978  ¥ 44,998  262,638 | Electronics  ¥ 58,925  2  ¥ 58,927  ¥ 3,104 67,907 | 2014  Total  ¥ 308,671  238  ¥ 308,909  ¥ 44,202  420,693 | Reconciliations             | ¥ 308,671<br>¥ 308,671<br>¥ 44,252<br>614,220 |  |  |

|                                                                        | Thousands of U.S. Dollars |             |             |             |                 |              |  |  |
|------------------------------------------------------------------------|---------------------------|-------------|-------------|-------------|-----------------|--------------|--|--|
|                                                                        |                           |             |             | 2015        |                 |              |  |  |
|                                                                        |                           | Reportable  | segment     |             |                 |              |  |  |
| _                                                                      | Power                     | Ceramics    | Electronics | Total       | Reconciliations | Consolidated |  |  |
| Sales                                                                  |                           |             |             |             |                 |              |  |  |
| Sales to customers                                                     | \$ 606,700                | \$1,892,509 | \$656,333   | \$3,155,542 | -               | \$ 3,155,542 |  |  |
| Intersegment                                                           |                           |             |             |             |                 |              |  |  |
| sales or transfers                                                     | 358                       | 809         | -           | 1,167       | \$ (1,167)      | -            |  |  |
| Total                                                                  | \$ 607,058                | \$1,893,318 | \$656,333   | \$3,156,709 | \$ (1,167)      | \$3,155,542  |  |  |
| Segment (loss) profit                                                  | \$ (19,600)               | \$480,117   | \$52,458    | \$ 512,97   | \$ 167          | \$ 513,142   |  |  |
| Segment assets                                                         | 782,817                   | 2,445,133   | 815,592     | 4,043,542   | 1,808,408       | 5,851,950    |  |  |
| Other:                                                                 |                           |             |             |             |                 |              |  |  |
| Depreciation and amortization                                          | 25,916                    | 157,033     | 29,817      | 212,766     | -               | 212,766      |  |  |
| Impairment losses on assets                                            | -                         | -           | 983         | 983         | -               | 983          |  |  |
| Increase in property,<br>plant, and equipment<br>and intangible assets | 22,392                    | 173,792     | 43,783      | 239,967     | 13,083          | 253,050      |  |  |

#### Notes:

- 1. Reconciliation of segment profit is the adjustment of intersegment transactions.
- 2. The amount of general corporate assets included in the reconciliation of segment assets was ¥258,132 million (\$2,151,100 thousand) and ¥234,348 million at March 31, 2015 and 2014, respectively, mainly consisting of surplus funds (cash and marketable securities), long-term investment funds (investment securities), and the assets of administrative departments.
- 3. The increase in property, plant, and equipment and intangible assets in other relates to the increase in corporate departments.

# Information about geographical areas

# (1) Sales

# Millions of Yen

| North Ar | merica | Euro    | ppe                |                           | Other                          |                                      |
|----------|--------|---------|--------------------|---------------------------|--------------------------------|--------------------------------------|
| USA      | Others | Germany | Others             | Asia                      | Areas                          | Total                                |
| ¥78,897  | ¥5,707 | ¥43,666 | ¥49,115            | ¥69,181                   | ¥24,208                        | ¥378,66                              |
|          | USA    |         | USA Others Germany | USA Others Germany Others | USA Others Germany Others Asia | USA Others Germany Others Asia Areas |

## Millions of Yen

|         |         |        | 20      | 014     |         |         |          |
|---------|---------|--------|---------|---------|---------|---------|----------|
|         | North A | merica | Euro    | ope     |         | Other   |          |
| Japan   | USA     | Others | Germany | Others  | Asia    | Areas   | Total    |
| ¥98,929 | ¥59,655 | ¥7,061 | ¥44,480 | ¥25,614 | ¥50,754 | ¥22,178 | ¥308,671 |

| Thousands | of | U.S. | Dollars |
|-----------|----|------|---------|
|           |    |      |         |

