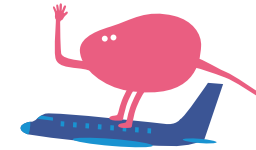


# Nabtesco Value Report 2017

Integrated Report  
FY Ended December 31, 2017



# 2017

## Nabtesco Value Report

Contents

### SECTION 01 About Nabtesco Group

- 03 The Nabtesco Way
- 05 Nabtesco Group's Main Products
- 07 Nabtesco's Growth History

### 09 Nabtesco Group's Materiality

### 11 Value Creation Process of Nabtesco Group

#### 13 Value Creation Process of the Nabtesco Group (Explanations)

The Nabtesco Group deems it important to share the whole picture of its value creation process with stakeholders. Accordingly, in this section, we provide explanations about the business model and other elements that comprise the core of the value creation process, hoping that these explanations will help readers understand how the Nabtesco Group is striving to fulfill its social responsibility and achieve sustainable growth.

#### 21 Financial/Non-Financial Highlights

### SECTION 02 Growth Strategies of the Nabtesco Group

### 23 Message from the CEO

### 27 CEO's Meeting

Nabtesco's CEO Katsuhiko Teramoto and Outside Director Yutaka Fujiwara had a dialogue meeting with two representatives of institutional investors.



### 33 Dialogue on Governance

Chairman Kazuaki Kotani talked with Outside Director Naoko Yamazaki about governance and the use of human resources, which provide the basis for sustainable corporate growth.



- 39 Road Map for Growth
- 57 Major Financial Indicators
- 63 Financial Information
- 69 Financial Management and Measures to Solve ESG Issues

# SECTION 03

## Measures to Solve ESG Issues

73 Nabtesco Group's Approach to ESG Issues

### Ensure management transparency

- 75 Strengthen Corporate Governance
- 77 Promote Risk Management and Compliance Behavior
- 78 Ensure Proactive Dialogue with Stakeholders
- 81 Corporate Governance Effort
- 83 Management Team

### Enhance customer satisfaction

- 89 Producing Innovations
- 91 Intellectual Property Activities to Support Innovation
- 92 Manufacturing Innovation to Win the Global Competition

### Ensure quality and safety

- 93 Management of Quality
- 94 Management of Occupational Safety

### Fair, Proper and Transparent Procurement Activities

- 96 Nabtesco Group's Procurement Activities

### Develop human capital and promote workplace diversity, Provide safe and comfortable workplaces

- 97 Work Style Reforms
- 98 Fostering Workplace Diversity
- 99 Human Rights Management
- 100 Human Capital Development
- 100 Increasing Employees' Awareness of The Nabtesco Way

### Local community development

- 101 Nabtesco Group's Community Investment

### Environment

- 103 Environmental Management

## Corporate Profile / Disclosure Policy

- 107 Corporate Profile
- 108 Disclosure Policy

### About the Integrated Report

Believing it important to establish trust with its stakeholders through dialogue for ensuring management transparency, the Nabtesco Group is focused on sharing an overview of its approach to value creation with its stakeholders.

The Group has published the Nabtesco Integrated Report, which covers both financial and non-financial information, since FY2014. We have worked to describe in this report the Nabtesco Group's value creation activities conducted based on The Nabtesco Way by presenting relevant information in a comprehensive and easy-to-understand manner.


In this FY2017 version, we present the entire picture of our value creation process and provide explanations about the external environment as well as about our business model, management strategy and performance, and long-term vision in Section 1. In Section 2, we introduce the frank opinions of the Nabtesco Group's management team about its strategies for sustainable growth by presenting a talk between the CEO and long-term investors and a dialogue between the Chairman of the Board and one of the outside directors. In Section 3, we describe the major measures taken by the Group for the solution of ESG issues and in line with its materiality (material CSR issues).

In preparing this report, the Integrated Reporting Framework, the Intangibles Reporting Framework and various other guidelines on sustainability were used as references to ensure objectivity and transparency. To reduce paper use and thus protect the environment, this report is published only in an electronic (PDF) format on Nabtesco's corporate website (<https://www.nabtesco.com/en/>).

### Questionnaire

Please kindly send us your opinions and comments about the integrated report.

**URL: <https://questant.jp/q/VUVSQ1YX>**



For further details of the Nabtesco Group's measures for the solution of ESG issues, please refer to the CSR section of Nabtesco Corporation's website:  
<https://nabtesco.disclosure.site/en>

Action Declaration

By implementing these promises, we will realize  
“All Stakeholders' Dreams.”

## The Nabtesco Way

---

Aiming to become an *Shinise* (honorable company) established in the 21 century while evolving together with society

Nabtesco has formulated The Nabtesco Way, which comprises Corporate Philosophy, Our Promises, Action Guidelines, and Action Declaration. We encourage each of our management and employees to comply with the Nabtesco Way to pursue the realization of “All Stakeholders' Dreams” as specified in our Action Declaration.

When all our employees share a commitment to The Nabtesco Way and individually act in line with it, we enhance our unity while simultaneously making the most out of our diversity. Nabtesco will fully utilize its unique motion control technology and supply highly reliable products and services. Thus, we pursue our mission to contribute to the creation of a safe and comfortable society that gives people a sense of security.

**CORPORATE  
PHILOSOPHY**

Reason for corporate  
existence and value

**OUR PROMISES**

What we value in implementing the  
Corporate Philosophy

**Action Guidelines**

Specific actions and attitudes to be  
taken to fulfill Our Promises

**The Nabtesco Group, with our unique motion control technology, will provide safety, comfort and a sense of security in daily lives as well as any form of transportation.**

- 1 Value close communications with our customers worldwide
- 2 Value each individual's spirit of challenge and innovation
- 3 Continue to expand our business and profit
- 4 Continue to reinforce our sense of ethics and highly transparent business activities
- 5 Value the environment and promote harmony with local communities and cultures

**[Action Guidelines for Top Management]**

Based on these guidelines, top executives will manage the Nabtesco Group by focusing on the four important points to ensure its sustainable growth as a global corporate group.

- Communicate the Present Situation and Future Vision of the Company (Organization) to Employees.
- Encourage Active Discussions and Align All Members to a Common Direction.
- Ensure Succession.
- Manage in a Manner that Increases the Nabtesco Brand and Corporate Value.

**[Action Guidelines for All Group Members]**

As a common set of principles applying to all employees in the performance of their duties and decision-making, these guidelines clearly indicate the appropriate directions of individual actions and decisions and clarify important corporate values and unique strengths.

**Background to the establishment of The Nabtesco Way**

The Nabtesco Group established Corporate Philosophy and Our Promises in 2005, soon after its founding, with a view to making our society safer, more secure and comfortable by manufacturing products embedded with technology to control all kinds of motion.

Subsequently, Nabtesco has developed its business globally in the motion control field and has expanded its business domains and regions as well as its corporate size. Then, the Company established Action Guidelines and Action Declaration in 2012 to

encourage all Group employees, both in Japan and abroad, to share Nabtesco's values and cultivate a sense of unity and solidarity as members of the Nabtesco Group.

Action Guidelines clarify the specific actions and attitudes to be taken by individual employees to fulfill Corporate Philosophy and Our Promises, while Action Declaration expresses the commitment of all employees to follow the Guidelines. We collectively refer to these in-house norms as "The Nabtesco Way."

**Activities to Increase Employees' Awareness of The Nabtesco Way P100**

Nabtesco is conducting various activities to inculcate in its employees an appreciation for The Nabtesco Way, including by promoting The Nabtesco Way Month and workshops on priority issues, to help each employee develop empathy for the principles and put them into action.



"The Nabtesco Way Card" all Group employees carry

## Taking on the challenge of solving various social issues through moving and stopping technologies

The Nabtesco Group is committed to solving various social challenges together with its customers by offering products and services that support safety, comfort and a sense of security in the areas of "transportation of people and goods," "manufacturing, urban development and renewable energy," "daily lives and welfare" and "production of daily commodities."

### Transportation of people and goods

- Improve the safety and comfort of railroad vehicles, aircraft and commercial vehicles
- Foster the use of clean energy and safe navigation for marine vessels



High voltage electric power distribution units



Flight control actuation systems



Wedge brake chambers for commercial vehicles



Air dryers for commercial vehicles



Main engine remote control systems



Electronically controlled high-speed hydraulic valves

### Safety, comfort and a sense of security in the area of transportation



Swing units for excavators



Control valves for mini excavators



Travel units for excavators

### Manufacturing, urban development and renewable energy

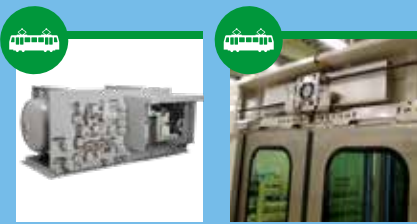
- Contribute to the establishment of industrial infrastructure in emerging economies
- Support automated, high-precision processing and conveyance at factories
- Promote labor- and energy-saving at manufacturing sites
- Spread the use of renewable energy



Precision reduction gears for industrial robots "RV series"



Compact Actuator "AF Series"



Brake operating units for railroad vehicles

Door operators for railroad vehicles



Platform screen doors

Automatic doors for buildings

Automatic doors for multipurpose toilets

## Daily lives and welfare

- Improve the safety comfort of public spaces
- Provide support for the elderly and people with disabilities
- Contribute to the creation of a barrier-free society



Rollator with a speed control system "CONPAL"

Electric wheelchair "Assist Wheel"

Intelligent prosthetic knee joints "ALLUX"

Safety, comfort and a sense of security in the areas of daily lives



Stereolithography systems (3D printer)



Automatic pre-pouch filler/sealers

## Production of daily commodities

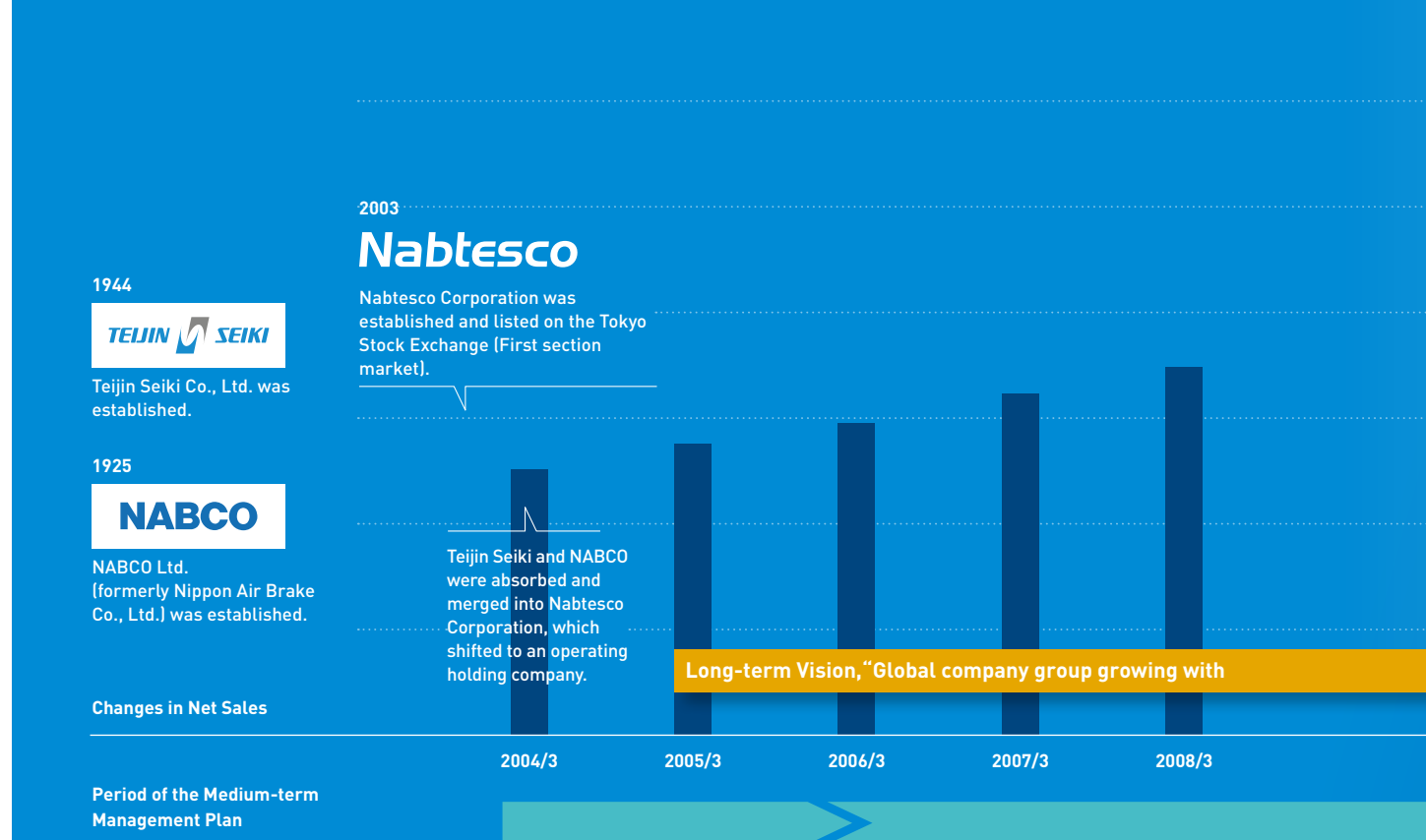
- Ensure the safety of food and daily consumables
- Reduce the use of packaging materials for food and daily consumables
- Contribute to product research and development



Drive units for wind turbine generators

# Accelerating growth in the global market by building upon the business foundations laid by our two predecessors

Nabtesco Corporation was formed in 2003 through the merger of Teijin Seiki Co., Ltd. and NABCO Ltd. Since then, the company has steadily consolidated its management bases and established production facilities outside Japan, while enhancing its unique motion control technology based on the technologies developed by the two companies. Each time when market conditions drastically changed, the company promptly and decisively reorganized its business portfolio to ensure disciplined portfolio management. Since 2011, Nabtesco has accelerated global business expansion through M&As in and outside Japan. In 2017, it launched the new Medium-term Management Plan. Nabtesco will work toward accelerating business growth in global markets.



### Reinforcement of the management base

- Introduced the in-house company system and the corporate officer system
- Established the Nabtesco Group Code of Corporate Ethics and the Nabtesco Group Code of Conduct (consolidated into the Nabtesco Group Code of Ethics)
- Formulated the Corporate Philosophy and the Long-term Vision

### Technology base: Unique motion control technology

#### Technologies developed by the two companies

- | Teijin Seiki          | NABCO                          |
|-----------------------|--------------------------------|
| ● Cutting technology  | ● Fluid control technology     |
| ● Assembly technology | ● Pneumatic control technology |



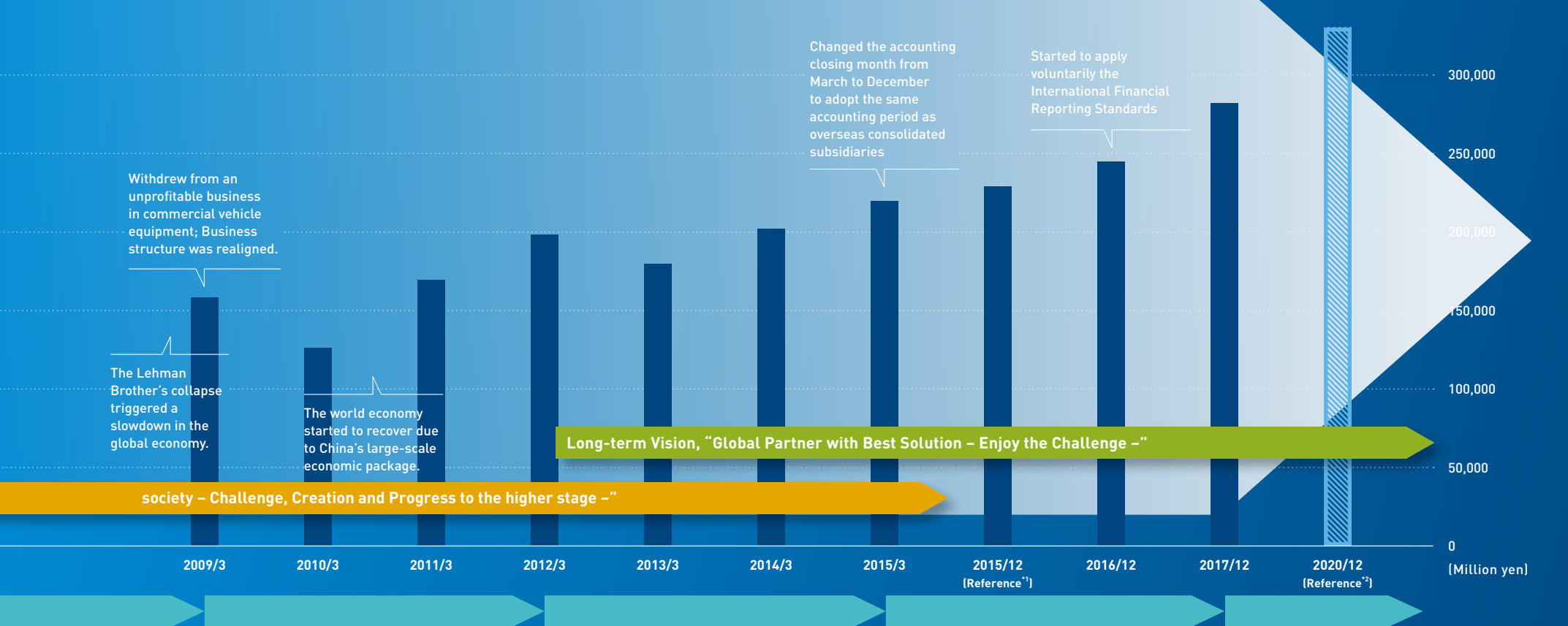
#### Technologies developed/enhanced after the integration

- Leading-edge element technologies: Surface treatment and heat treatment technologies
- Advanced development methods: CAE analysis technique, additive manufacturing (AM) technology, and model base development
- Innovative production technologies: Advanced automation and smart production management

### Current portfolio (main businesses)

- | Component Solutions (CMP)  | Transport Solutions (TRS)   | Accessibility Solutions (ACB)                                       | Manufacturing Solutions (MFR)  |
|--|---|---|--|
| <ul style="list-style-type: none"> <li>● Precision reduction gears</li> <li>● Hydraulic equipment</li> <li>● New energy equipment</li> </ul> | <ul style="list-style-type: none"> <li>● Railroad vehicle equipment</li> <li>● Aircraft equipment</li> <li>● Commercial vehicle equipment</li> <li>● Marine vessel equipment</li> </ul> | <ul style="list-style-type: none"> <li>● Automatic doors</li> </ul> | <ul style="list-style-type: none"> <li>● Packaging machines</li> </ul> |





Long-term Vision, "Global Partner with Best Solution - Enjoy the Challenge -"

society - Challenge, Creation and Progress to the higher stage -"

- Established the Quality & PL Committee
- Formulated The Nabtesco Way
- Opened an R&D base in Kyoto
- Announced participation in and signed the UN Global Compact
- Formulated the Nabtesco Group CSR-Oriented Procurement Policy
- Compliance Committee, CSR Committee and Risk Management Committee were established.
- CSR Basic Policy was formulated.
- Nabtesco Group Code of Ethics was established.

### Topics on acceleration of growth

- Establishment of the Nabtesco R&D Center
- Launch of the Business Transformation Division
- Formulation of the Nabtesco Group Human Rights Policy
- Formulation of the Nabtesco Group Community Investment Policy

\*1: Due to the change in the accounting closing date, the figures have been estimated for the 12-month period to make a comparison  
 \*2: Reference values for the final year of the Medium-term Management Plan

### Disciplined portfolio management for growth

#### Businesses inherited from the integration

- |  |  |
|--|--|
| <b>Teijin Seiki</b> <ul style="list-style-type: none"> <li>● Precision reduction gear business</li> <li>● Aircraft equipment business</li> <li>● Hydraulic equipment business</li> <li>● Packaging machine business</li> </ul> | <b>NABCO</b> <ul style="list-style-type: none"> <li>● Railroad vehicle equipment business</li> <li>● Marine vessel equipment business</li> <li>● Commercial vehicle equipment business</li> <li>● Hydraulic equipment business</li> <li>● Automatic door business</li> </ul> |
|--|--|

#### Restructured businesses

- |   |   |
|---|---|
| <b>Withdrawal</b> <ul style="list-style-type: none"> <li>● IT related product business</li> <li>● Automobile and motorcycle parts business; maintenance related business for textile machinery, etc.</li> </ul> | <b>Restructuring</b> <ul style="list-style-type: none"> <li>● Divestiture of commercial vehicle equipment business (Nabtesco Automotive Co., Ltd. established)</li> <li>● Restructuring of production bases in the hydraulic equipment business in China</li> <li>● New Energy Business Development Division was abolished</li> </ul> |
|---|---|

#### Accelerating growth through M&A

- |   |  |   |  |  |
|---|--|---|--|--|
| <b>Automatic doors</b> <ul style="list-style-type: none"> <li>● Gilgen Door Systems AG (Switzerland)</li> <li>● NABCO DOOR Ltd.</li> <li>● NABCO SYSTEMS Co., Ltd.</li> </ul> | <b>Railroad vehicle equipment</b> <ul style="list-style-type: none"> <li>● OCLAP S.R.L. (Italy)</li> </ul> | <b>Hydraulic equipment</b> <ul style="list-style-type: none"> <li>● Hyst Corporation</li> </ul> | <b>Commercial vehicle equipment</b> <ul style="list-style-type: none"> <li>● ITG Serienfertigung Fahrzeugteile GmbH and ITG Kompressoren GmbH (Germany)</li> </ul> | <b>(Head office) Technology and R&amp;D Division</b> <ul style="list-style-type: none"> <li>● Ovalo GmbH, adocos GmbH (Germany)</li> </ul> |
|---|--|---|--|--|

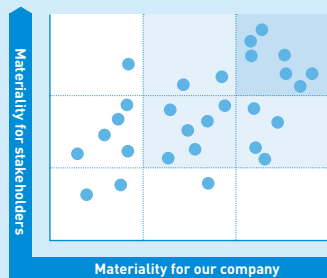
# We strive to ensure management transparency and to provide safety, comfort and a sense of security.