|               |                 |               |             | 2015           |               |           |           |       |          |
|---------------|-----------------|---------------|-------------|----------------|---------------|-----------|-----------|-------|----------|
|               | Nort            | th America    |             | Europe         | ;             |           | Other     |       |          |
| Japan         | USA             | Othe          | rs Ge       | rmany          | Others        | Asia      | Areas     | T     | otal     |
| \$899,092     | \$657,47        | 75 \$47,5     | 58 \$3      | 63,883         | \$409,292     | \$576,508 | \$201,734 | \$3,1 | 55,542   |
| Sales are att | ributed to cou  | ıntries based | on the loca | tion of the cu | istomers.     |           |           |       |          |
| 2) Property   | , plant, and ed | quipment      |             |                |               |           |           |       |          |
|               |                 |               |             | Millions       | of Yen        |           |           |       |          |
|               |                 |               |             | 20             | 15            |           |           |       |          |
|               | No              | orth America  |             | Eur            | ope           | As        | ia        | Other |          |
| Japan         | USA             | Mexico        | Others      | Poland         | Others        | China     | Others    | Areas | Total    |
| ¥86,872       | ¥22,029         | ¥27,846       | ¥12         | ¥27,090        | ¥3,477        | ¥16,974   | ¥14,358   | ¥602  | ¥199,260 |
|               |                 |               |             | Millions       | of Yen        |           |           |       |          |
|               |                 |               |             | 20             | 14            |           |           |       |          |
|               | No              | orth America  |             | Eur            | rope          | As        | ia        | Other |          |
| Japan         | USA             | Mexico        | Others      | Poland         | Others        | China     | Others    | Areas | Total    |
| ¥78,284       | ¥18,674         | ¥26,069       | ¥13         | ¥24,738        | ¥2,967        | ¥17,588   | ¥7,377    | ¥614  | ¥176,324 |
|               |                 |               |             | Thousands of   | of U.S. Dolla | ırs       |           |       |          |
|               |                 |               |             |                | 015           |           |           |       |          |
|               | N               | orth America  | 1           | Fu             | ırope         |           | Asia      | Other |          |
| Japan         | USA             | Mexico        | Others      | Poland         | Others        | China     | Others    | Areas | Tota     |

\* \* \* \* \* \*

\$225,750

\$28,975 \$141,450 \$119,650 \$5,017

\$723,933

\$183,575

\$232,050

\$100

\$1,660,500

# **Corporate Data**

As of March 31, 2015

# NGK INSULATORS, LTD.

2-56 Suda-cho, Mizuho, Nagoya 467-8530, Japan

Tel: +81-52-872-7171 Fax: +81-52-872-7690

URL: http://www.ngk.co.jp/english/

# **Paid-in Capital**

69,849 million yen

# **Common Stock**

327,560 thousand shares

## **Number of Shareholders**

21,342

# **Stock Exchange Listings**

Tokyo and Nagoya

#### **Auditors**

Deloitte Touche Tohmatsu LLC

Administration Dept.

Manufacturing Engineering Dept. Information Technology Dept. Construction & Maintenance Dept.

(Japanese member firm of Deloitte Touche Tohmatsu)

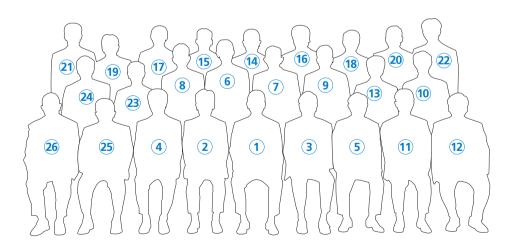
# Organization As of June 26, 2015

| Power Business Group                                                                                                                                                                              | Head Office                                                                                                                                                                    |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Business Planning Dept.  Sales Div.  Electrical Insulator Div.  Electrical Equipment Dept.  NAS Battery Div.  Quality Assurance Dept.                                                             | Auditing Dept.  Environmental Management Dept.  Quality Management Dept.  Corporate Strategy Office  New Business Planning Office  Secretarial Office  Public Relations Office |
| Ceramic Products Business Group  Business Planning Dept.  Worldwide Sales and Marketing Div.  Engineering Div.  Manufacturing Div.  Sensor Div.  Industrial Process Div.  Quality Assurance Dept. | Human Resources Dept.  CSR Office Global Compliance Office Finance & Accounting Dept. Legal Dept. Intellectual Property Dept. General Affairs Dept. Purchasing Dept.           |
| Electronics Business Group                                                                                                                                                                        | Corporate R&D                                                                                                                                                                  |
| Business Planning Dept.  High Performance Ceramics Div.  New Metals Div.  Electronic Components Div.  Quality Assurance Dept.                                                                     | Wafer Project  NCM Project  Functional Materials Development Project  SOFC Project  ZNB Project  Materials Research Laboratory  Future Technology Management Center            |
|                                                                                                                                                                                                   | Corporate Manufacturing Engineering                                                                                                                                            |