We at the Nabtesco Group are committed to fulfilling our corporate social responsibility through our CSR management. To this end, we will seriously take on the challenge of pursuing economic rationality while also addressing ESG (environmental, social and governance) issues, based on our belief that this kind of business management will give us a competitive edge that will underpin our sustainable corporate growth.

In 2016, we launched the CSR Committee as an organization that supervises all our CSR

activities and reports directly to the CEO. Subsequently, we reexamined the material CSR issues (materiality) of the Nabtesco Group and formulated the CSR Basic Policy. The level and scope of stakeholders' expectations for the fulfillment of corporate social responsibility by the Nabtesco Group have been rising and expanding. In response, we will continue to examine the materiality on a regular basis to earn even more trust from our stakeholders.

## Process of Materiality reexamination



## SDGs:

A document titled Transforming our world: the 2030 Agenda for Sustainable Development was adopted at the UN Sustainable Development Summit in 2015. The agenda sets out a declaration and goals as an action plan for the prosperity of humankind and the earth. Known as Sustainable Development Goals (SDGs), the goals consist of 17 goals and 169 associated targets and position the action plan to be achieved by 2030 by all countries, both developed and developing.



## Nabtesco Group's CSR Basic Policy

By practicing The Nabtesco Way, the Nabtesco Group strives to ensure management transparency, provide safety, comfort and a sense of security, and fulfill its corporate social responsibilities, thereby contributing to solving environmental and social issues and seeking to enhance corporate value on a sustainable basis.

The CSR Basic Policy clearly states that the Nabtesco Group will fulfill its corporate social responsibilities, thereby meeting the expectations and requests of its stakeholders. The policy to "Ensure management transparency" and "Provide safety, comfort and a sense of security" upheld under the abovementioned CSR Basic Policy represents the Group's

material issues. By incorporating the concept of materiality into the CSR Basic Policy, we are strategically tackling CSR issues that are important to the Group as well as to its stakeholders.

### Materiality (Material CSR Issues)

| General Category                                | ESG Category  | Materiality (Material CSR Issues)  | Major SDGs of Relevance   |
|---|---|--|---|
| Ensure management transparency                  | Governance (G)  | Strengthen corporate governance  |     |
|   |   | Promote risk management and compliance behavior  |   |
|   |   | Ensure proactive dialogue with stakeholders  |   |
| Provide safety, comfort and a sense of security | Society (S)   | Enhance customer satisfaction, ensure quality and safety   |   <br> <br>  |
|   |   | Develop human capital and promote workplace diversity<br>Provide safe and comfortable workplaces |   |
|   |   | Respect human rights<br>Prevent corruption   |   |
|   |   | Fair, proper and transparent procurement activities  |   |
|   |   | Local community development  |   |
|   |   | Environment (E)  |   |
|   | Environmentally friendly manufacturing                          |  |   |
|   | Reduction of environmental impact through products and services |  |   |
|   | Recycling, reuse and remanufacture of products                  |  |   |

Through the materiality reexamination process, we have classified Nabtesco's material CSR issues in relation to the 17 SDGs as per the table shown on the left. In 2018, we added Goal 4 to "Major SDGs of Relevance" in line with the newly formulated Nabtesco Group Community Investment Policy.

Impacts of each issue on our corporate activities are described in "Nabtesco Group's Approach to CSR." While giving due consideration to potential impacts of each issue, we will invest resources efficiently and effectively to address wide-ranging ESG issues and will systematically promote specific activities with a view to contributing to achieving the SDGs.

**Nabtesco Group's Approach to ESG Issues** [P73](#)

**MISSION** We will realize “all stakeholders’ dreams”

**External Environment**

**Growth opportunities for each of the businesses for which we have large shares of niche markets**

**Market trends**

- Domestic and developed markets: Win orders steadily in the stable, mature markets
- Emerging markets: Increase orders in the volatile growth markets

**Technological trends**

- Engineering innovation in the manufacturing industry with the arrival of an IoT society and the evolution of AI
- Increased needs for mechatronics technologies and systematization of machinery-related components

**Opportunities to contribute to the solution of social challenges through businesses**

- Demand for automation and energy conservation at manufacturing sites in line with the tight labor market and increase in labor costs
- Demand for products that can mitigate environmental impacts
- Needs for the enhancement of safety and comfort of vehicles
- Needs for increased safety and comfort in public spaces
- Needs for safe transportation means for the elderly, people with disabilities, and their caregivers
- Needs for the enhancement of safety for food and daily commodities
- Social demand for realizing sound working environments

**Increased request for management transparency**

- Increased demand for the development of a governance system for the continuous enhancement of corporate value
- Expansion of the scope of risk management and compliance as a result of globalization

**Major risks**

- Risks related to the economy and market trends
- Risks related to overseas business expansion
- Risks related to competition
- Risks related to intellectual property
- Risks related to large-scale disasters
- Risks related to the environment

**Growth opportunities provided by global social challenge**

- Contribution to the achievement of the Sustainable Development Goals (SDGs)



**Business Model**

**Managerial Resources That Support Value Creation**



**Relationship capital**

- Major customers
  - Industrial robot manufacturers and construction machinery manufacturers
  - Aircraft manufacturers and companies engaged in railroad, marine and air transportation businesses
  - Major construction companies and others engaged in the construction business
  - Food manufacturers
- Characteristics of our shareholders
  - High rate of non-Japanese shareholders
  - Large ownership by growth investors
- Relationships with a range of suppliers
- Favorable relationships with local communities

**Financial capital**

- Capability to generate stable cash flow

**Human capital**

- Management team members who demonstrate diverse expertise to increase corporate value
- Diverse workforce made up of people who value quality as well as collaborative creation, competition and sharing

**Technology and manufacturing capital**

- Motion control technology that meets development requests from customers
- Local production and local consumption system to fulfill responsibility to realize stable supply
- System to create and enhance intellectual property

**Organizational capital**

- Speedy business execution based on the in-house company system
- A range of committees that provide a system to implement measures for ESG issues across the Group
- Corporate governance system with a focus on the sustainable increase of corporate value

**Activities for Sustainable Growth**



**Major businesses**

| Business segment                     | Characteristics  | Main products and services  | Relationship with society                              |
|--------------------------------------|--|---|--|
| <b>Component Solutions (CMP)</b>     | Significant impact of changes in production/sales volume on profitability<br><br>After-sale services (MRO) that mitigate impacts from changes in OEM production volume | Precision reduction gears<br>Hydraulic equipment<br>New energy equipment                                    | Manufacturing<br>Urban development<br>Renewable energy |
| <b>Transport Solutions (TRS)</b>     |  | Aircraft equipment<br>Railroad vehicle equipment<br>Commercial vehicle equipment<br>Marine vessel equipment | Transportation of people and goods                     |
| <b>Accessibility Solutions (ACB)</b> |  | Automatic doors<br>Platform doors<br>Welfare equipment  | Daily lives and welfare                                |
| <b>Manufacturing Solutions (MFR)</b> |  | Packaging machines  | Production of daily commodities                        |

**Measures for Operational Excellence**

**Financial management**

- Higher ROE and making growth investment compatible with the return of profit to shareholders

**Measures to solve ESG issues**

- Ensuring “management transparency” and providing “safety, comfort and a sense of security”



MRO: Maintenance, repair and overhaul

## Management Strategy and Performance

### Medium-Term Management Plan (FY2017/12 – 2020/12)

#### Market Creation

#### Obtain new markets

by accelerating overseas business and developing new domains.

#### Technology Innovation

#### Create new solutions

through transition from components to systems and services.

#### Operational Excellence

#### Raise profitability and reinforce operational basis

Revitalize the organization and promote effective use of human resources

### Our commitments

ROE: 15%

Consolidated payout ratio:  
35% or over

Focus on solving ESG issues














Long-Term Vision  
Status in  
FY2020

Global Partner with  
Best Solutions  
“Enjoy the Challenge”

Enjoy!

OUTCOME

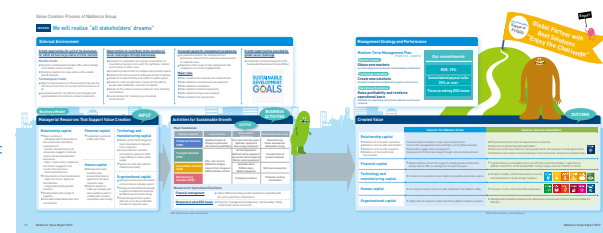
## Created Value

|   | Value for the Nabtesco Group  | Value for external stakeholders  |
|---|---|--|
| <b>Relationship capital</b> <ul style="list-style-type: none"> <li>Relations of trust with customers</li> <li>Relations of trust with shareholders</li> <li>Relations of trust with suppliers</li> <li>Relations of trust with local communities</li> </ul> | <ul style="list-style-type: none"> <li>Customer bases founded on top-class market shares</li> <li>Trust in the management team and high-scoring ESG evaluation</li> <li>Responsible supply chain management</li> <li>Improvement of the brand image through community investment</li> </ul> | <ul style="list-style-type: none"> <li>QCD* performance that meets the requirements of customers</li> <li>Enhancement of partnership with stakeholders</li> <li>Enhancement of the value chain for mutual growth and for the expansion of trade opportunities</li> <li>Contribution to the solution of social challenges in the environment, education and welfare fields</li> </ul>   |
| <b>Financial capital</b>  | <ul style="list-style-type: none"> <li>Robust balance sheet that supports steady growth investments</li> <li>Equity ratio of 58% on average for the past five years</li> </ul>  | <ul style="list-style-type: none"> <li>Capital efficiency and stable return of profit that meet shareholders' expectations</li> <li>ROE for FY2017/12: 15.9% (Actual ROE: 14.3%) Payout ratio for FY2017/12: 35.3%</li> </ul>  |
| <b>Technology and manufacturing capital</b>   | <ul style="list-style-type: none"> <li>Creation of new products and a highly competitive production system</li> </ul>   | <ul style="list-style-type: none"> <li>Provision of safety, comfort and a sense of security and contribution to climate change mitigation</li> </ul>       |
| <b>Human capital</b>  | <ul style="list-style-type: none"> <li>Securing of human resources who implement The Nabtesco Way</li> </ul>  | <ul style="list-style-type: none"> <li>Provision of safe and comfortable workplaces</li> </ul>         |
| <b>Organizational capital</b>   | <ul style="list-style-type: none"> <li>Highly ethical corporate culture based on a global compliance system</li> </ul>  | <ul style="list-style-type: none"> <li>Management transparency based on the autonomous improvement of its functions by the Board of Directors</li> </ul>   |

QCD stands for quality, cost and delivery.

## Value Creation Process of the Nabtesco Group (Explanation)

The Nabtesco Group is focused on sharing the overall picture of its value creation process with stakeholders. In order to ensure our management transparency, we need to help stakeholders understand how we are striving to fulfill our corporate social responsibility and achieve sustainable growth. In this section, we will make detailed explanations about the tables and figures shown on pages 11 and 12.



### MISSION

## We will realize “all stakeholders’ dreams.”

The Nabtesco Group has formulated The Nabtesco Way, which comprises the Corporate Philosophy, Our Promises, Action Guidelines, and Action Declaration. We encourage each of our management team members and employees to comply with The Nabtesco Way and turn “all stakeholders’ dreams” into reality, as stated in our Action Declaration. We will work to meet our stakeholders’ expectations (“dreams”) in a sincere manner on a long-term basis, thereby providing them with greater value while achieving sustainable and profitable growth as a company.

## External Environment

The Nabtesco Group manufactures, sells and provides after-sale services for machinery-related components in the area of B-to-B business. In this business area, we absolutely must make appropriate responses to changes in market trends, including trends in the market of final products, as well as to related risks. We also think it important to contribute to the solution of domestic and global social challenges through our businesses, believing that these efforts will in turn help us achieve growth in the businesses.

### ● Growth opportunities for each of the businesses for which we have large shares of niche markets

Sales outside Japan account for about 50% the Nabtesco Group’s total sales. In addition, our domestic sales include sales of components used in products to be exported from Japan. In the niche markets in which we command large market shares, demand for our products will steadily expand, mainly in Japan and other developed countries, which have stable and mature markets. Moreover, we can increase our growth opportunities in these niche markets by winning more orders in the rapidly and widely changing emerging markets.

The advent of an IoT society and progress of AI are fueling engineering innovation, which has increased the needs for mechatronics technologies and systematization of machinery-related components. By meeting these technological needs, the Nabtesco Group can add more value to its products.

### ● Opportunities to contribute to the solution of social issues through businesses

The Nabtesco Group conducts business in a range of domains, including “Manufacturing/Urban development/Renewable energy,” “Transportation of people and goods,” “Daily lives/Welfare,” and “Production of daily commodities.” We supply machinery-related compo-

nents and systems to manufacturers of completed products and provide these corporate customers with maintenance, repair and overhaul (MRO) services. Through these business activities, we will contribute to the solution of social challenges, focusing mainly on those listed below.

### ■ Opportunities to contribute to the solution of social challenges through businesses

|  |  |
|--|--|
| Manufacturing/Urban development/Renewable energy | <ul style="list-style-type: none"> <li>- Demand for automation and energy conservation at manufacturing sites in line with the aging of society, decreasing birth rate, and shrinking labor force</li> <li>- Demand for wind power generation devices for the effective use of renewable energy</li> <li>- Needs for products that can mitigate environmental impacts</li> </ul> |
| Transportation of people and goods               | <ul style="list-style-type: none"> <li>- Needs for the enhancement of safety and comfort of vehicles</li> </ul>  |
| Daily lives/Welfare                              | <ul style="list-style-type: none"> <li>- Needs for increased safety and comfort in public spaces</li> <li>- Needs for safe transportation means for the elderly, people with disabilities, and their caregivers</li> </ul>   |
| Production of daily commodities                  | <ul style="list-style-type: none"> <li>- Needs for the enhancement of safety for food and daily commodities</li> <li>- Needs for resource-saving packaging of food and daily commodities</li> </ul>  |
| Business activities in general                   | <ul style="list-style-type: none"> <li>- Social demand for realizing sound working environments</li> </ul>   |

### ● Increased requests for management transparency

With the expansion of investments made from Environmental, Social and Governance (ESG) viewpoints, companies are increasingly required to fulfill their accountability for the sustainable improvement of their corporate value. The globalization of business has also expanded the scopes of risk management and compliance to be ensured by companies.

In order to ensure the transparency of its management, the Nabtesco Group deems it essential to help stakeholders understand how the Group is working for sustainable growth.

## Managerial Resources That Support Value Creation

The managerial resources that support the Nabtesco Group's business operations include relationship capital, financial capital, technology and manufacturing capital, human capital, and organizational capital. The most important capital among these is relationship capital, which is based on relations of trust with customers, shareholders, investors and other stakeholders. Relationship capital and the four other types of capital supplement each other. By using such capital, we create value through our business activities and based on our efforts for financial management and the solution of ESG issues.

### Relationship capital

#### Relationship with customers

The Nabtesco Group has customers representing a broad range of industries, including those engaged in manufacturing and infrastructure building. Among them are excellent corporate customers that are operating on a global scale and fulfilling their social responsibilities to a high standard. We have been meeting the high expectations of these customers, thereby continuing to win their trust as the basis for our business operations. Our excellent customer base was, is and will continue to be a sustainable source of our profits.

#### Major customers by segment

|                         |   |
|-------------------------|---|
| Component Solutions     | Industrial robot manufacturers, FA machine manufacturers, construction machinery manufacturers, etc.  |
| Transport Solutions     | Aircraft manufacturers, companies engaged in railroad, marine and air transportation businesses, etc. |
| Accessibility Solutions | Major construction companies, others engaged in the construction business, etc.                       |
| Manufacturing Solutions | Food manufacturers, etc.  |

#### Relationship with shareholders and investors

The Nabtesco Group has been focusing on capital cost for disciplined management, with a view to meeting the expectations of shareholders and investors on a long-term basis. Non-Japanese shareholders account for more than 50% of Nabtesco's shareholders (51.8% as of the end of December 2017). Moreover, the Group gets a high rating for its growth potential, and the percentage of our shares owned by institutional growth investors\*, including those both within and outside Japan, is uniquely high. We proactively engage in dialogues with these investors for more sophisticated management of the company.

\* Growth investors: Investors who make investments with a focus on the growth potential of companies

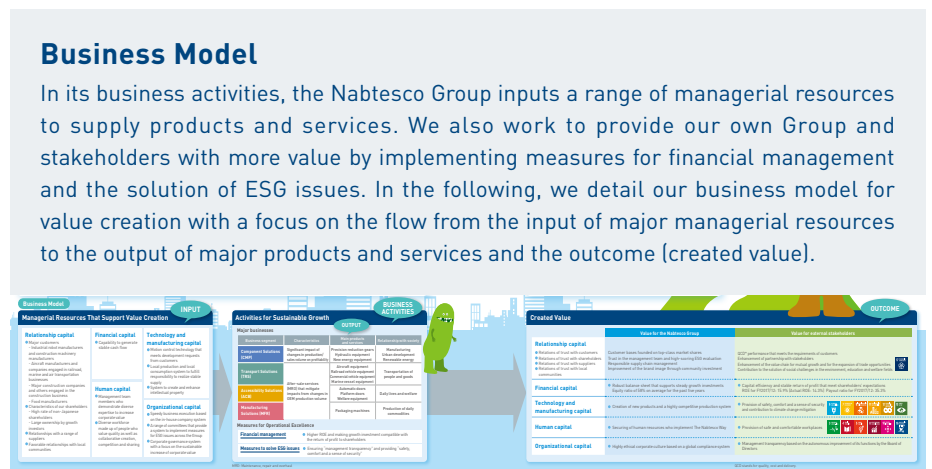
#### Major risks

The Risk Management Committee, which manages risks on a company-wide basis, identifies the serious risks for the entire company based on the risk assessment results and deliberates on countermeasures. The Committee worked mainly on identifying the following risks in FY2017.

1. Risks related to the economy and market trends
2. Risks related to overseas business development
3. Risks related to large-scale disasters
4. Risks related to changes in the foreign exchange market
5. Risks related to procurement
6. Risks related to product quality
7. Risks related to competition
8. Risks related to information security
9. Risks related to intellectual property
10. Risks related to laws and regulations
11. Risks related to the environment
12. Risks related to M&A and others
13. Risks related to the impairment of fixed assets

#### Growth opportunities provided by global social challenges

As a precondition to achieve sustainable growth as a global corporate group, the Nabtesco Group must contribute to the achievement of the United Nations' Sustainable Development Goals (SDGs) as part of its corporate social responsibility. Based on this recognition, we will contribute in particular to the attainment of the SDGs that are more strongly related to our measures for our material CSR issues (materiality).



## Value Creation Process of the Nabtesco Group (Explanations)

### ● Relationship with suppliers

A total of around 1,000 companies, including both large and small, supply their products (mainly metal, electronic and electric components) or offer machine processing and component assembly services to the Nabtesco Group. The Group's cost structure and QCD performance depends to a considerable degree on its relationship with these suppliers. For its medium- to long-term success, it is essential that the Group have a sustainable supply chain, for which we are working closely with our suppliers based on fair and proper trade practices founded on an appropriate cost structure.

### ● Relationship with local communities

The Nabtesco Group has a global production and sales network comprising 15 subsidiaries in Japan and 44 outside the country. We attribute importance to good relationships with local communities in the regions where we operate, for which we foster exchange and cooperation with the communities through local activities and activities in areas of society deeply related to our businesses. Many of our employees live near the plants and sales bases where they work, and improving our brand image in the surrounding communities helps increase the satisfaction of these employees. It might also be expected to help us recruit excellent local talent in the future. We work to contribute to the solution of local issues across the globe as the basis for increasing our corporate value on a long-term basis.

### Financial capital

The Nabtesco Group has continued to post operating cash flow that on average exceeds the roughly 20-billion-yen mark for the last five years. This stable cash flow provides us with the financial resources to make growth investments and return profit to stakeholders.

### Technology and manufacturing capital

In each of the businesses for which it boasts a large market share, the Nabtesco Group has a proprietary system for developing products and services in a way that is integrated with the product development of its customers. The core technology that allows us to do this is our unique motion control technology. By continuing to meet the demanding requests of customers, we have built up our basic technologies, including cutting technology, assembly technology, and fluid control technology. In addition, we have an enviable collection of advanced element technologies, such as those for surface treatment, heat treatment, CAE analysis, and additive manufacturing. All these technologies provide the basis for our motion control technology.

For production, we secure sufficient production capacity to meet demand that will expand on a medium- to long-term basis in the businesses for which we take the top spot in the market, including the business of precision reduction gears to be used in medium- to

large-sized industrial robots. We have local production and local consumption systems for these businesses to fulfill our supplier responsibilities, and these systems make it difficult for new companies to enter the market.

Moreover, the Nabtesco Group identifies the core values that give it its competitive edge ("core competences"), such as the technologies and ideas incorporated into its products as well as its design/manufacturing know-how. We classify such competences into those to be protected as confidential information and those to be protected by patents and others, and have established a system for the global protection of these competences. We are establishing core competences in terms of both technologies and production capabilities, and implementing measures to maintain and enhance them so that we can continue to be a competitive player on a long-term basis.

### Human capital

#### ● Management team members who demonstrate diverse expertise to increase corporate value

In the Action Guidelines for Top Management, which is included in The Nabtesco Way, it is clearly stated that top executives shall manage the Nabtesco Group in a manner that increases the corporate value. All members of the management team are strongly committed to leading the Group's activities to increase the Group's corporate value. Also, all members of the Board of Directors, including the three independent outside directors, have general knowledge about business/risk management, including financial, legal and compliance-related knowledge as well as expertise regarding technologies and business operations. These professionals are using their diverse knowledge and expertise for corporate management and global business promotion and are supervising the management of the Group for the sustainable increase of its corporate value.

#### ● Diverse workforce made up of people who value quality as well as collaborative creation, competition and sharing

The Nabtesco Group has a unique system to educate employees on high-quality manufacturing. The Group develops workers who can manufacture high-quality products based on systematic and regular education on quality, which also provides the basis for the Group to create value for customers.

As of the end of December 2017, Nabtesco has 7,591 employees on a consolidated basis and 2,256 employees on a non-consolidated basis. In accordance with the expansion of its businesses, the number of employees has been on the rise. For Nabtesco's employees on a non-consolidated basis, employees of the former Teijin Seiki, those of the former NABCO, and new graduates and mid-career hires employed by Nabtesco (founded by the merger of the aforementioned two) each account for about one-third of the total number. With diverse backgrounds, our employees are committed to collaborative creation, competition and sharing as a unique feature of the Nabtesco Group.



## Organizational capital

The Nabtesco Group adopts the in-house company system and the executive officer system. Under these systems, each business department pursues profits by making decisions independently and has a prompt business execution system suitable for its business environment.

For the management of the entire Group, the CEO makes business decisions through the Management Committee, while the Board of Directors formulates the Group's basic policies and strategies, decides on important operations, and supervises the execution of business.

In addition, we have the Compliance Committee, CSR Committee, Group Quality & PL Committee, Group ESH (ESH stands for "environment, safety and health") Committee, and Risk Management Committee to address ESG issues across the Group under the leadership of the directors and executive officers.

The Nabtesco Group thus has a highly transparent corporate governance system for prompt and flexible execution of business and for the sustainable increase of its corporate value.

### BUSINESS ACTIVITIES

## Activities for Sustainable Growth

In a wide range of B-to-B business, the Nabtesco Group supplies products and services to customers who are providers of completed products. Our products and services are connected with society by being used in or for our customers' products, which are then used by their own customers in society.

At the same time, the Nabtesco Group is working to provide itself and its stakeholders with more value through financial management and the implementation of a range of measures to help solve ESG issues.

### OUTPUT

## Major businesses, products and services

In the area of B-to-B business, the Nabtesco Group supplies products and services that support people's daily lives and social infrastructure to customers. We believe that we can enhance relations of trust with customers and other stakeholders by making contributions to the solution of social challenges through our business operations. The following outlines our business segments and shows how they are related to society.

In the Component Solutions Segment, which comprises the precision reduction gear business and the hydraulic equipment business, we focus on OEM production. These businesses are related to society mainly in the domain of "Manufacturing/Urban development/Renewable energy." Compared with other businesses, the profitability of these two

businesses can easily be influenced by production- and sales-related changes, while great synergy effects can be generated in the segment through the joint procurement of materials and flexible use of the core production staff.

The Transport Solutions Segment, which is composed of the railroad vehicle equipment business, aircraft equipment business, commercial vehicle equipment business, and marine vessel equipment business, is related to society in the domain of "Transportation of people and goods." We provide the maintenance, repair and overhaul (MRO) after-sale services in all of the businesses and can share MRO bases and know-how to generate synergy effects between the businesses.

The Accessibility Solutions Segment, in which we conduct the automatic door business and the welfare equipment business, is related to society in the domain of "Daily lives/Welfare." In the automatic door business, we have adopted the following business model: expand the sales and service network through M&A and enhance the value chain (manufacture, sales, installation, maintenance and after-sale service) to integrate the production and marketing processes to make more profit.

In the Manufacturing Solutions Segment, we mainly operate the packaging machine business and are connected with society in the domain of "Production of daily commodities."

### ■ (Reference) Reclassification of the business segments

The Nabtesco Group reclassified its business segments in the fiscal year ended December 31, 2017. We have since been more proactively working to generate synergies between the businesses.

| Former segments                  |                                     | New segments                            |                                     |
|----------------------------------|-------------------------------------|---|-------------------------------------|
| Segment                          | Major business                      | Segment                                 | Major business                      |
| Precision equipment              | Precision reduction gears           | Component Solutions                     | Precision reduction gears           |
|                                  | New energy equipment                |   | Hydraulic equipment                 |
| Transport equipment              | Railroad vehicle equipment          |   | Transport Solutions                 |
|                                  | Commercial vehicle equipment        | Railroad vehicle equipment              |                                     |
|                                  | Marine vessel equipment             | Aircraft equipment                      |                                     |
| Aircraft and hydraulic equipment | Aircraft equipment                  | Commercial vehicle equipment            |                                     |
|                                  | Hydraulic equipment                 | Marine vessel equipment                 |                                     |
| Industrial equipment             | Automatic doors (welfare equipment) | Accessibility Solutions                 | Automatic doors (Welfare equipment) |
|                                  | Packaging machines                  | Manufacturing Solutions (Other segment) | Packaging machines                  |

## Value Creation Process of the Nabtesco Group (Explanations)

### Measures for Operational Excellence

The Nabtesco Group is working to increase its profitability and efficiency and gain a sharper competitive edge for its businesses by implementing financial strategies as well as by reforming its manufacturing sites and revitalizing its organizations.

At the same time, we are promoting systematic measures for ESG issues while giving due consideration to their economic rationality, thereby making our value creation sustainable and meeting the increasingly demanding expectations of our stakeholders. We are thereby enhancing the foundation of our operations to achieve Operational Excellence.

#### Financial management

For financial management, we are improving our capital efficiency to achieve "ROE: 15%." We are also working to have stable cash flow to make proactive growth investments and return profit to shareholders in a steady and flexible manner.

#### Measures to solve ESG issues

The Nabtesco Group deems it one of its material CSR issues to ensure management transparency and provide safety, comfort and a sense of security. We will contribute to the attainment of the SDGs by working on a range of ESG themes.

### Created Value

#### OUTCOME

By inputting various resources and conducting activities for sustainable growth, we will continuously create value for ourselves and for external stakeholders.

### Relationship capital

| Value for the Nabtesco Group  | Value for external stakeholders  |
|---|--|
| <p><b>Relations of trust with customers</b></p> <ul style="list-style-type: none"> <li>● <b>Customer bases founded on top-class market shares</b></li> </ul> <p>The large market shares we command in each business are proof of the trust our customers have in the Nabtesco Group and provide the basis for us to offer more value to society.</p> <p>The Nabtesco Group boasts top-class shares and adequate profitability in both</p> | <ul style="list-style-type: none"> <li>● <b>QCD performance that meets the requirements of customers</b></li> </ul> <p>We can create value for customers by continuing to meet their expectations and trust. We are contributing to increasing our customers' own quality, cost and delivery (QCD) performance by providing them with high value-added products and services that meet their QCD requirements.</p> |

| Value for the Nabtesco Group   | Value for external stakeholders   |
|--|---|
| <p>domestic and overseas product markets. We will make use of the ability to collect information, which we have gained through holding these leading market positions, to identify more social needs and contribute to the solution of social issues through our business operations.</p>  |   |
| <p><b>Relations of trust with shareholders</b></p> <ul style="list-style-type: none"> <li>● <b>Trust in the management team and high-scoring ESG evaluation</b></li> </ul> <p>We regard the affirmative vote rate of selected directors as one of the indicators of trust in our top management team. Over the past five years, the rate has been 98% or higher, exceeding the average rate among listed companies in Japan, and thus proving strong trust in our management team.</p> <p>The Nabtesco Group is included in the major ESG stock indexes both in Japan and abroad and is highly rated by ESG evaluating organizations. We will continue to foster dialogue with shareholders and investors who make long-term investments and with investors who attribute importance to ESG issues, thereby deepening our understanding of their ideas to create value in a more sophisticated manner.</p> | <ul style="list-style-type: none"> <li>● <b>Enhancement of partnership with stakeholders</b></li> </ul> <p>Ensuring management transparency and building a sustainable value creation process helps increase the opportunities for shareholders and investors to invest more in our shares. Proactively communicating with these stakeholders also fosters our partnerships with them. By enhancing this relationship capital, we will continue to make contributions to Goal 17 of the SDGs: Strengthen the means of implementation and revitalize the global partnership for sustainable development.</p> |
| <p><b>Relations of trust with suppliers</b></p> <ul style="list-style-type: none"> <li>● <b>Responsible supply chain management</b></li> </ul> <p>The Nabtesco Group is committed to fulfilling its corporate social responsibility across its supply chain based on fair, proper and transparent transactions with suppliers.</p> <p>Based on the relations of trust with our suppliers, whose understanding</p>  | <ul style="list-style-type: none"> <li>● <b>Enhancement of the value chain for mutual growth</b></li> </ul> <p>The Nabtesco Group believes that the improvement of suppliers' QCD performance will directly help the Group improve its own QCD performance. Based on this recognition, we are working to increase our QCD performance across</p>  |

| Value for the Nabtesco Group  | Value for external stakeholders   |
|---|---|
| of the Nabtesco Group's CSR-Oriented Procurement Policy we seek, we will build a responsible supply chain to ensure the sustainability of our value creation. | our supply chain. We believe that the enhancement of the value chain based on collaboration with suppliers will result in mutual growth and the expansion of trade opportunities. |

| Value for the Nabtesco Group   | Value for external stakeholders   |
|--|---|
| <p><b>Relations of trust with local communities</b></p> <p>● <b>Improvement of the brand image through community investment</b></p> <p>We can contribute to the solution of social challenges faced by local communities through community investment, which in turn helps us improve our brand image. We also regard community investment as an initiative that provides Group employees with opportunities to take on the challenge of contributing to the solution of social issues in fields related to the businesses in which they work and to change their way of thinking. These measures are important for winning the trust of local communities in the regions where we operate and also for securing human resources in the future, and provide us with a foundation to increase our corporate value on a long-term basis.</p> | <p>● <b>Contribution in the fields of the environment, education and welfare</b></p> <p>The Nabtesco Group implements its community investment initiative by using its resources and knowledge in the three key fields of the environment, education and welfare, which are closely connected to its businesses. The specific activities conducted in the initiative are in line with the Group's material CSR issues (materiality) and a range of targets set in the SDGs.</p> <p>As a global corporate citizen, we will contribute to the solution of social challenges faced by local communities and to their long-term prosperity.</p> |

#### Related SDGs

By enhancing its relationship capital, the Nabtesco Group can contribute to Goal 17 of the SDGs: Strengthen the means of implementation and revitalize the global partnership for sustainable development.



## Financial capital

| Value for the Nabtesco Group  | Value for external stakeholders   |
|---|---|
| <p>● <b>Strong balance sheet that supports growth investments</b></p> <p>Strong balance sheets support growth investments and the stable return of profits to employees and shareholders. The Nabtesco Group is fostering the improvement of capital efficiency and disciplined financial management, being rated A by the rating agencies. As a result, the equity ratio has remained at 58% on average for the most recent five years, and this means that we are on a level that allows us to make steady growth investments and stably return profit to stakeholders.</p> | <p>● <b>Improvement of capital efficiency and stable return of profit</b></p> <p>The Nabtesco Group is committed to "ROE: 15%" in its medium-term management plan. For the fiscal year ended December 31, 2017, our actual ROE is 14.3%* and is below the level committed to. However, it is above the average level of listed companies in Japan and has been on the rise.</p> <p>We are also committed to "Consolidated payout ratio: 35% or over" in the medium-term management plan. We have steadily increased the dividend amount in line with the expansion of profit and have been maintaining the payout ratio of 35% or over.</p> <p>* Excluding the equity method-based investment profit gained by the affiliated company named Harmonic Drive Systems Inc.</p> |

## Technology and Manufacturing Capital

|  |  |
|--|--|
| <p>● <b>Creation of new products and a highly competitive production system</b></p> <p>By enhancing our technology and manufacturing capital, we can meet more diversified and advanced customer needs to increase our competitiveness in the existing businesses while also adding value to our products by including more mechatronic products and systems in them. Moreover, we can foster the development of new products and services through open innovation, technological marketing (IP landscape) using intellectual property information, and strategic M&amp;A projects toward the creation of a new business foundation.</p> | <p>● <b>Provision of safety, comfort and a sense of security</b></p> <p>For the Nabtesco Group, which is engaged in the manufacturing industry, safety means to (1) manufacture products safely; (2) manufacture safe products; and (3) ensure that the manufactured products can continue to be used in a safe manner. Based on this recognition, we are working to provide customers with safety, comfort and a sense of security by implementing a range of measures at our manufacturing sites.</p> <p>The Nabtesco Group is also advanced in environmental management. In</p> |
|--|--|

## Value Creation Process of the Nabtesco Group (Explanations)

| Value for the Nabtesco Group   | Value for external stakeholders  |
|--|--|
| <p>Furthermore, our unique manufacturing innovations, including the enhancement of our production capability, production management ability, and procurement ability, are designed for the establishment of an overwhelmingly competitive production system and for the provision of a basis to win global competitions.</p> | <p>particular, for climate change issues, which are global challenges, we are speeding up measures by setting long-term CO<sub>2</sub> emission reduction targets.</p> |
| <p><b>Related SDGs</b><br/>By enhancing its technology and manufacturing capital, the Nabtesco Group can contribute to the attainment of the SDGs shown on the right.</p>  |    |

### Human capital

#### ● Securing of human resources who implement The Nabtesco Way

The Nabtesco Group continues to conduct activities aimed at making all employees aware of The Nabtesco Way, encouraging them to attain their own targets, and uniting the Group as one. In order to maintain and improve our competitiveness on a long-term basis, it is essential for us to secure human resources. The rate of employees who have quit working for the Group for their own reasons has been as low as 1%, providing evidence that our workplaces are favorable for employees.

#### ● Provision of safe and comfortable workplaces

Giving due consideration to human rights in all business operations is a basic social responsibility to be fulfilled by companies. The Nabtesco Group is implementing measures to respect human rights based on the Nabtesco Group Code of Ethics and the Nabtesco Group Human Rights Policy, while also promoting work style reforms and diversity to further revitalize its workplaces. Through these measures we are working to provide employees with safe and comfortable workplaces, which will in turn lead to the creation of sound and sustainable employment opportunities.

| Value for the Nabtesco Group   | Value for external stakeholders   |
|--|---|
| <p><b>Related SDGs</b><br/>By enhancing its human capital, the Nabtesco Group can contribute to the attainment of the SDGs shown on the right.</p> |  |

### Organizational capital

#### ● Highly ethical corporate culture based on a global compliance system

The Nabtesco Group conducts business globally, and compliance provides the basis for the Group to implement its corporate philosophy through business operations. Each and every employee supports the Group's business activities by behaving in a highly ethical and transparent manner. Compliance is one of the most important preconditions for the Group to be selected by customers as their business partner. Toward building a highly ethical corporate culture, we are applying the Nabtesco Group Code of Ethics globally to all Group members and raising their compliance awareness through training and by other means.

#### ● Management transparency based on the autonomous improvement of its functions by the Board of Directors

The Nabtesco Group attributes importance to winning the trust of stakeholders on a long-term basis. In order to improve the functions of the Board of Directors, we annually evaluate the effectiveness of the Board. In FY2017, it was confirmed that the number of Board members and composition of the Board was appropriate and that the members were able to discuss issues in an open and constructive manner. The effectiveness was thus evaluated to be generally high. Some issues were pointed out regarding Board discussions, however, including how to secure enough time for the deliberation of important management themes such as growth strategies, how to empower subordinate organizations to this end, and how to further increase the operational efficiency of Board meetings.

We will continue to improve the Board's functions based on the results of the effectiveness evaluation.

## Management Strategy and Performance

By strategically promoting the value creation process, we will fulfill the commitments we have made in the medium-term management plan.

The Nabtesco Group has been implementing the medium-term management plan targeting the period from the fiscal year ended December 31, 2017 to the fiscal year ending December 31, 2020. For the sustainable growth of the Group, we focus on Market Creation, Technology Innovation, and Operational Excellence as our core management strategies, while appropriately identifying the growth opportunities for each of the niche markets where we have large shares as well as the opportunities for us to contribute to the solution of social challenges through our business operations.

For Market Creation, we are speeding up overseas business expansion and the pioneering of new fields to find new markets. For Technology Innovation, we are shifting from the manufacture of components (machine components) to the creation of new solutions. For Operational Excellence, we are improving profitability by production reforms and operational reforms and enhancing the basis for the business operations by revitalizing our organizations and making more advanced use of human resources. We will proactively allocate resources to the core strategies for the maximization of their effects.

In the medium-term management plan, we have made the following three management commitments to stakeholders.

### Our commitments

ROE: 15%

Consolidated payout ratio: 35% or over

Focus on solving ESG issues

## Long-Term Vision

The Nabtesco Group will strive to expand the scope of value creation and work to become the Global Partner with Best Solutions, as shown in the long-term vision formulated in 2012 toward the final year of the medium-term management plan (FY2020).

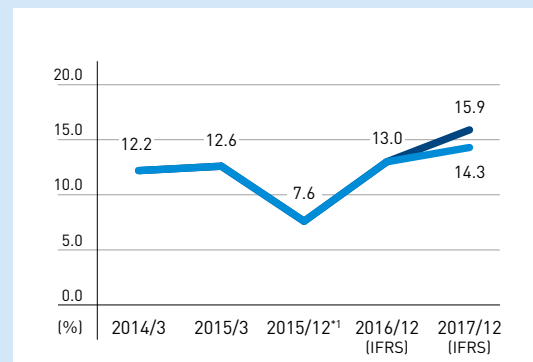
Status in FY2020

### Global Partner with Best Solutions

- Continue to provide society with new innovative solutions (products, services and business models)
- Pursue excellence through continuous technological innovation, thereby enhancing rapport and trust with customers
- Value open communication and creative thinking regardless of language and cultural differences
- Encourage each employee to proactively take on challenges with the slogan, "Enjoy the Challenge."

## Financial Highlights

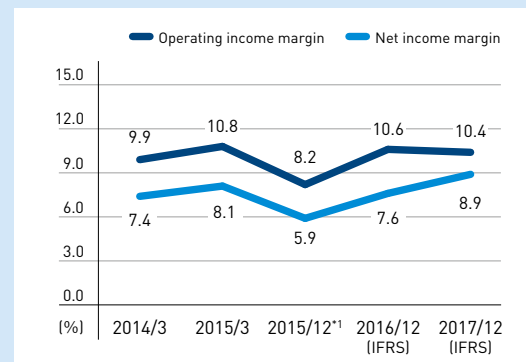
### ROE



(Note) For 2017/12, including/excluding the equity method-based profit gained through the overseas subsidiary acquisition by Harmonic Drive Systems Inc.

Nabtesco is focused on continuously securing a capital efficiency level that can meet the expectations of its shareholders and investors, and management has made a commitment in the medium-term management plan to achieve an ROE of 15%. Excepting for the fiscal year ended December 31, 2015, which was an irregular accounting period due to a change in closing date, our policy is to raise ROE, which has recently remained at around 12%, to 15%, as early as possible and maintain it. In FY2017, Nabtesco introduced ROIC (Return on Invested Capital) as a new internal management indicator to ensure improvement in capital efficiency. While paying attention to capital cost, we strive to achieve growth in terms of absolute amount of profits and to improve the following elements, thereby realizing the commitment.

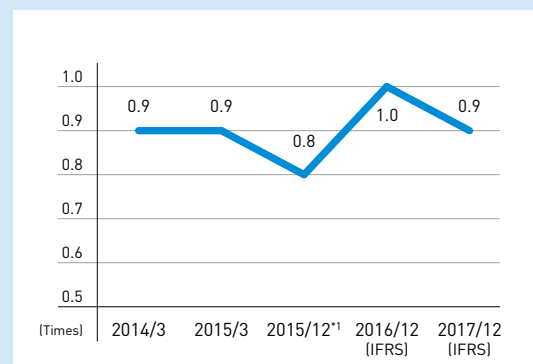
### Operating Income Margin / Net Income Margin\*2



Nabtesco deems it critical to secure a sound level of profitability as a prerequisite for business growth, and endeavors to improve operating income margin. To improve net income margin through an increase in operating income margin, we will pursue improvement in operating income margin, which was recorded at the 8–10% level in the past few years. We will promote cross-organizational measures to increase sales in business sectors offering MRO\* services, while aiming at enhancing added value through the development of mechatronic products and systems. Also, in the precision reduction gear business, in which brisk demand is expected, to achieve greater profitability, we will grow profits by increasing sales to a level that can absorb a depreciation cost increase from the enhancement of production capability.

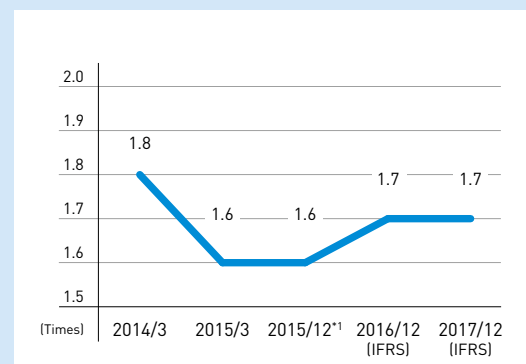
\*MRO: Maintenance, repair and overhaul

### Total Assets Turnover



It is indispensable to efficiently use management resources in order to improve total assets turnover. In the past five years, total assets turnover has been roughly 0.9, and we are working to improve this level. At present, Nabtesco is fostering group-wide manufacturing innovation to enhance its production technologies, production management ability, and procurement ability. To make effective use of business assets, we are also promoting the introduction of optimal production management by the use of AI and IoT for digitization, visualization and automatic scheduling, while implementing logistics reforms. By using the ROIC tree, we will boost our competitiveness in manufacturing and improve the rate of utilization of business assets.

### Financial Leverage



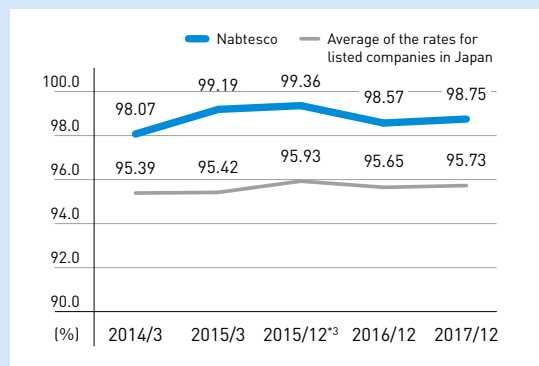
Nabtesco upholds a policy of maintaining an A credit rating in order to secure balance sheet soundness as a prerequisite for long-term value creation. As we have recorded steady earnings every year, equity capital is increasing. With a view to further improving capital efficiency, we will implement control of the balance of cash on hand and explore the use of financial leverage as necessary. Moreover, to make efficient use of internal reserves, we will drive growth investment including in capital expenditure, R&D and M&A. At the same time, we will practice the type of financial management that enables stable and flexible shareholder returns.