# **Board of Directors, Executive Officers and Audit & Supervisory Board**

As of June 26, 2015





#### **BOARD OF DIRECTORS**

#### Chairman

1 Eiji Hamamoto

#### President

2 Taku Oshima

#### Executive Vice President Yukihisa Takeuchi

Group Executive, Corporate R&D, Development Committee Chair

#### Director and Senior Vice President

Susumu Sakabe

Responsible for the Finance Dept. and Purchasing Dept., General Manager, Tokyo Main Office

#### Director and Senior Vice President

5 Hiroshi Kanie

Group Executive, Ceramic Products Business Group. General Manager, Nagoya Site

#### Director and Senior Vice President

6 Ryohei Iwasaki

Responsible for Corporate Strategy Office, New Business Planning Office, Secretarial Office, Public Relations Office, and Human Resources Dept., Senior Officer in charge of Group Companies

# Director and Senior Vice President

Hideaki Saito

Group Executive, Power Business Group

#### Director and Senior Vice President

Shuhei Ishikawa

Group Executive, Electronics Business Group, General Manager, Chita Site

#### Director and Senior Vice President

9 Nobumitsu Saji

Responsible for Auditing Dept., CSR Office, Global Compliance Office, Legal Dept., Intellectual Property Dept., and General Affairs Dept., General Manager, Global Compliance Office, CSR Committee Chair, Internal Controls Committee Chair, and General Manager, Osaka Site

#### Director and Vice President

10 Chiaki Niwa

Group Executive, Corporate Manufacturing Engineering. Responsible for Environmental Management Dept. and Quality Management Dept., Facilities Committee Chair, NGK Environmental Protection Committee Chair, and Company-wide Quality Committee Chair

#### **Outside Director**

Hiroyuki Kamano

#### **Outside Director**

Toshio Nakamura

### **EXECUTIVE OFFICERS**

#### Senior Vice President

13 Hiroshi Kurachi

General Manager, Engineering Div., General Manager, Sensor Div., Ceramic Products Business Group

# Vice President

14 Hideki Yamamoto

In charge of Purchasing Dept., and Special Operations

#### Vice President

15 Takaya Teshima

General Manager, High Performance Ceramics Div., Electronics Business Group

#### Vice President

16 Atsushi Matsuda

General Manager, Worldwide Sales & Marketing Div., Ceramic Products Business Group, President, NGK EUROPE GMBH

#### Vice President

Toshiyuki Mima

General Manager, NAS Battery Div., Power Business Group, General Manager, Komaki Site

#### Vice President

18 Hitoshi Sakai

Group Vice Executive, SOFC Project Leader, Corporate R & D

# Vice President

19 Hiroto Matsuda

General Manager, Manufacturing Div., Ceramic Products Business Group

#### Vice President

20 Hirovuki Tsuii

General Manager, Manufacturing Engineering Dept., Corporate Manufacturing Engineering

#### Vice President

Tomohiro Yamada

Representative Director and Executive Vice President. NGK Electronics Devices Inc., Assistant to Group Executive, Electronics Business Group

#### Vice President

22 Tadaaki Yamada

General Manager, Human Resources Dept.