\*1 Due to the change of the accounting closing date of fiscal year since FY2015/12, the results for FY2015 is calculated on a basis of 9 months for Nabtesco Corporation and the other consolidated subsidiaries in Japan, and 12 months for the overseas consolidated subsidiaries.

\*2 Net income attributable to owners of the parent

# Non-Financial Highlights

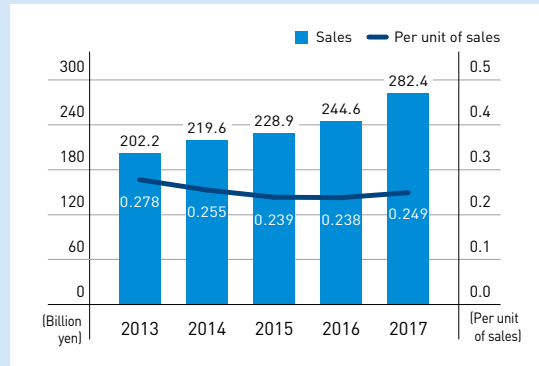
## Affirmative Vote Rate of Selected Directors



[Note] Nabtesco's affirmative vote rate of selected directors was calculated based on the percentage of directors selected and approved at the ordinary general meeting of shareholders for a given fiscal period. The average of the rates for listed companies in Japan was calculated by Nabtesco based on the rates shown in the extraordinary reports created by the companies.

Nabtesco values relations of trust with its shareholders to enhance its business management for sustainable value creation, and defines an affirmative vote rate for selected directors at the general meeting of shareholders as an indicator of confidence in management. The affirmative rate has been over 97% for the past five years, exceeding the average for listed companies in Japan. At the general meeting of shareholders held in March 2018, Nabtesco received a 98.75% rate of approval for its transition to the new directorship. We will continue to reinforce our approach to corporate governance to ensure management transparency and improve corporate value to meet the expectations of our shareholders.

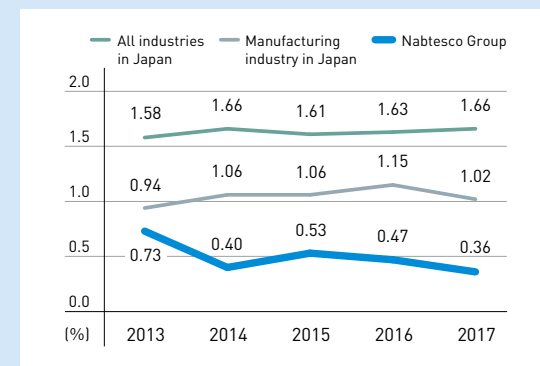
## CO<sub>2</sub> Emissions per Unit of Sales [Global]



To combat climate change as one of its material CSR issues, Nabtesco is working to reduce greenhouse gas emissions and to conserve energy. As a result, our CO<sub>2</sub> emissions per unit of sales have been decreasing globally. In order to achieve business growth while reducing CO<sub>2</sub> emissions, we built plants by using advanced environmental technologies and have proactively introduced renewable energy equipment. In FY2016 we set a medium-term target to achieve a reduction of at least 9% from the base year. Moreover, we established long-term targets to reduce CO<sub>2</sub> emissions by 30% in FY2030 and by 80% in FY2050. We are committed to achieving the medium- and long-term targets through stepping up our efforts to save and create energy.

\* The medium- and long-term targets are expressed as percentages of reduction from actual CO<sub>2</sub> emissions in FY2015.

## Lost-Work Time Injuries Frequency Rate<sup>\*4</sup>

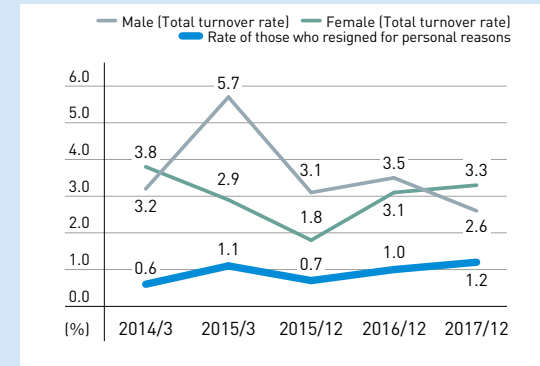


[Note] Data for the all-industries average and the manufacturing industry average in Japan are from the 2017 Survey on Industrial Accidents, Ministry of Health, Labour and Welfare.

[Note] In October 2017, the Higashiosaka labor standards inspection office found excessive work to be the cause of an employee's death by suicide. The death was therefore certified as an occupational accident. Accordingly, the data for 2014/3 were revised retrospectively.

Nabtesco gives first priority to safety, deeming safety as a basic requirement to be met in all its business activities. We are making efforts to eliminate workplace accidents as the basis for protecting the day-to-day safety of employees and for sustainable value creation. Although Nabtesco's lost-work time injuries frequency rate has always been lower than the all-industries average and the manufacturing average in Japan for the past five years, we have not achieved the Group's target of zero industrial injuries, including commuting-related injuries. To attain the target, it is necessary to raise safety awareness at our workplaces. To this end, we are conducting activities to nurture a Nabtesco-style culture of safety in addition to implementing ongoing measures against individual risk factors.

## Rate of Those who Resigned for Personal Reasons<sup>\*5</sup>



Nabtesco sees its employees as human assets, as they constitute the human capital that underpins the Group's sustainable value creation. Retention of the workforce is essential to maintain and enhance competitiveness in the long run. At Nabtesco, the rate of employees who resigned for personal reasons has remained around 1%, which shows that Nabtesco provides its employees with a good work environment. We are currently promoting measures for work style reform and endeavoring to revitalize the organization through workplace diversity. We will continue activities to develop human assets that drive global business operations and to increase employees' awareness of The Nabtesco Way, while encouraging them to fulfill their own goals and foster a sense of unity across the Group.

<sup>\*3</sup> Period covered for Non-financial data: January 1, 2015 to December 31, 2015

<sup>\*4</sup> The calculation scope includes Nabtesco Corporation and domestic Group Companies.

<sup>\*5</sup> The calculation scope covers only Nabtesco Corporation.

**In order to fulfill our commitments, we will enhance the foundation of our competitiveness on a medium- to long-term basis.**



.....  
Representative Director,  
President and CEO

**Katsuhiko Teramoto**



## Our commitments

01 ROE: 15%

02 Consolidated payout ratio: 35% or over

03 Focus on solving ESG issues

\* ESG: Environment, society and governance

**Results for FY2017 and outlook for the future**

We started our new four-year medium-term management plan in FY2017. In the same year, we posted record-high sales and profit on a consolidated basis, far exceeding the forecasts made at the beginning of the term.

Regarding performance by segment, we received more orders year on year in all segments. In particular, the outstanding growth of the Component Solutions Segment greatly contributed to increases in our total sales and profit. Thanks to expanded needs for automated production equipment, demand for our precision reduction gears for industrial use, including use in industrial robots, substantially increased. In addition, the recovery of demand for construction machinery in China helped us record favorable results in the hydraulic equipment business, which also contributed to increases in our total sales and profit.

In the precision reduction gear business, we have expanded the total production capacity of the Tsu Plant and Nabtesco (China) Precision Equipment Co., Ltd. in Changzhou from 640,000 units to 760,000 units per year, in order

to meet the expanding demand. Moreover, we plan to further expand the capacity to 1.2 million units by 2020.

In the Transport Solutions Segment, we recorded decreases in sales and profit. In the aircraft equipment business, it was a changeover period from old to new B777x models for civil aviation, while in the marine vessel equipment business the shipbuilding market remained stagnant and the railroad vehicle equipment business was influenced by a shift to domestic production in the Chinese market.

In the Accessibility Solutions Segment, we recorded an increase in sales thanks to robust demand for automatic doors and also because a domestic sales company became a consolidated subsidiary of Nabtesco. However, for profit, we posted only a minor increase, being affected by a delay in business integration at one of our subsidiaries in North America.

For packaging machines in the Manufacturing Solutions segment, the increased needs for automation boosted both sales and profit in the Japanese and Southeast Asian markets.

In FY2018, we expect that needs for automated produc-

tion equipment and demand in the Chinese construction machinery market will expand and continue to support our favorable performance in the Component Solutions Segment. We can also expect that the expanded demand for subway vehicle equipment in China will contribute to the recovery of both sales and profit in the Transport Solutions Segment. In the Accessibility Solutions Segment, the growth of the automatic platform door business will help increase sales, but we make a rather conservative forecast for an increase in profit because we plan to make a strategic investment for a full model change for automatic doors for buildings.

Taking this outlook into account, both sales and profit are expected to reach record highs in two consecutive terms for our consolidated results in FY2018.

The Nabtesco Group upholds “Net sales of 330 billion yen,” “Operating income of 42 billion yen,” and “Net income of 30 billion yen” as reference values for the consolidated performance in FY2020. However, we will review these reference values in the latter half of FY2018 in consideration of the pace of business growth at that time.

## Message from the CEO

### Progress with the medium-term management plan

As for the three themes (“Market Creation,” “Technology Innovation,” and “Operational Excellence”) set for the key strategies, I believe we were able to make necessary preparations and have built a system to attain the targets.

For “Market Creation,” we established our European headquarters (a holding company) in Germany in May 2017 to smoothly allocate resources to local subsidiaries and improve management efficiency for the expansion of our business in the European market.

Moreover, in January 2017, we founded a base in Thailand to sell the Nabtesco Group’s products and provide after-sale services across the Southeast Asian market. We also established an import, sales and after-sale service base in India in the previous term, and it is already operating at full scale. In China, we began to make efforts to win more orders for our railroad vehicle equipment

with a focus on subway trains.

For “Technology Innovation,” we acquired all of the shares of OVALO GmbH of Germany in March 2017 and made the company and its subsidiary adcos GmbH Nabtesco’s consolidated subsidiaries. In the future we will make use of the two companies’ ability to develop motor-control unit integrated products to speed up the manufacture of systems and mechatronic products as Nabtesco Group products.

In October 2017, we relocated all the facilities of the Technology and R&D Division located in Kobe to Kyoto for the consolidation of the Division’s R&D resources in the old capital of Japan, changed the name of the Nabtesco Digital Engineering Center to the Nabtesco R&D Center, and established an open innovation-oriented R&D system.

For “Operational Excellence,” we fostered automation and the use of robots at our production sites and began an activity to increase our production efficiency by 10% by 2020. Also, for the administrative departments, we began

considering the introduction of Robotic Process Automation (RPA) tools for higher efficiency and reduction of workload.

### Our commitments

In the medium-term management plan, we are committed to the following: “ROE: 15%,” “Consolidated payout ratio: 35% or over,” and “Focus on solving ESG issues.”

For “ROE: 15%,” we achieved ROE of 15.9% on a consolidated basis for FY2017, but the equity in earnings of affiliates for Harmonic Drive Systems Inc., which is one of our affiliated companies, contributed to this. The Nabtesco Group’s true ROE was 14.3%. We will continue to maintain our high profitability while increasing our asset efficiency to further increase ROE.

As for “Consolidated payout ratio: 35% or over,” the year-end dividend for the term was 38 yen per share. As a result, the annual dividend per share totaled 72 yen (up 22 yen year on year), including the interim dividend of 34



yen. As a result, the consolidated payout ratio came to 35.3%. For FY2018, we plan to increase the annual dividend amount per share to 73 yen (36 yen and 37 yen for the interim and year-end dividends, respectively). Also, for "Focus on solving Environmental, Social and Governance (ESG) issues," we are spending enough money to implement necessary measures.

For "E (Environmental)" issues, we increased the amount of investment to be made in environment-friendly equipment in FY2017 to about 2.3 times the budget for the previous fiscal year. For example, we installed a geothermal air-conditioning system and a system for zero discharge of wastewater at the new facilities built within the Gifu Plant for the aircraft equipment business. For FY2018, we will further increase the investment amount to 1.7 times the budget for FY2017 in order to install more solar panels and other environment-friendly equipment not only at our new plants but also at the existing plants.

The Nabtesco Group is committed to reducing CO<sub>2</sub>

emissions from its global production activities through these investments, and has set the targets of reducing the emissions by 30% by 2030 and by 80% by 2050 relative to the FY2015 level. In July 2017, we received Science Based Targets (SBT) certification for Nabtesco's non-consolidated emission targets as targets that meet the decarbonization criteria established for the achievement of the 2°C target set in the Paris Agreement.

For "S (Social)" issues, we focused on the promotion of work style reforms and implemented relevant measures under the leadership of the Business Transformation Division newly established in August 2017. In the company-wide questionnaire survey conducted for the improvement of operational efficiency, more than 7,000 proposals to remove "operational waste" were submitted by respondents. In parallel with these measures, we are promoting automation and the introduction of robots at our production sites while also making use of RPA tools for our administrative departments. We are thus proactively

spending money on reforms in a cost-effective manner.

Finally, for "G (Governance)" issues, with a view to increasing our management transparency, we have established the Nomination Committee, Remuneration Committee, and Compliance Committee as advisory bodies to the Board of Directors, which help ensure the effectiveness of the Board. In FY2018, we abolished three divisions (Corporate Planning Division, General Administration & Human Resources Division, and Compliance Division) to further increase our corporate value and transformed them into departments under the direct control of the directors in charge.

The Nabtesco Group will continue to make progress steadily, constantly pursuing "growth with profitability" and making strategic investments as required for the expansion of our businesses.

I would ask our stakeholders to continue to give their kind support to the Nabtesco Group in anticipation of its future growth.

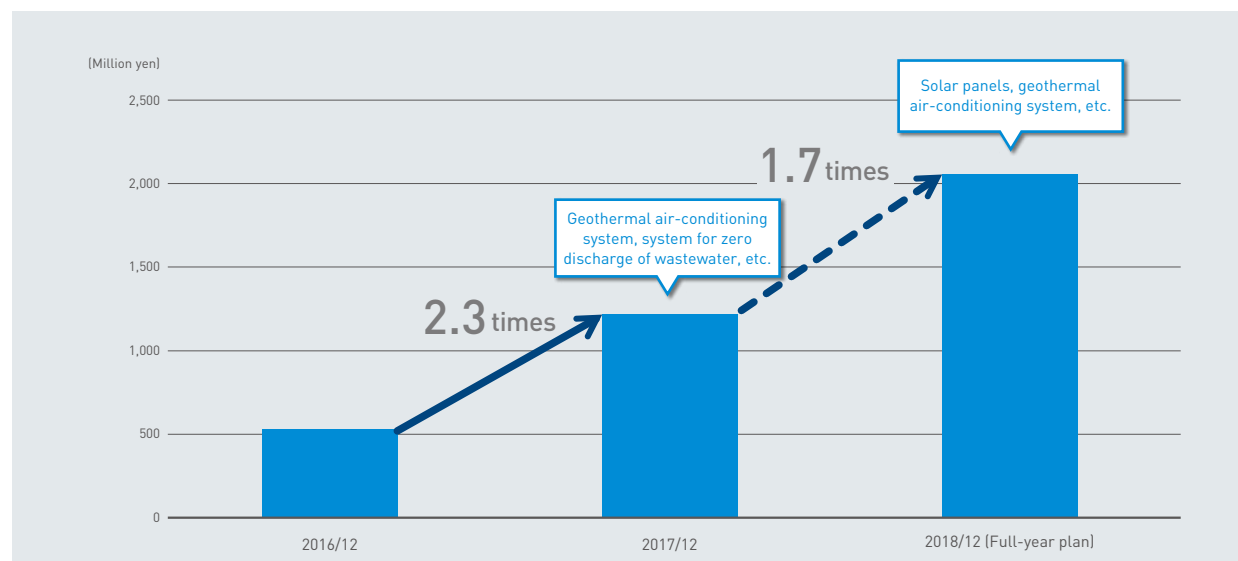
### Mid-Term Management Plan (Referential)

| [JPY billion]                       | 2016/12<br>Result<br>(Reference for IFRS) | 2017/12<br>Result<br>(IFRS) | 2020/12<br>Reference<br>(IFRS) |
|-------------------------------------|---|-----------------------------|--------------------------------|
| Sales                               | 245.0                                     | 282.4                       | 330.0                          |
| Core Operating profit <sup>*1</sup> | 25.2                                      | 29.2                        | 42.0                           |
| Operating Profit                    | 26.0                                      | 29.5                        | 42.0                           |
| Net Profit <sup>*2</sup>            | 18.6                                      | 25.1                        | 30.0                           |

\*1 Core operating profit: Calculated the sum of operating income year ended December 2016 (JGAAP), goodwill amortization and others.

\*2 Net Profit: Net profit attributable to owners of the parent

### Investment in Environment-Friendly Equipment





**Growth driven by the expanded sales of precision reduction gears**

**Teramoto:** The fiscal year ended December 31, 2017 was the first year of the current medium-term management plan (hereinafter “the Mid-Term Plan”) and we were able to achieve record-high sales of 282.4 billion yen and operating income of 29.5 billion yen before celebrating the 15th birthday of the company.

The Component Solutions business, in which we mainly sell precision reduction gears for industrial robots and hydraulic equipment for construction machinery, showed substantial growth, while the Transport Solutions business, in which we focus on aircraft, marine vessel and railroad vehicle equipment, was rather stagnant. But we achieved favorable results in the Accessibility Solutions business targeting automatic doors and the Manufacturing Solutions business, which mainly deals with packaging machines.

**Nishikawa:** It was in the fiscal year ended March 31, 2008 that you reached the previous peak, with sales of 174.3 billion yen and operating income of 19.4 billion yen. You have thus steadily and stably improved your performance from the previous peak to the latest peak, which I think was driven mainly by the growth of the precision reduction gear business. For the next three to five years, what do you think will propel the growth of your company?

**Teramoto:** During the period of the Mid-Term Plan, which lasts until 2020, precision reduction gears for industrial robots will continue to be our growth driver. Accordingly, in 2017 we decided to make equipment investment of 26 billion yen to enhance our production capacity for the gears.

**Nishikawa:** As I understand it, precision reduction gears represent a market that is difficult for new companies to enter, and Nabtesco has very competitive products in the market. However, some Chinese and other foreign companies as well as Japanese manufacturers might catch up

# Toward Sustainable Value Creation

For Nabtesco, the fiscal year ended December 31, 2017 was a milestone year in which a new medium-term management plan was launched and a new CEO took office. Regarding the past year and future outlook, Nabtesco's CEO Katsuhiro Teramoto and Outside Director Yutaka Fujiwara met with representatives of two institutional investors to listen to their questions and opinions. (Meeting held in a conference room of Nabtesco in April 2018.)

Representative Director,  
President & CEO  
Nabtesco Corporation

**Katsuhiro  
Teramoto**

Chief Analyst  
Asset Management Division  
Mitsubishi UFJ Trust and Banking Corporation

**Shinichiro  
Hyogo**

Research Analyst  
Fidelity Management &  
Research (FMR)

**Takamitsu  
Nishikawa**

Outside Director  
Nabtesco Corporation

**Yutaka  
Fujiwara**

Hereinafter their names will be listed without the titles.

with your company in the future.

**Teramoto:** We are constantly monitoring the trends of competitors and I am convinced that we will be able to remain highly competitive in terms of design, materials, processing and various other aspects for the time being. However, we are not going to fall victim to hubris and are continuing our efforts to further improve the performance and quality of our products.

Moreover, we have tremendous strength also in terms of production capacity. In particular, in the market of precision reduction gears for machine tools, in which a rapid increase in demand has generally extended the length of time required for the delivery of products, we have been maintaining our supply capacity and thereby winning more trust from customers.

### Expanding the scope of business by supplying systems and fostering the MRO business

**Fujiwara:** As for recent business performance, the growth of the precision reduction gear business is outstanding, but Nabtesco has achieved growth by promoting multiple businesses in a mutually supplementary manner. For example, the railroad vehicle equipment business is now stagnant due to the setback with the high-speed train project in China, but it was once a growth driver. The same applies to hydraulic equipment for construction machines. I believe Nabtesco has a great advantage in that it has diversity in its business portfolio.

**Hyogo:** Yes, we have the same understanding and this advantage is one of the factors that make investors like us trust your company.

**Fujiwara:** Beyond operating multiple businesses in a mutually supplementary manner, we also need to expand the scope of each business, which we often discuss at the meetings of the Board of Directors. Nabtesco used to focus on components but should increase diversity in each of its business segments. We must speed up our

measures to supply more value-added systems and foster the maintenance, repair and overhaul (MRO) business.

**Hyogo:** Institutional investors make investments on a long-term basis and we need to evaluate the business portfolio of a company in consideration of the growth potential of its new businesses. For Nabtesco, however, the potential is not quite visible. What do you think about new businesses?

**Teramoto:** We want to launch new businesses while our present business portfolio remains effective. We would like to add at least one or two businesses to the portfolio as our new mainstays in and after 2020.

We are creating new businesses by two methods. First, our business departments are working to create new businesses in peripheral business fields. Second, the head office is taking leadership to create new businesses through M&A and also the Technology and R&D Division fosters the creation of new businesses. The second method has been more successful so far. For example, we acquired OVALO of Germany in March 2017 mainly to enhance the manufacture and supply of systems, which Mr. Fujiwara has already mentioned. We have not yet achieved any specific results through the acquisition, such as releasing a new product, but we are already in the process of creating a new business by fusing OVALO's unique technologies and development method with our own.

### Launching a new organization while also focusing on work style reform

**Hyogo:** In the Mid-Term Plan, you have upheld "Creating new businesses through Market Creation," "Creating new solutions through Technology Innovation," and "Improving profitability and efficiency through Operational Excellence" as the main management strategies. Could you describe the unique measures you took in line with these strategies in 2017?

**Teramoto:** For "Market Creation," we established the

regional headquarters for Europe in Germany. We also founded a corporation to serve as our local sales and service base in Thailand. Moreover, we launched full-scale activities at the import, sales and service base that we had established in India in the previous term.

For "Technology Innovation," as I have already said, we made great progress by acquiring OVALO. We also consolidated the R&D functions dispersed across our plants in Japan to Kyoto and opened a new R&D base named "Nabtesco R&D Center."

For "Operational Excellence," we paid special attention to "work style reform," which has been increasing in its importance. We established the Business Transformation Division as a new in-house organization. The direct trigger for this was what happened at the Tsu Plant, where precision reduction gears for industrial robots are manufactured; that is, due to the exploding demand, the operation rate was increased to as high as 140%, imposing tremendous burdens on employees and others.

**Nishikawa:** Did you implement any specific measures to mitigate the burdens at the Tsu Plant?

**Teramoto:** Yes, we did. We employed more temporary workers and also reassigned some of the employees working at our manufacturing facilities for products other than precision reduction gears to the Tsu Plant. Such reassignment is one of the benefits of having a diverse business portfolio but it was just an emergency measure. The Business Transformation Division will plan and implement more drastic measures for work style reform.

### Advantages and disadvantages of the country's labor shortage

**Nishikawa:** Recently, the shortage of labor has been getting serious in Japan, meaning companies are increasingly forced to undertake work style reform. However, as well as bringing disadvantages, this shortage of workers actually benefits your company because it will accelerate



**During the period of the Mid-Term Plan, which lasts until 2020, precision reduction gears for industrial robots will continue to be our growth driver. Accordingly, we decided to make equipment investment of 26 billion yen to enhance our production capacity for the gears.**

automation, which will in turn boost the sales of industrial robots, eventually leading to the expansion of demand for your precision reduction gears.

**Teramoto:** Yes, indeed. Demand for precision reduction gears to be used in industrial robots has been expanding, being driven by the rising trend toward automation. With the shrinking of Japan's working-age population and the aging of society in general, I feel that the types of products needed by our customers are changing. For example, for packaging machines for retort food, our customers used to be satisfied with machinery that performed only the food filling function but now they need a system that can do more, including pre- and post-processes.

As for the adverse impact of the shortage of workers on our company, we have not yet faced a serious problem, but in the future, securing labor will definitely become a difficult challenge. Based on this recognition, we will strive to make our workplaces even more comfortable as part of our efforts to recruit new employees, develop young workers and foster diversity.

**Hyogo:** Do you conduct surveys, such as an employee satisfaction survey?

**Teramoto:** Once every two years we outsource an organizational diagnosis survey to measure our strength as an organization. This includes items on employee satisfaction.

The survey revealed a lack of internal communication, and in response we implemented measures first for the management team and middle management. These measures have resulted in gradual improvements, as demonstrated in the results of the subsequent surveys.

**Hyogo:** Mr. Fujiwara, do you feel that there is a lack of communication between the departments as an outside director of the company?

**Fujiwara:** Personally, no. Nabtesco was established by the business integration of Teijin Seiki and NABCO in 2003. Presently, those who belonged to the former two companies and those who joined the newly established company each account for one-third of the total number

of employees. Usually in such a situation, employees tend to group themselves into factions, but at Nabtesco I have not seen this happen. At least for participants in Board meetings, I do not know who belonged to which organization, and all participants discuss matters openly and freely at the meetings. I therefore think that no factions exist at Nabtesco.

### The achievement of "ROE: 15%" is not a goal but a milestone

**Nishikawa:** In the Mid-Term Plan, you are committed to "ROE: 15%." Looking back to the past, your ROE exceeded 10% during the previous peak period but it subsequently dropped to as low as 5% in the face of the financial crisis. Is the commitment to ROE of 15% an average value or the maximum value to be recorded during the period of the Mid-Term Plan?

**Teramoto:** For us, ROE of 15% is neither an average nor the maximum value. Although we are committed to achieving 15%, I think we should achieve more.

Nabtesco has been focusing on the improvement of the operating profit ratio for higher ROE. However, ROE is composed not only of the profit ratio but also of the asset turnover and financial leverage, and for the Mid-Term Plan we decided to view ROE from a broader perspective.

**Nishikawa:** If you find it difficult to achieve ROE of 15%, will you include a stock buyback in your options?

**Teramoto:** Under the Mid-Term Plan, we do not assume any stock buyback. We will focus on growth investment while also being committed to "Consolidated payout ratio: 35% or over."

**Nishikawa:** Nabtesco is a company with excellent growth potential, being engaged in an industrial field that should grow structurally. Investors who attribute more importance to long-term corporate growth than to short-term return to shareholders will appreciate your focus on growth investment.

**Hyogo:** The details of the Mid-Term Plan also indicate that you attribute importance to making proactive investments in equipment and product development for sales growth. If you can also clearly show how you will utilize cash to create new businesses for sustainable growth, it will help investors deepen their understanding of your company.

**Teramoto:** Yes, indeed. I would like to make improvements on that point as well.

**Hyogo:** I also think that ROE of 15% is just one of the milestones for your company. Nabtesco can achieve even more and if it exceeds the 20% level, the corporate image will substantially change, I expect.

**Fujiwara:** The average ROE of Japanese companies is around 8%, while Nabtesco boasts ROE of 14% to 15%, and I think we are at the level of excellent ROE in Japan. Outside the country, however, 14 to 15% is average for American companies. To compete as a global company, we thus naturally need to do better.

Also, concerning our commitment to ROE of 15%, if we cannot achieve expected results through growth investments, it will be difficult for us to deal with the situation in an impromptu manner. Based on this recognition, we decided to get rid of unnecessary assets in order to have more cash as a precautionary measure, and have finally introduced return on invested capital (ROIC) as a new performance indicator.

### ROIC introduced based on each department's understanding

**Hyogo:** I wanted to ask you about ROIC. Among other companies that have introduced ROIC, there are more than a few that cannot promptly establish it as a performance indicator, because the heads of the departments do not readily understand its importance as an indicator. At Nabtesco, how are you promoting the establishment of

ROIC as one of your performance indicators?

**Teramoto:** For ROIC, led by Mr. Fujiwara, who was passionate about introducing ROIC as a performance indicator, we discussed it a lot at Board meetings for several years, and have finally introduced it. The ongoing discussions were mainly on whether we could really use ROIC as the shared performance indicator for all the business departments, which were engaged in different businesses.

However, we had long paid attention to the individual elements of the ROIC tree, such as inventory turnover, and finally reached a consensus to focus on the ROIC element that was most suitable for each business as a new indicator and to evaluate the growth of the business by comparing the previous result with the current result for the indicator.

**Fujiwara:** What matters in business management is how much profit we can make through a certain amount of investment. ROIC and ROE show the minimum profit levels

that we should achieve. However, Nabtesco's business departments have different historical backgrounds and it would be difficult for all of them to achieve ROIC of 10 or 15% all together. So as Mr. Teramoto has said, we will first focus on the rate of change for the indicator, but aim to achieve ROIC of 14 to 15% across all our business departments eventually.

**Teramoto:** Against this backdrop, we regard ROIC only as an internal management indicator and have not announced any numerical targets for it externally. I hope that you will look at the resulting ROE.

### Proactive discussions involving both in-house and outside directors

**Hyogo:** Over recent years, I have met outside directors of various companies amid the trend for corporate governance reform. Meetings with these directors provide me

Nabtesco used to focus on components in its business, but is now required to manufacture more value-added systems and foster sales promotion in the MRO business.





Nabtesco has already been highly acclaimed for its proactive ESG measures. These measures will help the company reduce its medium- to long-term business risks and the approach is indeed praiseworthy.

with good opportunities to examine the companies objectively. Mr. Fujiwara, could you tell us about the atmosphere of Nabtesco's Board meetings?

**Fujiwara:** I assumed the position five years ago, and since then I have often made proposals regarding what should be targeted in the company's medium-term management plans. Initially, sales and profit were the main targets set in the plan, but these targets are subject to changes in the external environment. I have constantly insisted on the importance of adopting numerical targets that the Board of Directors and the management team can control more easily, and ROIC was finally included in the targets of the current plan. Nabtesco is indeed flexible enough to listen to the opinions of outside directors and introduce a new indicator if all members agree on it as a result of discussion.

**Hyogo:** You mean there are no problems regarding the company's support given to outside directors, including information provision?

**Fujiwara:** Presently, I have nothing to complain about. The company works to help outside directors deepen their understanding of the in-house situation by, for example, holding a Board meeting at one of its plants. However, not a few of the in-house directors also serve as executive officers, and I sometimes think that it might be difficult for these members to separate their two different roles.

**Teramoto:** Directors who are also serving as executive officers are the heads of the in-house companies as well, and it would be indeed difficult for them to fulfill their multiple roles in a separate manner. Themes discussed a lot within the in-house companies are eventually discussed at Board meetings, and heads of the in-house companies would have special feelings about the themes discussed intensively at their own departments. However, even such themes are not easily approved at Board meetings, showing the soundness of the Board of Directors.

### Of 15 directors and auditors, six are outside members

**Hyogo:** At present, the Board of Directors is composed of three outside directors and seven in-house directors. What do you think about this composition?

**Fujiwara:** Each of the three outside directors has a different background, including their expertise and experience, and I think we can supervise and give advice to the company in a well-balanced manner. Mr. Uchida used to be the president of TOPCON and has substantial experience in overseas businesses. Ms. Yamazaki has special experience as an astronaut and has a different viewpoint from that of businesspeople. She can also give opinions from the viewpoint of women. As for me, I think I have had unique experiences in banking, manufacturing and other fields, including working as an investment fund consultant.

**Teramoto:** There have been some public calls to increase the percentage of outside directors, but I think the current composition is satisfactory for the company. The participation of executive officers in the Board meetings promotes deeper discussions, and outside directors contribute to the discussion of various topics from a broader perspective.

For example, Mr. Uchida strictly points out business risks based on his experience working as a corporate president, while Mr. Fujiwara gives us opinions from the viewpoint of investors based on his expertise in investment funds. Ms. Yamazaki often makes recommendations on safety and other issues that we have not otherwise recognized. Also, we have three outsiders among our five corporate auditors. We thus have six outside players among a total of 15 directors and auditors.

### The company is committed to implementing ESG measures

**Hyogo:** In the Mid-Term Plan, you are also committed to "Focus on solving ESG issues." You have already men-



tioned G (Governance). I would like you to talk about E (Environment) and S (Social) issues as well.

**Teramoto:** In The Nabtesco Way established in 2012, we promise to value the environment and promote harmony with local communities and cultures. We have thus made efforts for harmony with the environment and society for years now.

As for consideration to the environment, we have recently focused on reducing our CO<sub>2</sub> emissions by curbing our electricity consumption. In 2017 we expanded the Gifu Plant to increase our production capacity for aircraft equipment, but we introduced a range of energy-saving systems so as to avoid increasing our electricity use despite the increased production. We have also steadily introduced solar power generation systems to all our plants.

For social issues, we think it is important to promote diversity, in particular, to help women fulfill their potential, and so we are implementing necessary measures, including initiatives for work style reform.

**Nishikawa:** To solve ESG issues, will you foster measures apart from those to increase your sales and profit?

**Teramoto:** We will give priority to the solution of ESG issues to some extent, although we need to keep an economic balance.

**Hyogo:** Nabtesco has been included in the "CDP's Climate A List" and has already been highly acclaimed for its proactive ESG measures. These measures will help you reduce your medium- to long-term risks and so your approach is indeed praiseworthy. It is important for top management to show their strong commitment to solving ESG issues. You are once again committed to the solution of ESG issues in the Mid-Term Plan, which I think is quite valuable.

**Fujiwara:** Nabtesco could make more improvements by setting its targets in a more systematic manner in addition to the current CO<sub>2</sub> reduction targets. It would be difficult to deal with ESG issues because most of them are qualitative issues, but I expect that Nabtesco will set numerical and visible targets as much as possible so that

the yearly progress can be easily evaluated.

### Holding proactive discussions with investors

**Teramoto:** I would like to take this opportunity to ask you what kind of company is a good company for investors.

**Hyogo:** Personally, I think it is a good company if it can achieve sustainable growth while giving due consideration to its stakeholders. Even if a company makes a fantastic profit, it will be unable to achieve sustainable growth if the achievement is made at the cost of its employees.

**Nishikawa:** "Good companies" prove to be good through their track records. Many of the companies that have steadily achieved growth from one peak to another peak are indeed good companies.

**Hyogo:** What do you expect of investors?

**Fujiwara:** Even an outside director tends to think from an internal viewpoint after assuming the position for five

or six years. I therefore want investors to give us various opinions to help us update our ideas. We need to make efforts to this end and should increase the opportunities to discuss things with investors, for example, by holding a meeting with them after the organization of the annual shareholders' meeting.

**Teramoto:** I also want investors to teach us a lot of things. Although we meet them at briefings and other IR-related meetings, we are speakers in these meetings. I think we need to have more opportunities to listen to them so as to acquire knowledge and learn lessons from them.

This meeting has certainly provided us with a good opportunity to listen to your opinions and I hope that you will kindly continue to give us your frank opinions in the future.

**"Good companies" prove to be good through their track records. Many of the companies that have steadily achieved growth from one peak to another peak are indeed good companies.**



# Innovation to Make Effective Use of Human Resources

Companies need to promote governance and effective use of human resources as the basis for their sustainable growth. Chairman Kazuaki Kotani talked with Outside Director Naoko Yamazaki about the measures taken for Nabtesco to meet these two important requirements, including its unique initiatives, current challenges and new ideas to enhance the measures.

(Meeting held in a conference room of the company in April 2018.)



Outside Director  
Nabtesco Corporation

**Naoko Yamazaki**

Chairman of the Board  
Nabtesco Corporation

**Kazuaki Kotani**

(Hereinafter their names will be listed without the titles.)

## First impression of Nabtesco: Reliable technology and sincerity

**Kotani:** Two years have passed since you became an outside director of our company. What was your first impression of Nabtesco? Has that impression changed? If it has, could you tell me how?

**Yamazaki:** By participating in the meetings of the Board of Directors, I found that Nabtesco was a technology-oriented company that had reliable technologies and made sincere efforts to develop products and promote its businesses.

This impression has not changed, but I have also recently found that the company is implementing measures by looking far ahead. At present, it is implementing the medium-term management plan for 2020, but at Board meetings participants also discussed matters looking beyond 2020, which I found very impressive. Nabtesco acquired OVALO in 2017 and I also have a strong sense of the company's determination to speed up its globalization.

**Kotani:** We acquired OVALO to change Nabtesco, based on the belief that we should change in order to survive in the market.

**Yamazaki:** Discussions at Board meetings have certainly given me a sense of that strong determination. It is very meaningful for the company to have a large base in Europe, and it will also be able to take a big step forward by expanding the scope of its business to include systems in addition to single products.

**Kotani:** Nabtesco is highly rated as a component manufacturer, but we also need to supply systems to achieve further growth, and I am pleased that you are aware of this necessity.

**Yamazaki:** Adding OVALO to the Nabtesco Group leads to the integration of hardware and software technologies, and this gives Nabtesco a great advantage. I participated in discussions at Board meetings with the expectation that the integration would exert a positive influence over a range of components manufactured by Nabtesco and eventually enhance the overall value of its products.

## Free-ranging discussions based on the appropriate provision of information

**Kotani:** What do you think about the Board of Directors?

**Yamazaki:** Nabtesco provides me and the other outside directors with sufficient information and does so very openly, and I think that the company is reliable in that it allows us to discuss issues freely. Also, the agenda of the Board meetings is determined and necessary explanations are made in a very thoughtful manner. However, I think we need much more

time to discuss long-term growth strategies. If it is difficult to spend more time on these strategies at Board meetings, we might be able to talk with each other for brainstorming purposes before or after each of the meetings.

**Kotani:** We might not have sufficiently discussed what we generally lack and what it takes for us to foster medium- to long-term growth strategies. In my capacity as the chairperson of Board meetings, I would like to discuss this also at the meetings. In fact, we have so many things to discuss at the meetings and we probably need to review the agenda.

**Yamazaki:** Was the number of items included on the agenda always as large as it is now?

**Kotani:** In the past, no interim reports were made by the in-house companies at the meetings. However, some insisted that the presentation of the initial plans for the term and the final reports on the results was not enough to allow Board members to have effective discussions, and so we decided to include the presentation of the interim reports on the agenda.

**Yamazaki:** I do think it better to include the presentation of the interim reports, and it seems difficult to decrease the number of items to be included on the agenda. However, I think it is possible to devise reporting methods that will reduce the time currently spent on explaining the present situation, so that we can focus more on important issues. In fact, you can grasp the financial data by reading the reference materials distributed before the Board meetings.





**Kotani:** Yes, indeed. We might have to review the reporting details in order to discuss things more efficiently at Board meetings within the limited time available. You have kindly said “in a very thoughtful manner,” and in fact people at our company tend to think that they need to offer detailed explanations to outside directors to help them deepen their understanding of the company’s situation.

**Yamazaki:** I can understand that reporters have things that they definitely want to communicate. However, we also have things that we want to ask at Board meetings. So you can omit the explanations about things that can be easily understood by reading the reference materials and instead allocate more time to the Q&A session, thereby making Board meetings more meaningful.

### The Nomination Committee gives consideration also to the development of the next management team

**Kotani:** I would like to take this opportunity to ask your opinions about the Nomination Committee.

**Yamazaki:** I feel honored to have been appointed a member of the committee. I have heard

that you established the Nomination Committee when you were the CEO of the company.

**Kotani:** Yes, I established it in 2015, one year before resigning from the position of CEO. Earlier, in 2012, or one year after becoming the CEO, I was asked by one of the outside directors about the nomination of my successor, and this caused me to think about founding a nomination committee. But the Remuneration Committee was established first, and the related discussions led to the step-by-step introduction of a nomination committee to the company.

We have enough time before the next nomination. The Nomination Committee, which is now composed of five members, including yourself, while it was composed of three in the past, will hold deeper-level discussions to select new Board members in addition to choosing the future CEO.

**Yamazaki:** It is wonderful that members are able to share the evaluation criteria and engage in discussion based on the shared criteria. I have already received reference materials about the candidates for the next CEO and Board members and I am conducting examinations. But I am a bit worried about the fact that no specific discussions have been held regarding how to ensure sufficient training is provided to the candidates.

**Kotani:** The Nomination Committee is also responsible for the training of the next management team, but the members of the restructured committee have not yet discussed at great length the training of the future management team members. I would like to provide the committee with an opportunity for such discussion as soon as possible.

At Nabtesco, the Human Resources Department implements training programs for young and mid-ranked employees for their development, but for the training of employees in higher positions, we have not yet undertaken the necessary full-scale examinations within the company. At Board meetings, it is sometimes pointed out that employees can develop themselves quickly by experiencing and overcoming hardships overseas, where they are all alone. In fact, if you are transferred to an affiliate of Nabtesco located outside Japan, you will assume a managerial position that is higher than your previous position in Japan and you will take more responsibility for the growth of the business. And there are no senior staff members around you whom you can immediately rely on, or junior staff members who understand you and work for you. If you have to work in such a situation, you will naturally develop into a “multi-player.”

**Yamazaki:** You have worked overseas yourself.

**Kotani:** I visited various regions in Asia as a salesperson and also got experience working as a senior vice president at an affiliate of Nabtesco in Indonesia. However, we do not have enough overseas positions involving managerial responsibilities to give all candidates for top management a chance to develop themselves. Also, it would be strange if “working overseas” were deemed to be a precondition for employees to assume the position of CEO or director, and we need to establish a system under which our people can have a range of experiences even if they don’t go abroad. It is certainly a difficult issue, and let me repeat

that we need to begin discussing how to develop a future management team as early as possible, as you have pointed out.

### Women's participation in society delayed in Japan compared with overseas

**Yamazaki:** Under the current medium-term management plan, you are committed to focusing on the solution of ESG issues, and work style reform and diversity promotion are regarded as important management themes. For these issues I feel I am very much expected to play a central role and really want to fulfill that role.

**Kotani:** For diversity, in particular for women's participation in society, I have long felt that Japan is different from other countries. As a salesperson, I visited or worked in ASEAN countries, such as Indonesia, as well as Taiwan and China, where women were working on the same level as men. The same applies to the United States and Europe, which I subsequently visited frequently. In these countries, female managers proactively contributed at meetings. A female representative of Boeing once asked me why participants in the meetings with Nabtesco were all men, and she also asked me, "Shall I give a talk to your female employees on how to make work and personal life compatible?" Based on these experiences, I have long aspired to make Nabtesco a company where women can demonstrate their abilities in a broader range of areas.

**Yamazaki:** I think the situation in the United States was also not very good in the past and it has improved over the past 30 years. A series of improvements have been made to change the situation.

**Kotani:** Yes, indeed. They have made steady progress in that country. Why can't Japan do the same thing? Recently, a decrease in the working-age population following a decrease in the birth rate has started to become a social problem in Japan, but if the participation rate of women in the labor force, which has been low, is increased, the shortage of workers will be mitigated. Also, from this perspective, diversity promotion is a management priority and I think it is urgently necessary for us to foster work style reform and remove hurdles that prevent women from working in a way that is comfortable for them.

### How to support women who want to move up the career ladder

**Yamazaki:** I read the results of the questionnaire survey conducted in 2015 targeting all female employees who had been working for Nabtesco for three years or longer, and found out that at Nabtesco female employees are on par with male employees in terms of length

of service. It means that many female workers continue to work for the company even after getting married and giving birth, and also while raising their children. In this respect, it can be said that Nabtesco provides women with a workplace where they can work comfortably.

However, regarding promotion, I feel it is a shame that there are few female employees who want to move up the career ladder at Nabtesco. In particular, female workers at the plants mostly want to remain in their current positions. It is of course up to individuals what they value, but I am still worried that they limit the scope of work that they can perform because there are still only a few female managers at the company who can be a role model for them. It might therefore be difficult for female workers to even aspire to become managers.

**Kotani:** I was briefed on the results of this questionnaire survey by the head of the Human Resources Department. Female employees who were highly motivated to get a promotion when they joined the company seem to go one of two ways after they got married and gave birth: those who want to be promoted while raising their children and those who give up on the idea of getting a promotion after their return to work. It is of course important to respect their individual ideas, but if the work environment discourages them from wanting a promotion, we need to think about how we can provide them with appropriate support.