### **AUDIT & SUPERVISORY BOARD**

Audit & Supervisory Board Member

23 Takevuki Mizuno

Audit & Supervisory Board Member

24 Ken Sugiyama

Audit & Supervisory Board Member, Outside

25 Setsuo Tanaka

Audit & Supervisory Board Member, Outside

26 Ichiro Terato

# **Subsidiaries and Affiliated Companies**

| JAPAN                          | Company's Direct and Indirect Ownership (%) Principal Products and Services |                                                                       |  |  |  |
|--------------------------------|-----------------------------------------------------------------------------|-----------------------------------------------------------------------|--|--|--|
| ■ ENERGY SUPPORT CORPORATION   | CORPORATION 100 Power distribution equipment                                |                                                                       |  |  |  |
| AKECHI INSULATORS, LTD.        | 100                                                                         | Electrical insulators                                                 |  |  |  |
| IKEBUKURO HORO KOGYO CO., LTD. | 78.9 Glass-lined reactors & tanks for chemical processing industries        |                                                                       |  |  |  |
| ■ NGK CHEM-TECH, LTD.          | 100                                                                         | Chemical equipment and maintenance                                    |  |  |  |
| NGK FILTECH, LTD.              | 100                                                                         | Membrane separation systems                                           |  |  |  |
| ■ NGK ADREC CO., LTD.          | 97.9                                                                        | Refractories/kiln furniture                                           |  |  |  |
| NGK KILNTECH CORPORATION       | 100                                                                         | Thermal process engineering & products                                |  |  |  |
| HEISEI CERAMICS CO., LTD.      | 100                                                                         | Refractories/kiln furniture                                           |  |  |  |
| ■ NGK OKHOTSK, LTD.            | 100                                                                         | Jig for ceramics production                                           |  |  |  |
| NGK METEX CORPORATION          | 100                                                                         | Beryllium copper wrought products                                     |  |  |  |
| NGK FINE MOLDS, LTD.           | 100                                                                         | Molds                                                                 |  |  |  |
| ■ NGK CERAMIC DEVICE CO., LTD. | 100                                                                         | Ceramic electronic components                                         |  |  |  |
| SOSHIN ELECTRIC CO., LTD.      | 40.6                                                                        | Electronic components and devices                                     |  |  |  |
| NGK ELECTRONICS DEVICES, INC.  | 100                                                                         | Ceramic packages for semiconductors and ceramic electronic components |  |  |  |
| METAWATER CO., LTD.            | 28.9                                                                        | Environmental protection systems                                      |  |  |  |
| TAJIMI COUNTRY CLUB CO., LTD.  | 100                                                                         | Operation of a golf course                                            |  |  |  |
| Other Group Companies          |                                                                             |                                                                       |  |  |  |
| KANSAI ENERGYS CORPORATION     | ■ KYUSYU ENERGYS CORPORATION                                                | ■ HOKURIKU ENERGYS CORPORATION ■ TOKAI ENERGYS CORPORATION            |  |  |  |
| ENERGYS SANGYO CORPORATION     | ■ SOSHIN DEVICE CO., LTD.                                                   | ■ RISSHIN ELECTRONICS CO., LTD. ■ SOSHIN POWERTECH CO., LTD.          |  |  |  |
| NGK SPORTS PLANNING CO., LTD.  | NGK LIFE CO., LTD.                                                          | NGK YU-SERVICE CO., LTD. NGK TECHNICA, LTD.                           |  |  |  |
| NGK BUILDING SERVICE, LTD.     | NGK LOGISTICS, LTD.                                                         | NGK EDUCATION SERVICES, LTD.                                          |  |  |  |

# **Global Network**

■ Consolidated companies

■ Affiliated companies accounted for by the equity method



# **NORTH AMERICA**



LOCKE INSULATORS, INC.



NGK CERAMICS USA, INC.



FM INDUSTRIES, INC.



NGK-LOCKE POLYMER INSULATORS, INC.



NGK METALS CORPORATION



NGK CERAMICS MEXICO, S. DE R.L. DE C.V.

NGK-LOCKE, INC. NGK AUTOMOTIVE CERAMICS USA, INC. NGK ELECTRONICS USA, INC. NGK INSULATORS OF CANADA, LTD.