**Yamazaki:** I think you need to make small improvements one by one. For example, if the working environment at the plants is improved a little bit from the perspective of women, it might have the effect of raising the awareness of on-site employees.

**Kotani:** If improvements are made to the working environment from a unique female perspective, it will also help reduce the risk of occupational accidents. I would like to follow your proposal at once.

**Yamazaki:** Small changes will encourage women to make more meaningful contributions at manufacturing facilities and eventually encourage more women to aim at becoming managers.

### It takes at least 10 years to change the way workers think

**Kotani:** In Japan's manufacturing industry, the percentage of female employees is generally low. At Nabtesco too, the rate hovers at around 10% on an unconsolidated basis. But the number of female employees has been increasing over recent years at our company, including those who have worked long enough to be promoted to managerial positions. I still think it will take some more time for women to achieve parity with men in terms of managerial positions at Nabtesco.

**Yamazaki:** It takes time to develop human resources and it is indeed difficult to change people's way of thinking. I therefore think it is necessary to make plans with 10-year intervals.

**Kotani:** The number of female managers might increase to some extent at our company over the next four to five years, but in the end it will take a total of around 10 years from now for female employees to be promoted to even higher positions. I think that they will find their jobs more interesting as they assume higher positions and get more empowered.

**Yamazaki:** I myself did not set an ambitious goal from the beginning. I joined the organization that is presently JAXA as an engineer. I found the job interesting and worked to get a higher position so I could do something I found even more interesting.

**Kotani:** You are conducting a range of activities to foster the empowerment of women, including working as the Chirperson of Japanese Rocket Society "Sorajo" board and an ambassador for the Women's Initiative in Developing STEM Career (WINDS). What are the topics that often come up in discussions in these activities?

**Yamazaki:** In fact, today I also had a lunch meeting on women's empowerment in business, which was held by the APEC Business Advisory Council. At the meeting, I talked to other participants about how to make the social environment more conducive to women's empowerment.

In meetings like this, it is often pointed out that in Japan women tend to be stereotyped and traditional values are hard to shift. I have said that it is difficult to change the way people think and it is therefore important to raise the awareness of the younger generations, including elementary school students. Nabtesco is supporting the "Chikyu Kyoshitsu" ("class on the Earth") environmental education project for elementary school students held by Japanese newspaper company, and I believe conducting such an activity in a steady

manner will contribute to changing how people think about their work.

**Kotani:** Apart from participating in grassroots activities such as the "Chikyu Kyoshitsu" project, Nabtesco needs to enhance its ability to convey messages. Even if we conduct quite valuable activities, it will be meaningless if they are not widely recognized by the public.

**Yamazaki:** If you publicly declare that you will make your workplaces more comfortable, it might have a positive impact on all employees, including women. Even when you convey a message to the world outside the company, it will also have an impact on those inside the company.

### How to adopt and evaluate diverse work styles

**Kotani:** Last year, the CEO once again declared that the company would foster work style reform, although we have been repeatedly mentioning this reform for several years now. Under the slogan of changing our way of thinking, habits and future, we have also established a new organization to promote the reform. Please tell me your opinion about such activities.

**Yamazaki:** It is important to approve a range of work styles, which will help promote diversity and women's empowerment. For example, you could adopt a system that allows employees to serve as managers even if their working hours are rather limited. You can also encourage employees to work from home as an effective means to foster reforms. Nabtesco has already introduced a work-from-home system, but how is it actually utilized?



**Kotani:** In the manufacturing industry in which we operate, there are many workplaces where it is difficult to introduce a work-from-home system, and we are still in the trial stage of implementing such a system. However, at the head office, about 10% of employees reportedly work from home. There is no doubt that it is a waste of time and effort for employees to commute to workplaces in the Tokyo metropolitan area during rush hour, and adopting a work-from-home system might mean a lot for us. However, we need to talk more about introducing diverse work styles to the entire company, including discussing the performance evaluation methods.

**Yamazaki:** The introduction of diverse work styles might make the personnel evaluation and wage systems more complex and impose more burdens on managers. I still think the company should take on this challenge.

**Kotani:** We are engaged in B-to-B business, in which we cannot make achievements in the short-term. What we are tackling now will bring about results in several months at the earliest and in as many as three to four years in some cases. How we evaluate these achievements is a difficult issue. However, as the CEO has said, we need to think about “how we can make our jobs easier” and I feel that our people are steadily moving in this direction.

### With a focus on technology and human resources Wanting to contribute to greater corporate value

**Kotani:** So, finally, could you tell me about your future aspirations?

**Yamazaki:** I have been serving in this position for two years, and have a deeper understanding of the businesses conducted by Nabtesco. It is now clear to me that two of the most important capitals that give Nabtesco tremendous corporate value are its technology and human resources. For even greater corporate value, I want to support the company in implementing measures for the long-term growth of its technological capabilities. As for human resources, I would like to contribute to enhancing the company's capacity for communication. By proactively publicizing Nabtesco's work style reform and diversity promotion among the broader population, I want to encourage employees to raise their own awareness while increasing the company's public profile as a company whose employees are highly motivated. I also want to have a meeting with female employees of Nabtesco, whom we have mentioned in today's meeting.

**Kotani:** In my capacity as the chairperson of Board meetings, I should ensure that outside directors, who are experts in different fields, can freely express their opinions at the meetings. Outside directors ask questions and give opinions beyond the framework of the conventional wisdom inside the company, which is certainly scary but also



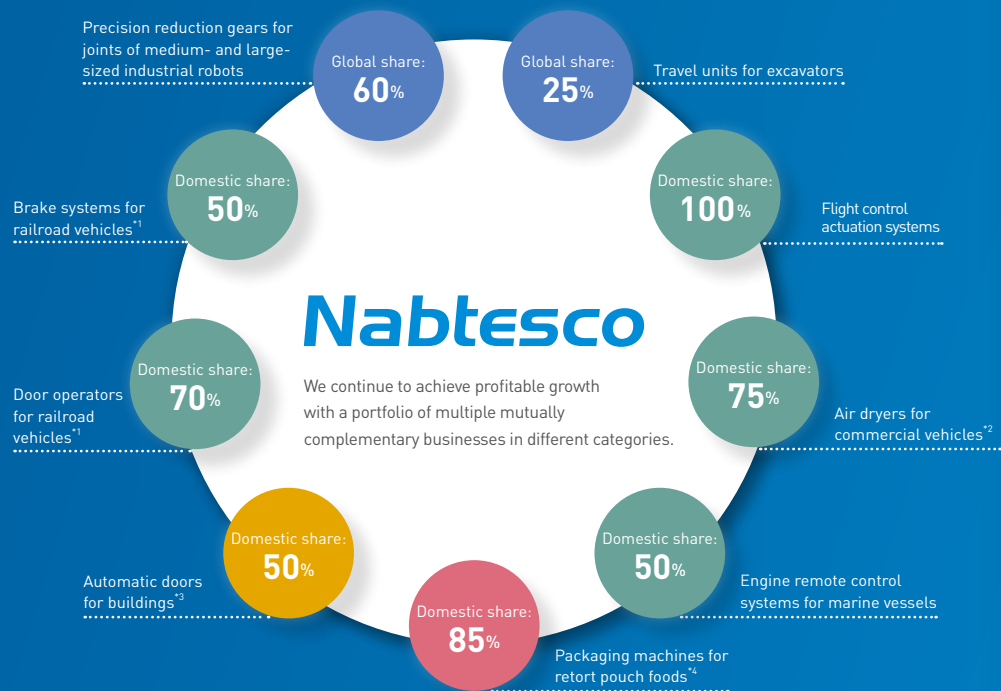
provides us with opportunities to review our way of thinking. Moreover, outside directors make comments based on their very unique expertise, and I would like to continue making efforts to make effective use of their comments.

Thank you very much for sparing your precious time to attend this meeting today.

By providing products and services to customers, the Nabtesco Group will contribute to solving social challenges through business and strive to provide value on a continuous basis.

## Creation of economic value

With products that enjoy large market shares, we will fulfill our responsibilities for ensuring stable supply in each market.



\*1 Nabtesco's estimate based on "Statistics Data of Production (2016)," Japan Association of Rolling Stock Industries  
 \*2 Nabtesco's estimate based on "Large and Medium-Sized Freight Vehicle Unit Sales (2016)," Japan Automobile Dealers Association  
 \*3 Nabtesco's estimate based on "Number of Automatic Doors Installed (2016)," Japan Automatic Door Association  
 \*4 Nabtesco's estimate based on "Production Volume of Retort Package Food (2016)," Japan Canners Association and the 2016 survey by Tokyo Shoko Research, Ltd.

## Main business models

### Business model of the Component Solutions segment

Maintain competitive advantage through product development leveraging information-gathering abilities as the industry leader

### Business model of the Transport Solutions segment

Provide continuous and stable service including MRO (maintenance, repair and overhaul) for transport equipment with a long operating life

### Business model of the Accessibility Solutions segment

Provide a wide range of services by establishing an extensive sales network such as by adding sales companies through M&A



We will identify further needs (social challenges) by leveraging our information-gathering abilities as a company with leading market share, and provide high value-added services through motion control technology.





# PRECISION REDUCTION GEAR BUSINESS



To ensure the medium- to long-term growth of the Precision Reduction Gear Business, we will further enhance our stable supply systems established at our Japanese and Chinese plants to steadily meet the increased needs for automation in the automotive and general machinery industries, thereby helping manufacturers save labor and increase productivity at their sites.

Managing Executive Officer, President, Precision Equipment Company  
**Shinji Jyuman**

|   |  |
|---|--|
| <b>Strength</b> <ul style="list-style-type: none"> <li>• Product quality</li> <li>• Ability to develop technologies</li> <li>• Relations of trust with customers</li> <li>• Flexible supply system</li> </ul> | <b>Opportunity</b> <ul style="list-style-type: none"> <li>• Shortage of labor</li> <li>• Growth of needs for labor saving and automation against the backdrop of a rise in personnel expenses</li> </ul> |
| <b>Weakness</b> <ul style="list-style-type: none"> <li>• High level of dependence on demand for industrial robots</li> </ul>  | <b>Threat</b> <ul style="list-style-type: none"> <li>• Inability to maintain technological lead over competitors in emerging markets</li> </ul>  |

## Sources of Strength

### Motion Control Technology, Ability to Develop Applications and Technologies

The compact and lightweight Precision Reduction Gear RV, which boasts excellent durability and high positioning accuracy, serves as the source of Nabtesco's competitiveness. The high product performance is supported by the competencies the company has accumulated in responding to customer needs.

### Relations of Trust with Customers

Nabtesco launched its first precision reduction gears on the market in 1986, and since then its global market share of precision reduction gears for industrial robots has grown to about 60%. Although the basic patents possessed by the company for the products expired in 2006, the high market share has been maintained as a result of conducting business with the greatest importance placed on customer satisfaction and building relations of trust with our customers.

### Stable Supply System

In anticipation of a high demand for precision reduction gears, Nabtesco has increased the production capacity of its domestic plants and has launched new production sites in China to ensure the stability of its supply system. We have also been implementing measures for increasingly higher quality and faster delivery on a continual basis, and are able to make flexible responses to changes in demand, which adds another competitive edge to Nabtesco.

## Business Environment (Opportunities and Risks)

According to the forecast made by the International Federation of Robotics, in the medium term, the global market of industrial robots (including small-, medium-, and large-sized robots) will grow at the annual rate of 15%. In light of the fact that the growth rate of the market for small robots is relatively high with demand beginning to increase, the annual growth rate of the market for medium and large robots is expected to be 5 to 10%. By region, the growth rate will be around 25% in China, where the need for unmanned, automated operations has seen a remarkable increase. In fields other than industrial robots, we are promoting sales of precision reduction gears for general industries and new-type actuators

**REFERENCE**

Operating Results by Business Segment  
(1) Component Solution segment (CMP)  
Page 67

### MAIN PRODUCTS



#### Precision Reduction Gears: RV Component Type

The Precision Reduction Gear RV are compact and lightweight with outstanding rigidity and overload resistance. With these features, the reduction gears serve to provide excellent accelerating capabilities, smooth motion, low backlash, and accurate positioning precision, leading to enhanced robot controllability.

### MAIN PRODUCTS



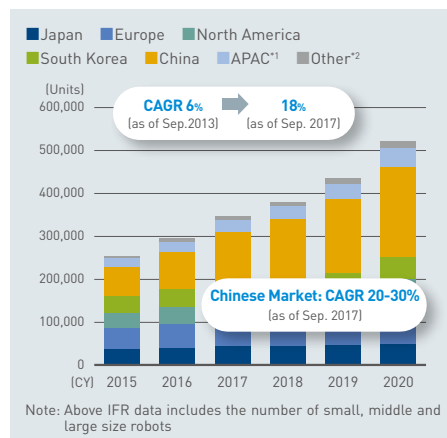
#### Gear Head Type "RD Series"

This is a gear head product based on the Precision Reduction Gear RV with the emphasis on ease of use. The product is easily installed on servomotors and features airtight grease sealing.

that integrate precision reduction gears and servomotors in China, Europe and other regions.

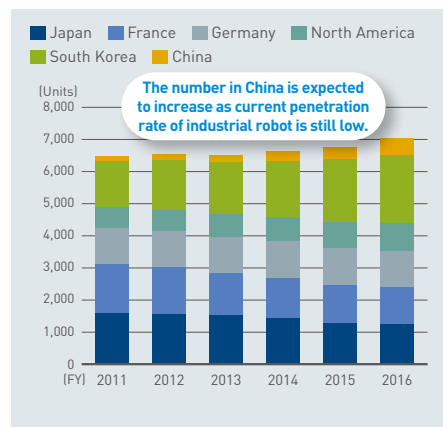
Meanwhile, demand for industrial robots is influenced by changes in capital expenditure. Therefore, the Group is subject to the risk that we might face drastic changes in demand depending on end customers' capital investment policies. We also regard competitors' catch-up in technology as a potential risk.

### Worldwide Annual Shipment of Industrial Robots



Source: International Federation of Robotics (IFR)  
 \*1 APAC=Asia /Australia [Total]-China-Japan-Korea  
 \*2 Total=Total-North America-Asia/Australia [Total]-Europe [Total]

### The Number of Multipurpose Industrial Robots per 10,000 Persons Employed in Automotive Industry



Source: International Federation of Robotics (IFR)

we are enhancing our production capacity and increasing our productivity with automation and labor saving at our manufacturing facilities in Japan while improving the production facilities in China for the maintenance and improvement of our stable supply system to meet demand that is expected to expand on a medium- to long-term basis. Furthermore, in the fields other than industrial robots, we are going to utilize our long-established technological expertise to promote the sales of new products and to develop new markets.

## > FACT SHEET

### Major customers

FANUC, YASKAWA Electric, Kawasaki Heavy Industries, KUKA Roboter, ABB Robotics and others

### Production base (as of the end of December 2017)

Tsu City, Mie Prefecture, Japan / Jiangsu Prefecture, China

### Market share

Precision reduction gears for the joints of medium- to large-sized industrial robots: 60% share of the world market

### History of business development

In 1976, Teijin Seiki began selling reduction gear-equipped hydraulic motors for use in construction machineries. Subsequently, following the maturation of this market, the company began to focus its attention on industrial robots, which would provide a new growth market where the company could make use of its unique reduction gear technology. The company then proceeded with the development of reduction gears for robot joints and began selling precision reduction gears for industrial robots in 1986. We now have a 60% share of the world market for precision reduction gears used in the joints of medium- to large-sized industrial robots. In 2015, we commenced building a new production base for precision reduction gears in China, which now offers the world's largest industrial robot market. This base will start production at the beginning of 2016.

- 1986** Commenced launch of the Precision Reduction Gear RV Series.
- 1991** Built the Tsu Plant for the manufacture of precision reduction gears.
- 2015** Began the construction of a production base in China (to start production in early 2016)
- 2017** Total cumulative production of precision reduction gears reached 7 million units.

## Measures for Medium- to Long-Term Growth

For the medium- to long-term growth of the company, we will further deepen relations of trust with our existing customers by responding to any new needs they have. At the same time, we will strive to find new customers, work for higher quality and faster delivery so that we will not miss any opportunities that come as a result of the increased demand for industrial robots. Moreover,

### MAIN PRODUCTS



#### Gear Head Type (Table Type) "RS Series"

This table-type series is designed for accurate positioning. The low-profile products with large and hollow shafts are easy to use and are therefore widely adopted for index tables as well as for pivots of various devices.

### MAIN PRODUCTS



#### Compact Actuator "AF Series"

This new product possesses the features of high accuracy, rigidity and reliability, which have been inherited from Precision Reduction Gear RV. Directly connected to servomotors, it serves to provide a compact drive part and usability by eliminating the need for embedding the servomotors into reduction gears.



Web

Precision Reduction Gears

<https://www.nabtesco.com/en/products/robot.html>



# HYDRAULIC EQUIPMENT BUSINESS



We will make progress with technological innovations to meet the need for ICT in construction machinery, which supports infrastructure development, while honing our global competitiveness and hydraulic system technologies in our pursuit of sustainable growth.

Executive Officer, President, Power Control Company  
**Kazumasa Kimura**

| Strength   | Opportunity  |
|--|--|
| <ul style="list-style-type: none"> <li>• Wide product lineup</li> <li>• Highly competitive products</li> <li>• Global production system</li> </ul> | <ul style="list-style-type: none"> <li>• Recovery of demand for construction machinery</li> <li>• More use of ICT in construction machinery</li> </ul> |
| Weakness   | Threat   |
| <ul style="list-style-type: none"> <li>• Ability to develop system products</li> </ul>   | <ul style="list-style-type: none"> <li>• Emergence of competitors in developing countries</li> <li>• Commodification of the products</li> </ul>        |

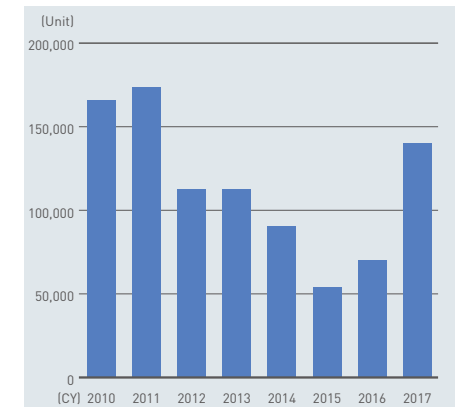
## Sources of Strength

Nabtesco's traveling units "GM Series" for crawlers, which integrate a hydraulic motor, a reduction gear, a parking brake and other components in one unit, feature excellence in durability and reliability in addition to great power generation efficiently, while remaining compact. Since the start of mass production in 1977, the GM series, one of the major products, have been highly appraised by customers, helping us to enhance the Nabtesco brand. With the improvement of machine processing technologies, the Tarui Plant has achieved a high level of automation during the manufacturing process, which contributes to the continuous generation of competitiveness.

## Business Environment (Opportunities and Risks)

China, the world's largest construction machinery market, has been gradually recovering from sluggish demand condition, which has driven favorable sales of products used in hydraulic excavators. In the construction machinery market, a new trend towards value creation, such as the incorporation of hybrid systems and ICT, will also help us find new business growth opportunities. Nonetheless, if the growth rate of public investments, which support the demand for construction machinery in China, drops and leads to the excessive supply of hydraulic excavators, there is a higher chance of failing to meet our targets on time.

Sales of Excavator in China



Source: China Construction Machinery Association

**REFERENCE**

Operating Results by Business Segment [1] Component Solution segment (CMP)  
Page 67

**MAIN PRODUCTS**

**Traveling Unit for Crawlers**

This series is used as a traveling unit for crawlers and the wheels of excavators, crawler drills, cranes, and aerial work platforms.

**MAIN PRODUCTS**

**Control Valve for Mini Excavators**

This product is a sectional type multi-control valve developed specially for mini excavators, and is ideal for various needs such as action control of excavators. The series is popular for its compact size, versatility, and wide ranging product lines. It has captured a large share in Japan.

**MAIN PRODUCTS**

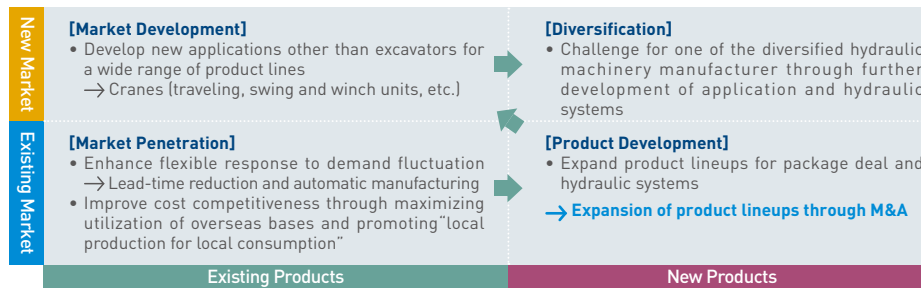
**Swing Unit for Hydraulic Excavator**

The swing unit used in hydraulic excavators consists of a highspeed motor and planetary reduction gear unit. Its compact design allows the unit to have fewer components and to excel in quietness. In addition to units for hydraulic excavators, swing units are also used in small sized cranes and winch motors for aerial working platforms.

## Measures for Medium- to Long-Term Growth

In the Hydraulic Equipment Business, we completed the restructuring of our production bases in China in FY2015. To further enhance our global production system, we will optimize production at our bases in Japan, China and Thailand to respond flexibly to changes in demand in the construction machinery market. Further, we will develop new markets where we can fully utilize our strengths, while advancing technological innovations in response to the incorporation of ICT in construction machinery. Also, based on the product lines expanded through the acquisition of Hyst Corporation, we will foster a shift from selling components to cross-selling of hydraulic equipment and further proposals of optimal hydraulic systems and generate greater added value.

### Growth Matrix of Hydraulic Equipment Business of Nabtesco



### Amplification of Product Lineups for Excavators through M&A

|            | Mini Excavators |             |       |        | Medium- to Large-Sized Excavators |             |       |        |
|------------|-----------------|-------------|-------|--------|-----------------------------------|-------------|-------|--------|
|            | Traveling units | Swing units | Pumps | Valves | Traveling units                   | Swing units | Pumps | Valves |
| Nabtesco   | ●               |             |       | ●      | ●                                 |             |       |        |
| Hyst Corp. |                 | ●           | ●     |        |                                   | ●           | ●     | ●      |

### MAIN PRODUCTS



#### Yaw Drive

This drive unit has high rigidity and high load performance based on the Rotor Vector (RV) reduction gear technology. It can be used under severe natural conditions, for example, in both low- and high-temperature areas as well as areas prone to salt damage. The low backlash feature helps prolong the field life of wind turbines.



Web

#### Hydraulic Equipment

<https://www.nabtesco.com/en/products/powershovel.html>

## > FACT SHEET

### Major customers

Komatsu, Kobelco Construction Machinery, Hitachi Construction Machinery, Sumitomo Construction Machinery, Kubota, YANMAR, Volvo, JCB, Sany, XCMG, Liu Gong and others

### Production base (as of the end of December 2017)

Tarui-cho, Fuwa-gun, Gifu Prefecture, Japan / Kobe city, Hyogo Prefecture, Japan / Shanghai, China / Chonburi, Thailand

### Market share

Traveling units for hydraulic excavators: Approx.25% global market share

### History of business development

Both Teijin Seiki and NABCO were engaged in the Hydraulic Equipment Business. NABCO began conducting such business back in the 1930s, offering a range of products, not only for construction machines and special vehicles, but also for general industrial equipment. The company also developed small, multiple-spool control valves for use in road sweepers produced in Japan, and these valves have been developed into our present control valve products.

Teijin Seiki began conducting business by establishing the Tarui Plant in 1961. Its hydraulic motors were not highly competitive despite being core products, and the company worked to develop a new product independently. The traveling units "GM Series" that was thus developed provided the four functions necessary for the driving unit of hydraulic excavators (i.e. hydraulic motor, reduction gear, valve and parking brake functions), and was also compact enough relative to the width of an excavator crawler shoe. The company then successfully commenced mass production of this innovative product. Further, the reduction gear technology developed for hydraulic motors led to the development of Precision Reduction Gear RV to control the joints of industrial robots.

Subsequently, we established a production base in China in 1996 and another in Thailand in 2008, and have resulted in fostering overseas business expansion and increasing our global market share in the business of traveling units for hydraulic excavators to 30%. In 2015, we acquired Hyst Corporation, the hydraulic equipment division of TOSHIBA MACHINE, with a view to further expanding our product lines and developing new hydraulic systems.

**1937** Manufactured hydraulic pumps for airplanes in the national defense field.

**1949** Commenced manufacture and sales of hydraulic equipment.

**1961** Opened the Tarui Plant for the manufacture of hydraulic equipment and start the Hydraulic Equipment Business.

**1970** Opened the Nishi Kobe Plant (presently Seishin Plant) for the manufacture of hydraulic and pneumatic equipment.

**1977** Commenced mass production of the "GM-series" traveling units. By using the reduction gears technology, developed the Precision Reduction Gear RV series for use in industrial robots.

**1996** Established a joint venture named Shanghai Teijin Seiki Co., Ltd. (presently Shanghai Plant).

**2008** Established Nabtesco Power Control Co., Ltd. in Thailand.

**2015** Acquired Hyst Corporation, the Hydraulic Equipment Business division of TOSHIBA MACHINE CO., LTD.

**2016** Fully Absorbed Hyst Corporation



# RAILROAD VEHICLE EQUIPMENT BUSINESS



Nabtesco supplies brake systems and automatic door systems to be used as core components in railroad vehicles, for which we must ensure a high level of safety and stability. Capitalizing on the technologies developed in the difficult Japanese market, we will proactively expand our business to overseas markets that have high growth potential.

Managing Executive Officer, President, Railroad Products Company  
**Shigeru Naoki**

| Strength   | Opportunity   |
|--|---|
| <ul style="list-style-type: none"> <li>Ability to customize products to meet the needs of customers</li> <li>High reliability proven by past achievements in the Japanese market</li> <li>Expansion of business in the Chinese market</li> </ul> | <ul style="list-style-type: none"> <li>Increase in the number of new railway line projects in emerging markets</li> <li>Demand driven by the updating of railroad vehicles in Europe</li> <li>Overseas business expansion by Japanese vehicle manufacturers</li> </ul>                |
| Weakness   | Threat  |
| <ul style="list-style-type: none"> <li>Delayed overseas expansion</li> </ul>   | <ul style="list-style-type: none"> <li>Shrinkage of the domestic market due to a decrease in the population</li> <li>Increased requests for conformity to European standards in projects implemented in emerging markets</li> <li>Progress of domestic production in China</li> </ul> |

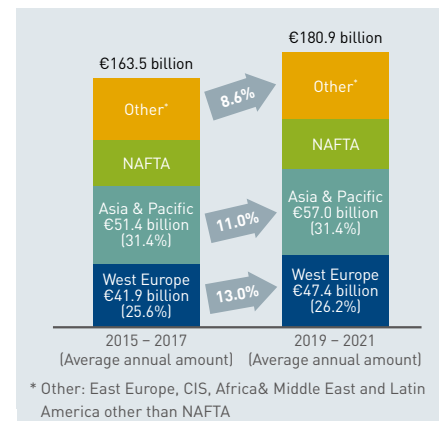
## Sources of Strength

Since receiving the first order for our air brake equipment from the former Japanese Ministry of Railways in 1925, we have been accumulating technologies through the provision of highly reliable brake systems, and have contributed to, for example, space-saving by developing brake units comprising multiple brake mechanisms. Railroad vehicle equipment, a foundational piece of social infrastructure, needs to be highly reliable and safe. We have been working to increase customer satisfaction over many years and we have built solid relationships of trust with our customers. This is one of our strengths and it aids our ability to provide customers with continuous MRO (maintenance, repair and overhaul) services.

## Business Environment (Opportunities and Risks)

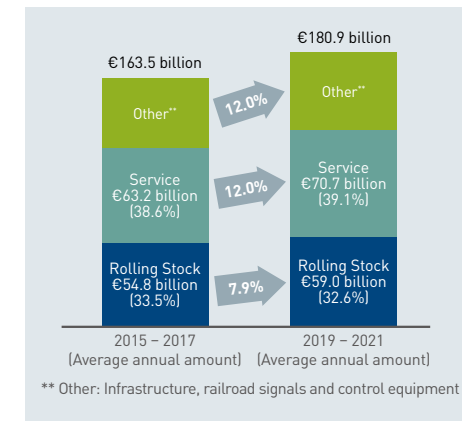
In the Japanese market, we expect that demand will continue to be stable mainly due to the need to replace old railroad vehicles with newer models. In the Chinese high-speed train

### Market Size of Railroad Industry (by Region)



Source: UNIFE

### Market Size of Railroad Industry (by Segment)



### REFERENCE

Operating Results by Business Segment (2) Transport Solution segment (TRS) Page 67

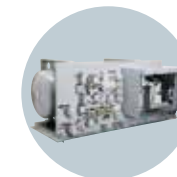
### MAIN PRODUCTS



#### Unit Brakes

The unit brake incorporates the integral functions of a conventional foundation brake rigging and a built-in automatic slack adjusting mechanism. Compared to existing foundation brake units, the product offers reduced size and weight, simplified maintenance, greater noise protection, and heightened consistency of braking efficiency.

### MAIN PRODUCTS



#### Brake Operating Units for Railroad Vehicles

This system is configured as a unit with a brake operating device that plays the core role in the electric commanding air brake system and the air brake valves that provide the brake cylinder pressure output for service and emergency braking.

market, the risk of a shift to domestic production is becoming obvious. In the Chinese subway market, however, demand for greater convenience in daily life and the solution of environmental problems such as pollution will continue to expand. In Europe, we expect that demand will continue to grow steadily, while in the Southeast Asian market, Japanese railroad vehicle manufacturers will bolster their activities to obtain more orders, which will provide us with new business opportunities.

## Measures for Medium- to Long-Term Growth

In order to conduct business in an effective and efficient manner in highly promising markets identified around the world, we will expand our business system in an all-encompassing manner, fostering the optimization of our development, procurement and production activities in the three regions of Japan, China and Europe. Particularly in the world's largest railroad market of Europe, we will work to obtain new orders and certifications through our local bases, aiming to expand the business in the region during the period of the Medium-term Management Plan.

We will also promote sales of products targeting subway trains in China by making use of our local sales network as well as results and technologies accumulated in Japan. In addition we will continue focusing on increasing customer satisfaction and expand the MRO business both in Japan and China based on our relations of trust with our customers. Moreover, in the second-hand vehicle market in Southeast Asia, we will continue our efforts to secure more orders in the MRO business, while extending technological support and supplying maintenance parts to railroad companies through a newly established after-sale service base in Thailand, thereby contributing to the local establishment of railroad infrastructures.

### MAIN PRODUCTS



#### Door Operators for Railroad Vehicles

Offering a tremendous variety of door operating units, our product lineups comprises door operators that meet the demands of a wide diversity of applications from high-speed trains including the Shinkansen to commuter trains and ultra-low-floor light rail vehicles (LRVs).



Web

Railroad Vehicle  
Equipment

<https://www.nabtesco.com/en/products/railway.html>

## > FACT SHEET

### Major customers

Japan Railway (JR) companies, private railway companies, Kawasaki Heavy Industries, Hitachi, Ltd., railway related companies in China and others

### Production base (as of the end of December 2017)

Kobe City, Hyogo Prefecture, Japan / Jiangsu Prefecture, China / Piedmont, Italy

### Market share

Brake systems: Approx. 50% domestic market share

Door opening systems: Approx. 70% domestic market share

### History of business development

In 1925, we received an order for its air brake systems from the Ministry of Railways, and this marked the beginning of our Railroad Vehicle Equipment Business in Japan.

In the 1960s, Shinkansen bullet trains began running in time for the Olympic Games in Tokyo, and the urban railway networks were increasingly improved for transportation at higher speeds and in greater quantity. In response, we developed highly reliable automatic train control systems to ensure safety even during high-speed operations, as well as electric command air brake systems. We continued to expand the business as subway systems were successively constructed to mitigate traffic congestion in urban areas.

We also changed our business model from the development of hardware products to making proposals to individual customers in order to expand our business.

In and after the 2000s, we expanded our market share in Chinese and Taiwanese high speed train and subway businesses. Further, in 2013, we acquired an Italian railroad vehicle door manufacturer (presently Nabtesco Oclap S.r.l) to spearhead business in Europe and around the globe.

- 1925** Received the first order for air brake equipment from the former Japanese Ministry of Railways. Commenced manufacturing and sales of air brake systems for railroad vehicles.
- 1998** Relocated and opened the Kobe Plant for the manufacture of railroad vehicle equipment.
- 2011** Established Jiangsu Nabtesco KTK Railroad Products Co., Ltd.
- 2012** Acquired International Railroad Industry Standard (IRIS) Certification.
- 2013** Acquired Oclap, an Italian railroad equipment manufacturer, and established Nabtesco Oclap S.r.l. Received an order for pneumatic door systems for train cars under the Intercity Express Programme (IEP) implemented in the United Kingdom.
- 2014** Became the first Japanese company to be certified as a global supplier of doors for train driving cabs and cars by Bombardier Transportation.
- 2015** Received an order for passenger doors for the Rennes subway line in France from Siemens AG.
- 2017** Established Nabtesco Service Southeast Asia Co., Ltd., in Thailand as a base for after-sales service to customers in Southeast Asia.



# AIRCRAFT EQUIPMENT BUSINESS

In the growth market of civil aircraft, we will foster innovations for production, technologies and after-sale service to provide customers with unique value for our sustainable growth. Moreover, we will make maximum use of the new manufacturing facilities now under construction to increase the supply of highly reliable products that support the safety of aircraft with lower environmental impact. Through these measures we will also contribute to local communities.



Executive Officer, President, Aerospace Company  
**Norimasa Takagi**

| Strength  | Opportunity  |
|---|--|
| <ul style="list-style-type: none"> <li>Know-how and technologies accumulated over 40 years</li> <li>Ability to maintain close relationships with customers</li> </ul> | <ul style="list-style-type: none"> <li>Growing market of civil aircraft</li> <li>Development of new aircraft by major customers</li> </ul>   |
| Weakness  | Threat   |
| <ul style="list-style-type: none"> <li>Past track records regarding the manufacture of systems and mechatronic products</li> </ul>                                    | <ul style="list-style-type: none"> <li>Political changes and deceleration of the world's economic growth</li> <li>Participation of new companies in the after-sale market</li> </ul> |

## Sources of Strength

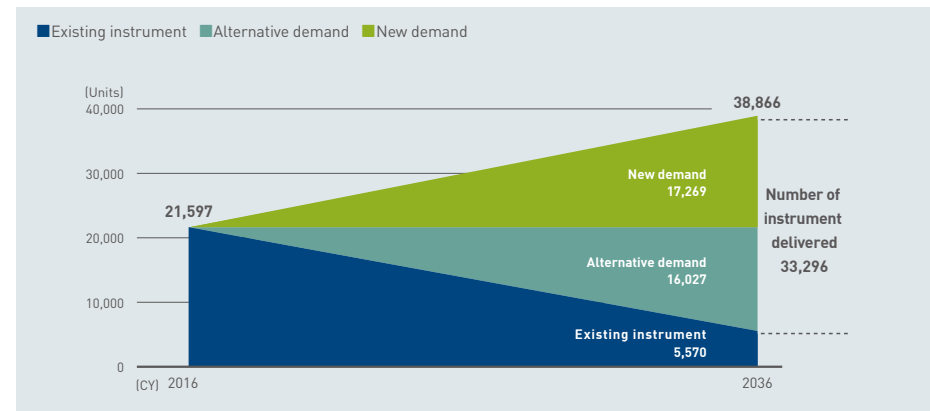
### Motion Control Technology and Technological Development Ability

We have long accumulated know-how and technologies by meeting the needs of customers in both private and national defense sectors, which are sources of strength for Nabtesco. We have developed the world's highest-level production technologies and expertise in the aircraft market, which prioritizes safety, and using these technologies, we are developing a highly reliable flight control actuation system (FCAS).

### Relations of Trust with Customers

We have been providing the world's aircraft manufacturers with the best solutions for nearly 40 years, always taking the viewpoint of customers and a proactive attitude. The close relations of trust we have built with customers provides us with the strength to establish ourselves as the world's first-class supplier of FCAS.

### Forecast for passenger aircraft demand



Source: Japan Aircraft Development Corporation

**REFERENCE**

Operating Results by Business Segment (2) Transport Solution segment (TRS) Page 67

### MAIN PRODUCTS



#### Flight Control Actuation System

Nabtesco is the leading Japanese manufacturer of this system, which controls the aircraft's attitude. This system is used to move the surface such as the ailerons on the main wings and elevators on the tail surface. Nabtesco has a solid reputation as a global leader in the commercial aircraft market.

### MAIN PRODUCTS



#### High Voltage Electric Power Distribution Unit

This product has been newly developed for Boeing 787 aircraft requiring more electric power than other existing aircraft, and is equipped with an efficient liquid cooling system for motor controllers and transformers. This product contributes to not only aircraft weight reduction but also improvement of aircraft maintenance by reducing electric wires in the aircraft significantly.



## Manufacturing System

We have been continuously taking measures to attain higher quality and productivity at two plants—one in Japan and the other in the United States.

## Business Environment (Opportunities and Risks)

In the private sector, the number of operating airplanes will double over the next twenty years. The budget for national defense will be at a stable level, although it might slightly increase. On the other hand, risks exist caused by stagnant growth of the world economy and political changes.

## Measures for Medium- to Long-Term Growth

By communicating closely with customers based on our relations of trust, we will analyze their “needs and wants” and propose highly competitive and high-quality solutions by concentrating our resources appropriately. We will also improve our technological development ability to deliver more value to customers and expand the capacity of our manufacturing facilities in Japan and the United States to grasp the business opportunities provided by demand in the aircraft market, which will rapidly expand following the start of new mass production programs by aircraft manufacturers in and after 2017.

Moreover, we will undertake actions while considering the provision of value across the value chain, and enhance measures in the after-sale market, while keeping the importance of achieving “profitable growth” in mind.



Granted the 2016 Boeing Supplier of the Year in the (Environment) category. We are honored to receive the Supplier of the Year award for the third time in four years.



Web

Aircraft Equipment

<https://www.nabtesco.com/en/products/aircraft.html>

## > FACT SHEET

### Major customers

Boeing, Mitsubishi Aircraft Corporation, Kawasaki Heavy Industries, Mitsubishi Heavy Industries, IHI, the Japanese Ministry of Defense, airline companies and others

### Production base (as of the end of December 2017)

Tarui-cho, Fuwa-gun, Gifu Prefecture, Japan / State of Washington, the United States

### Market share

FCAS: Approx.100% Market share for domestically-produced aircraft

### History of business development

The history of our Aircraft Equipment Business dates back to the period during the war, when we began manufacturing landing gear for airplanes. After the end of the war, we introduced overseas technologies and adopted a range of element technologies. We also acquired the know-how necessary for the design, development, and production of aircraft equipment.

We subsequently worked to enter the overseas civil aircraft market, and began dealing with Boeing in 1976. In 1990 we secured a contract to supply flight control actuators (FCAs) to Boeing for use in the B777, thereby receiving the world’s first order for FCA systems for use in civil aircraft. This success helped us to improve our position in the global market and also promote a growth afterward.

Since 2014, we were awarded Boeing Supplier of the Year Awards for the third time in four years and we have also received the Boeing Performance Excellence Award for three straight years since 2015, being acclaimed for our performance improvement of QCDS (Quality, Cost, Delivery and Service). We have continued to steadily receive orders and supply FCAS and services for various airplanes and expand the business.

**1944** Commenced production in Japan for airplanes in the national defense field.

#### Latter half of the 1970s

Received orders for products including landing gear hydraulic actuators for the B737 Classic.

**1976** Established Teijin Seiki America, Inc. (presently Nabtesco Aerospace, Inc.) in the State of Washington.

**1979** Received orders for spoiler actuators for the B767 and for aileron actuators for the B757.

**1990** Received an order for FCAS for the B777.

**2006** Received an order for high-voltage electric power distribution unit for the B787.

**2006** Received an order for aileron actuators/spoiler actuators for the B747-8.

**2008** Received an order for the FCAS for the MRJ (Mitsubishi Regional Jet).

**2012** Total cumulative delivery of FCAS for the B777 reached 1,000 units.

**2013** Received an order for spoiler actuators for the 737MAX, the latest model in the B737 family.

**2014** Received 2013 Boeing Supplier of the Year Award.

**2015** Received an order for FCAS for the B777X, the B777 next-generation model.

**2016** Received 2015 Boeing Supplier of the Year Award.

Expanded the Gifu Plant by adding the buildings for the manufacture of precision part and for surface treatment.

**2017** Received the 2016 Boeing Supplier of the Year Award.

Received the 2016 Boeing Performance Excellence Award.

**2018** Received the 2017 Boeing Performance Excellence Award.



# COMMERCIAL VEHICLE EQUIPMENT BUSINESS

As Japan's No.1 manufacturer of air brake systems for commercial vehicles, we will help meet the need for safe, environment-friendly, labor-saving transportation by truck, which is increasing in line with the expansion of transportation volume over the long term. We will expand to other world markets by pursuing further utilization of competitiveness by utilizing Japan, Europe and Asia production bases and expanding our product lineup.



President, Nabtesco Automotive Corporation  
**Michio Ogawa**

|  |   |
|--|---|
| <b>Strength</b> <ul style="list-style-type: none"> <li>Reliability of product safety backed by the accumulation of technologies over 80 years</li> </ul> | <b>Opportunity</b> <ul style="list-style-type: none"> <li>Ability to work within emerging markets with high growth potential</li> </ul> |
| <b>Weakness</b> <ul style="list-style-type: none"> <li>Lack of product variation at a level comparable with that of competitors</li> </ul>               | <b>Threat</b> <ul style="list-style-type: none"> <li>Competition in the market with leading European companies</li> </ul>               |

## Sources of Strength

The technologies and brand power developed to meet demand for high quality products by Japanese automakers are Nabtesco's strengths. Nabtesco became the first company to develop an air dryer in Japan, and our air dryers, which are highly safe and environment-friendly, are now one of the best known products in our Commercial Vehicle Equipment Business. We conduct business globally by making use of our production bases outside of Japan, and that is also a source of our strength.

## Business Environment (Opportunities and Risks)

In Japan, the volume of freight movement is increasing, driven by the government's economic measures and growing e-commerce business. In addition, the environmental law enforced ten years ago stimulated a replacement cycle for trucks. This cycle has supported and will likely support the continuous and steady demand for new trucks. In emerging countries, the demand is anticipated to grow by around 5% annually over the medium-term. Nonetheless, in ASEAN market where Japanese truck manufacturers hold a large share, the price competition between European automakers and those of emerging countries is intensifying and considered a risk that can affect the Group.

## Measures for Medium- to Long-Term Growth

By creating added value and enhancing the quality management system for higher competitiveness, we will continuously seek to increase customer satisfaction, thereby maintaining our share in the Japanese market. Also, we will make more use of our bases in Japan and overseas, and foster local procurement with an eye to securing all opportunities provided by robust demand in the highly promising ASEAN market, while also receiving more orders in India through proactive marketing activities.

Furthermore, through acquisition of European compressor makers, we aim to not only achieve early commercialization of a high value-added system by combining an air dryer and compressor, both of which are our most popular products, but also generate sales synergy as we build stronger customer relationships in Europe.

**REFERENCE**

Operating Results by Business Segment [2] Transport Solution segment (TRS)  
Page 67

### MAIN PRODUCTS



#### Air Dryers for Commercial Vehicles

This product removes any water or oil in the compressed air to increase the durability and reliability of air control systems. It is used by major Japanese heavy-duty truck manufacturers.

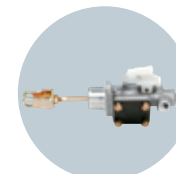
### MAIN PRODUCTS



#### Wedge Brake Chambers for Commercial Vehicles

This product is mounted on the wheels of heavy-duty trucks: it uses air pressure to push the piston to apply the brakes.