| NORTH AMERICA                             | Company's Direct and Indirect Ownership (%) | Principal Products and Services                                     |
|-------------------------------------------|---------------------------------------------|---------------------------------------------------------------------|
| ■ NGK NORTH AMERICA, INC.                 | 100                                         | Holding company                                                     |
| LOCKE INSULATORS, INC.                    | 100                                         | Electrical insulators                                               |
| ■ NGK-LOCKE, INC.                         | 100                                         | Electrical insulators                                               |
| ■ NGK-LOCKE POLYMER INSULATORS, INC.      | 100                                         | Electrical polymer insulators                                       |
| ■ NGK INSULATORS OF CANADA, LTD.          | 100                                         | Electrical insulators and ceramic products                          |
| ■ NGK CERAMICS USA, INC.                  | 100                                         | Automotive ceramics                                                 |
| ■ NGK AUTOMOTIVE CERAMICS USA, INC.       | 100                                         | Automotive ceramics                                                 |
| ■ NGK CERAMICS MEXICO, S. DE R.L. DE C.V. | 95                                          | Automotive ceramics                                                 |
| ■ NGK METALS CORPORATION                  | 100                                         | Beryllium copper products                                           |
| ■ NGK ELECTRONICS USA, INC.               | 100                                         | Ceramics for semiconductor manufacturing equipment                  |
| ■ FM INDUSTRIES, INC.                     | 100                                         | Modules for semiconductor production equipment                      |
| EUROPE AND AFRICA                         | Company's Direct and Indirect Ownership (%) | Principal Products and Services                                     |
| ■ NGK CERAMICS EUROPE S.A.                | 100                                         | Automotive ceramics                                                 |
| ■ NGK EUROPE GMBH                         | 100                                         | Ceramic products                                                    |
| ■ NGK CERAMICS POLSKA SP. Z O.O.          | 95                                          | Automotive ceramics                                                 |
| ■ NGK CERAMICS SOUTH AFRICA (PTY) LTD.    | 100                                         | Automotive ceramics                                                 |
| ■ NGK BERYLCO FRANCE                      | 100                                         | Beryllium copper products                                           |
| ■ NGK BERYLCO U.K. LTD.                   | 100                                         | Beryllium copper products                                           |
| ■ NGK DEUTSCHE BERYLCO GMBH               | 100                                         | Beryllium copper products                                           |
| ASIA PACIFIC                              | Company's Direct and Indirect Ownership (%) | Principal Products and Services                                     |
| ■ NGK INSULATORS TANGSHAN CO., LTD.       | 100                                         | Electrical insulators                                               |
| ■ NGK INSULATORS SUZHOU CO., LTD.         | 100                                         | Electrical insulators                                               |
| ■ NGK STANGER PTY. LTD.                   | 100                                         | Power distribution equipment                                        |
| ■ NGK INSULATORS (CHINA) INVESTMENT CO.   | , LTD. 100                                  | Electrical insulators and beryllium copper products                 |
| P.T. NGK CERAMICS INDONESIA               | 97.8                                        | Automotive ceramics                                                 |
| ■ SIAM NGK TECHNOCERA CO., LTD.           | 100                                         | Refractories/kiln furniture                                         |
| ■ NGK CERAMICS SUZHOU CO., LTD.           | 100                                         | Automotive ceramics                                                 |
| ■ NGK TECHNOCERA SUZHOU CO., LTD.         | 100                                         | Thermal process engineering & products, refractories/kiln furniture |

#### Other Group Companies

- ENERGY ELECTRIC (SHANGHAI) CORPORATION
- NGK MATERIAL USA, INC.
- NGK AUTOMOTIVE CERAMICS MEXICO, S. DE R.L. DE C.V.
- NGK ELECTRONICS DEVICES (M) SDN. BHD.
- NGK GLOBETRONICS TECHNOLOGY SDN. BHD.
- NGK ELECTRONICS DEVICES SUZHOU CO., LTD.
- SOSHIN ELECTRONICS OF AMERICA, INC
- SOSHIN ELECTRONICS (HK) LIMITED
- SOSHIN ELECTRONICS (SZ) LIMITED
- SOSHIN ELECTRONICS (M) SDN. BHD.

NGK AUTOMOTIVE CERAMICS KOREA CO., LTD.

NGK ITALY S.R.L.

TAIWAN SOSHIN ELECTRIC CO., LTD. SOSHIN ELECTRONICS EUROPE GMBH NGK ELECTRONICS DEVICES ASIA SDN. BHD.

# **EUROPE**



NGK CERAMICS EUROPE S.A.



NGK CERAMICS POLSKA SP. Z O.O.



NGK BERYLCO FRANCE

NGK BERYLCO U.K. LTD. NGK EUROPE GMBH NGK DEUTSCHE BERYLCO GMBH NGK ITALY S.R.L.

#### **AFRICA**



NGK CERAMICS SOUTH AFRICA (PTY) LTD.

#### **ASIA PACIFIC**



NGK INSULATORS TANGSHAN CO., LTD.



SIAM NGK TECHNOCERA CO., LTD.



PT. NGK CERAMICS INDONESIA



NGK CERAMICS SUZHOU CO., LTD.



NGK STANGER PTY. LTD.



NGK TECHNOCERA SUZHOU CO., LTD.

NGK INSULATORS (CHINA) INVESTMENT CO., LTD. NGK AUTOMOTIVE CERAMICS KOREA CO., LTD. NGK TECHNOLOGIES INDIA PVT. LTD.