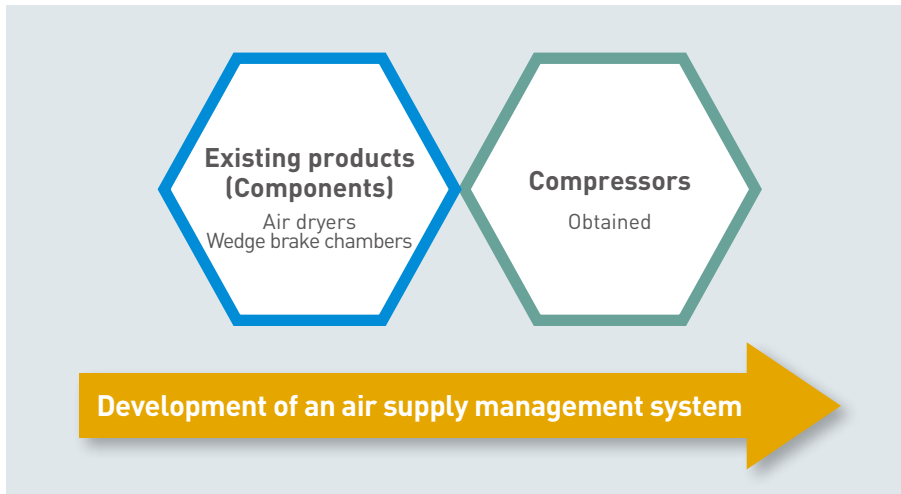
### MAIN PRODUCTS



#### Hydraulic Clutch Master Cylinders for Passenger Vehicles

This product converts the clutch force from the clutch pedal of manual-transmission vehicles into hydraulic pressure and transmits the pressure to the clutch system. It is supplied to automotive manufacturers nationwide.

Development of systems and expansion of business in Europe



**Web**

Commercial Vehicle Equipment

<https://www.nabtesco.com/en/products/automobile.html>

> **FACT SHEET**

**Major customers**

Hino Motors, Mitsubishi Fuso Truck and Bus, Isuzu Motors, UD Trucks, Nissan Motor and others

**Production base (as of the end of December 2017)**

Murayama City, Yamagata Prefecture, Japan / Samutprakarn, Thailand / Haryana, India / Saxony, Germany

**Market share**

Wedge brake chambers for commercial vehicles chambers: Approx.70% domestic market share  
Air dryers for commercial vehicles: Approx.75% domestic market share

**History of business development**

Nippon Air Brake became the first company to manufacture and sell automobile oil brakes in Japan in 1933. Subsequently, it also succeeded in producing commercial vehicle air brake systems in Japan and continued to develop safety-related technologies and peripheral devices, further expanding its business in line with the development of the automobile industry.

In 1972, the company became the first to succeed in the development of air dryers for commercial vehicles in Japan. The air dryers contributed to solving various problems, such as the rusting and freezing-up of valves, by removing water contained in air brake systems.

We established a new production base in Thailand in 2004 and spun off the growing Commercial Vehicle Equipment Business from Nabtesco Corporation, founding Nabtesco Automotive Corporation in 2009. Then, in 2013, we established Minda Nabtesco Private Limited in India as a joint venture to conduct business in the local truck market. We are thus further expanding our target market for this business.

- 1933** Became the first company to manufacture and sell oil brakes for commercial vehicles in Japan.
- 1937** Began manufacturing and selling air brake systems for commercial vehicles for the first time in Japan.
- 1972** Became the first company to succeed in developing air dryers for commercial vehicles in Japan.
- 1991** Opened the Yamagata Plant for the manufacture of commercial vehicle equipment.
- 2004** Established a joint venture to manufacture and sell automobile components (Nabtesco Automotive Products (Thailand) Co., Ltd).
- 2009** Began operations as Nabtesco Automotive Corporation.
- 2013** Established a joint venture to manufacture and sell commercial vehicle equipment in India (Minda Nabtesco Automotive Private Limited).
- 2016** Acquired a German air compressor maker and founded "Nabtesco ITG GmbH"



# MARINE VESSEL EQUIPMENT BUSINESS

We are contributing to the safe and efficient navigation of vessels through the provision of marine vessel engine control systems. We will expand the product lineup and promote the sales of products for electronically controlled diesel engines, which contribute to reducing environmental impact, and will enhance the service and support system for the products in anticipation of the global enforcement of environmental regulations on marine vessels.



Managing Executive Officer, President, Marine Control Systems Company  
**Taizo Tsuru**

| Strength   | Opportunity  |
|--|--|
| <ul style="list-style-type: none"> <li>Ability to make proposals on control systems</li> <li>Global production and service system</li> </ul> | <ul style="list-style-type: none"> <li>Recovery of demand</li> <li>More use of ICT in marine vessel equipment</li> </ul>                 |
| Weakness   | Threat   |
| <ul style="list-style-type: none"> <li>Cost competition</li> </ul>   | <ul style="list-style-type: none"> <li>Emergence of competitors in developing countries</li> <li>Commodification of machinery</li> </ul> |

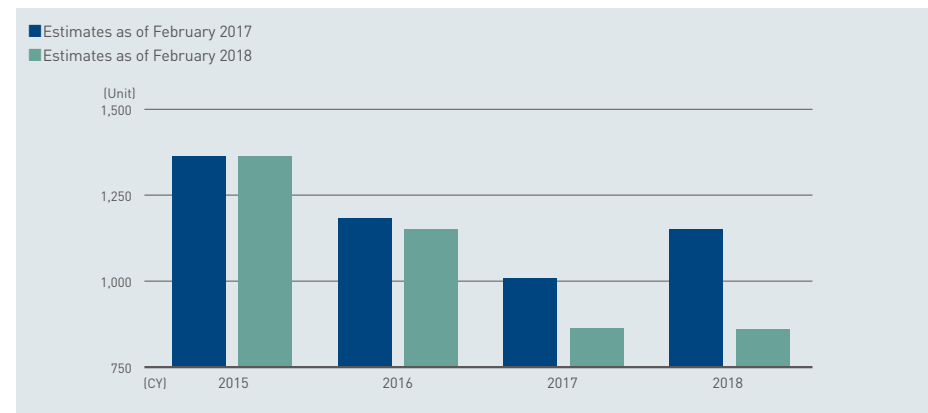
## Sources of Strength

We are developing products to create new value, environmentally conscious products. In addition to conventional products, we have included new product in our product lines corresponding electronic engines for large-sized marine vessels in response to the enhancement of environmental regulations. This provides us with strength in the market. Moreover, we are implementing a substantial around-the-clock service support system, making use of our bases in Japan, Singapore, the Netherlands, China and South Korea.

## Business Environment (Opportunities and Risks)

For engines for large marine vessels, there has been a rapid shift to electronic control and the diversification of fuels, and we are focusing on obtaining more orders for these engines as a core strategy for the marine vessel equipment business. Although the Marine Vessel Equipment Business is cyclic and has a risk to be affected by economic changes, we believe expansion of the MRO business will bring stability to the business.

### Global Production of 2-stroke Diesel Engines for Marine Vessels



Source: Nabtesco estimates

**REFERENCE**

Operating Results by Business Segment [2] Transport Solution segment (TRS)  
Page 67

**MAIN PRODUCTS**

**Main Engine Remote Control System (M-800-V)**

This system enables the remote control of the diesel engine in a vessel from the ship's bridge and/or control room, and has functions for outputting commands to control the engine speed (rpm) and for monitoring the engine status. Equipped with advanced network functions and a liquid crystal touch panel display, the system provides excellent operability and expandability.

**MAIN PRODUCTS**

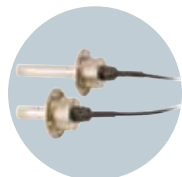
**Electronically Controlled High-Speed Hydraulic Valves**

Each Electronically Controlled diesel engine cylinder is equipped with one electronically controlled high-speed hydraulic valve, which electronically controls the timing and amount of fuel injection and the timing at which the exhaust valve opens and closes. The valve contributes to higher fuel economy and is attracting much attention as an environmentally friendly component.

## Measures for Medium- to Long-Term Growth

We will respond flexibly to market needs and create new products to help customers solve their problems, focusing on demand for electronic devices and environment-friendly products. In addition, we will put the three-polar (Japan, China and South Korea) production system on track to make further improvements in QCD (quality, cost and delivery). Moreover, we will expand our service network to build up a system to provide services with additionally higher quality, thereby making proposals and satisfying customers' potential needs for preventive equipment maintenance service. To this end, we will develop not only product failure prediction functions but also new products that are capable of reducing maintenance lead time and costs. We will also establish a system to provide around-the-clock, seamless support service to customers to aid in their safe navigation.

### MAIN PRODUCTS



#### Electronically Controlled Diesel GAP Sensors

Sensors monitor the behavior of engine fuel injection pumps and exhaust valves. The sensor gives an alarm when an abnormality is detected, thereby increasing the reliability of electronic diesel engine control systems.



Web

Marine Vessel Equipment

<https://www.nabtesco.com/en/products/ship.html>

## > FACT SHEET

### Major customers

Kawasaki Heavy Industries, Mitsui Engineering & Shipbuilding, Mitsubishi Heavy Industries, Hitachi Zosen, Hyundai Heavy Industries, Doosan Engine, Shanghai Waigaoqiao Shipbuilding, Hudong Heavy Machinery, MAN Diesel and others

### Production base (as of the end of December 2017)

Kobe City, Hyogo Prefecture, Japan / Shanghai, China / Busan, South Korea

### Market share

2-stroke main engine control systems: Approx.50% domestic market share (Approx. 40% world market share)

### History of business development

Since it developed the pneumatic valve in 1943, NABCO had been improving its pneumatic control technology for industrial use, and manufactured remote control equipment consisting of a range of valves, such as starting air pipe control valves, to be used in diesel engines or power generators and marine vessels, as well as gas compressors for freezers.

Subsequently, NABCO had built the foundation for meeting the standards that had been set by the ship classification societies of each country, and developed a pneumatic remote control system for ship engines ahead of others in Japan in 1963. Within only eleven years following the end of the war, Japanese shipbuilders had ascended to the level of the world's top producers in terms of the number of new ships built and further expanded their business, driven by increased international trade. Also, in response to accelerated automation of devices of marine vessels, NABCO had dramatically boosted its market share for pneumatic remote control system used in large marine vessel engines in Japan.

Around 1975, as needs for advanced control systems using electronic technologies began to increase, NABCO decided to develop mechatronics technologies as well. In 1983, it developed a microcomputer-based main engine remote control system, which was later standardized. In 1987 the company launched a microcomputer-based electronic governor for marine vessel engines and established the position as a top engine control system manufacturer.

In addition, aiming to enhance service by making proposals to customers on preventive maintenance, we expanded our service network through establishing bases in the Netherlands and Singapore in the latter half of the 1990s.

- 1950** Delivered gas compressors for freezers of marine vessels.
- 1963** Commenced manufacture and sales of marine vessel engine control equipment.
- 1983** Developed and commenced sales of microcomputer controllers for marine vessels.
- 1986** Commenced sales of M-800X, a mass production model of microcomputer controllers for marine vessels.
- 1987** Developed and commenced sales of microcomputer-based electronic governors for marine vessels.
- 1995** Established Nabmic B.V. in Netherlands.
- 1998** Established Nabtesco Marine Service Pte., Ltd. in Singapore.
- 2000** Established Nabtesco Marinotec Co., Ltd. in South Korea.
- 2006** Total cumulative shipment of marine vessel equipment reached 30,000 units.
- 2008** Commenced manufacture and sales of hydraulic control valves for electronic controlled engines.
- 2013** Established production facilities (Nabtesco Marine Machinery (Shanghai) Co., Ltd.) in China.
- 2014** Decided to participate in the R&D network of Maritime Innovation Japan Corporation. Total cumulative delivery of marine vessel electronic governor systems reached 7,000 units.
- 2016** Total cumulative shipment of marine vessel equipment reached 50,000 units. Total cumulative shipment of Electronically Controlled High-Speed Hydraulic Valves reached 10,000 units.



# AUTOMATIC DOOR BUSINESS



The "Pedestrian Flow Solution" is a business concept designed to provide people with safety, security and comfort in transportation and in their living spaces. Under the concept and the brands of NABCO and GILGEN, we will expand our businesses in Japan and also overseas markets, primarily in Europe, North America and China to help create barrier-free transportation spaces and ensure that they are safe.

President, Accessibility Innovations Company

**Koji Kaminaka**

### Strength

- Global expansion
- Wide lineup of high-quality automatic doors
- Installation, maintenance and service abilities in the major markets

### Opportunity

- Robust demand in the Japanese and Swiss automatic door markets
- Growth of the domestic and overseas platform door markets

### Weakness

- Lineup with too much focus on automatic doors
- Branding in emerging markets

### Threat

- Intensification of global competition
- Long-term tendency for the market to shrink due to maturity

## Sources of Strength

### Global Business Development

Since the first releasing Japan's first domestically produced automatic doors on the market in 1956, we have been engaged in the Automatic Door Business, and with roughly 50% and 20% shares in the domestic and global markets respectively, are now among the top market players. "NABCO" and "GILGEN" are two of our brands providing automatic door products in the four core markets: Japan, Europe, North America, and China, are the essential sources of our strength.

On a global scale, we conduct the value chain business focusing on automatic doors for buildings. We provide customers with a range of products and solutions, including installation, maintenance and management services in an integrated manner, which is also a source of strength for us. We are the only company in the world who sell automatic doors and platform doors in all of the four aforementioned markets, and thus occupy a unique position in the industry.

### Broad Product Lines with Focus on Automatic Doors

We offer a wide spectrum of products to meet our customer needs as one of the world's top automatic door brands. We focus on automatic doors used for buildings but also supply automatic doors for special purposes and industrial use as well as platform doors.

### Sales and Installation Network

We have sales, installation and maintenance services supporting systems that covers all regions across Japan and helps us to maintain high market share. Similarly, we have world-class shares in major overseas markets sustained by our well established network of sales, installation, and maintenance.

## Business Environment (Opportunities and Risks)

In the Japanese market, demand is expanding driven by the upcoming Tokyo Olympics and redevelopment projects being undertaken in the country. In the European market, there are concerns over the risk of sluggish demand for automatic door products due to rising political and economic uncertainty. However, demand in the Swiss market is forecast to remain steady.

### REFERENCE

Operating Results by Business Segment (3) Accessibility Solution segment (ACB) Page 67

### MAIN PRODUCTS



#### "NATRUS" Next-Generation Automatic Door System

This automatic door system conforms to the JIS A 4722 and thus meets the relevant international safety standards. Equipped with a function to test safety for each opening/closing operation as well as with increased sensor density, it boasts the industry's highest level of safety.

### MAIN PRODUCTS



#### Automatic Doors

We provide high-quality, reliable automatic doors, based on state-of-the-art technology. These doors are used at a wide range of facilities, such as office buildings, hospitals, airports, and commercial and industrial facilities.

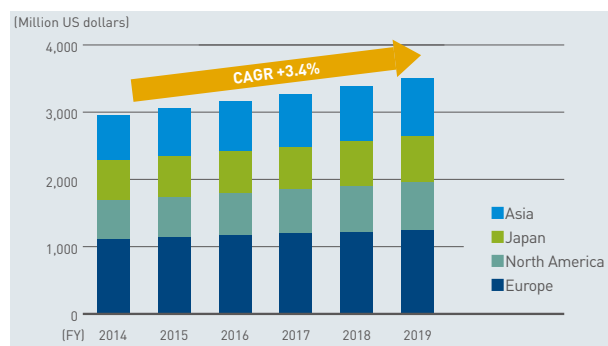
GILGEN doors: Westside Shopping and Leisure Centre in Switzerland

The global market for automatic door products is therefore expected to remain strong as a whole. In the long-term, the declining birth rate and aging of the Japanese population will increase the risk of domestic market shrinkage. In response, in order to offset these risks and secure consistent profitability, we will expand our overseas business and market shares by enhancing our sales network in North America, with its continuously growing population, and in Southeast Asia, where social infrastructure is gradually maturing.

## Measures for Medium- to Long-Term Growth

We will expand the size of our business through organic growth and by implementing M&A projects in a strategic manner. In the mature markets, we will take advantage of our large market shares to provide a range of products including general-purpose automatic and custom-made doors and offer a variety of solutions from installation and maintenance to management services with an eye to enhancing profitability and customer satisfaction.

### Automatic Doors Market



Source: IHS

### MAIN PRODUCTS



#### Wide-Opening Platform Doors

We developed wide-opening platform doors that are usable for trains that have different door positions and widths. This thin and well-designed door was first adopted on the Tokyo Metro Tozai Line.

Kudanshita Station on the Tokyo Metro Tozai Line



Web

Automatic Doors and Platform Doors

<https://www.nabtesco.com/en/products/automaticdoor.html>

## > FACT SHEET

### Major customers

Automatic doors for buildings: Leading construction companies, sash manufacturers, commercial facilities, hospitals, public organizations, industrial facilities (factories) and so forth  
Platform doors: Railway companies in each country

### Production base (as of the end of December 2017)

Kobe City, Hyogo Prefecture, Japan / State of Wisconsin, the United States / Bern, Switzerland / Beijing, China

### Market share

Automatic doors for buildings: Approx.50% domestic market share, leading world market share  
Platform screen doors: Approx.95% domestic market share (cumulative)

### History of business development

NABCO, which is one of the former companies of Nabtesco, worked to launch a new business in addition to supplying transportation vehicle equipment, including brake systems for railroad vehicles and automobile oil brakes. In 1953, the company began manufacturing and selling automatic door systems for railroad vehicles and buildings. Then in 1956, it produced the first automatic door in Japan ahead of all others. The Olympic Games held in Tokyo caused an explosive increase in new building construction mainly in the city center, and skyscrapers were built one after the other, which also boosted the use of automatic doors. By establishing a sales network across Japan as well as a careful service system, the company established a robust market position in the country by the early 1960s. Subsequently, started by the export of products to Hong Kong, it proactively expanded its business to overseas markets and gained a foothold in the U.S. market in the 1990s.

In 2011, we acquired Gilgen Door Systems AG to enter the European market on a full scale and have been operating the business under multiple global brand names. In Japan, we have achieved two million units of total cumulative production of NABCO automatic doors and our products are increasingly adopted in famed commercial and public facilities. Building the brand of "NABCO" and "GILGEN", we are establishing the top-class position predominating the four largest markets (Japan, North America, Europe and China) in terms of automatic door and platform door businesses.

- 1956** Became the first company to manufacture automatic doors in Japan.
- 1957** Established Osaka Door Engines (presently NABCO DOOR). Founded Tokyo Door Engine (presently Nabco Systems)
- 1992** Acquired LANSON, an automatic door manufacturer in the United States (presently NABCO Entrances).
- 1995** Established CSCEC-NABCO Auto Door Co., Ltd. in China (presently NABCO Auto Door (Beijing) Co., Ltd.
- 2011** Acquired the Automatic Door Business Division from Kaba Group of Switzerland and established Gilgen Door Systems AG. Building tetrapolar-system (Japan, North America, Europe and China) for automatic door and platform door businesses.
- 2012** Full acquisition of NABCO DOOR as the result of stock swap
- 2013** Total cumulative production of NABCO automatic doors reached two million units.
- 2016** Converted NABCO SYSTEM into a consolidated subsidiary as the result of additional stock acquisition.



# PACKAGING MACHINE BUSINESS



We will promote the development of next-generation high-speed packaging machines, the enhancement of our service system and the expansion of our business outside Japan, thereby meeting food processing company needs to save labor while ensuring food safety. We will also provide customers with a wide range of retort pouch packaging machines. Retort pouches have high transportation efficiency, which contributes to the reduction of CO<sub>2</sub> emissions in logistics.

President, Toyo Jidoki Co., Ltd.  
**Akiyoshi Kitamura**

| Strength  | Opportunity  |
|---|--|
| <ul style="list-style-type: none"> <li>• Ability to customize products</li> </ul> | <ul style="list-style-type: none"> <li>• Diversified needs for small-lot lightweight packaging</li> <li>• Needs for labor-saving and automation</li> </ul>   |
| Weakness  | Threat   |
| <ul style="list-style-type: none"> <li>• Lack of global recognition</li> </ul>    | <ul style="list-style-type: none"> <li>• Emergence of competitors in developing countries</li> <li>• Changes in the conditions of competition due to changes in the foreign exchange market</li> </ul> |

## Sources of Strength

### Advanced Technologies and Abilities of Onsite Employees

Nabtesco's strengths include technological capabilities, which enabled us to become the world's first successful developer of a rotary packaging machine. The machine integrated a stream of involved steps in packaging into one line with a control technology that enabled high-speed, reliable, stable, and airtight packaging. The finely-tuned response abilities of onsite employees who support application of the technologies can also be considered as one of our competitive advantages.

### Relations of Trust with Customers

We have earned trust from food manufacturers for our compact packaging machines, which provide high performance, require only limited space, and even seal packages with high air tightness to ensure the safety of food products contained therein.

## Business Environment (Opportunities and Risks)

Japan has seen increased demand for prepared meals for consumption by individuals at home, and demand for food packaging in pouches from manufacturers of private brand has been robust. Also, in North America, foods packed in economic and convenient pouches are gradually being accepted in place of bottles and cans as the preferred form of preserved foods. Moreover, in China and other emerging economies, people are increasingly focusing on the safety and hygienic quality of food products, and the demand for our packaging machines that enable high-precision processing are on the rise. However, risks associated with foreign exchange rates are also increasing as the export of these machines expands leading to greater changes in conditions with regard to competition and business results.

**REFERENCE**

Operating Results by Business Segment (4) Manufacturing Solution segment (MFR)  
Page 67

**MAIN PRODUCTS**

**Super High-Speed Automatic Filler/Sealer**

A high-speed automatic continuous motion filler/sealer that delivers high performance in a compact space. This equipment is not only used for retort pouch foods but also for soups, sauces, and other food products as well as for refills for liquid detergents. It contributes to reducing the costs of mass production.

**MAIN PRODUCTS**

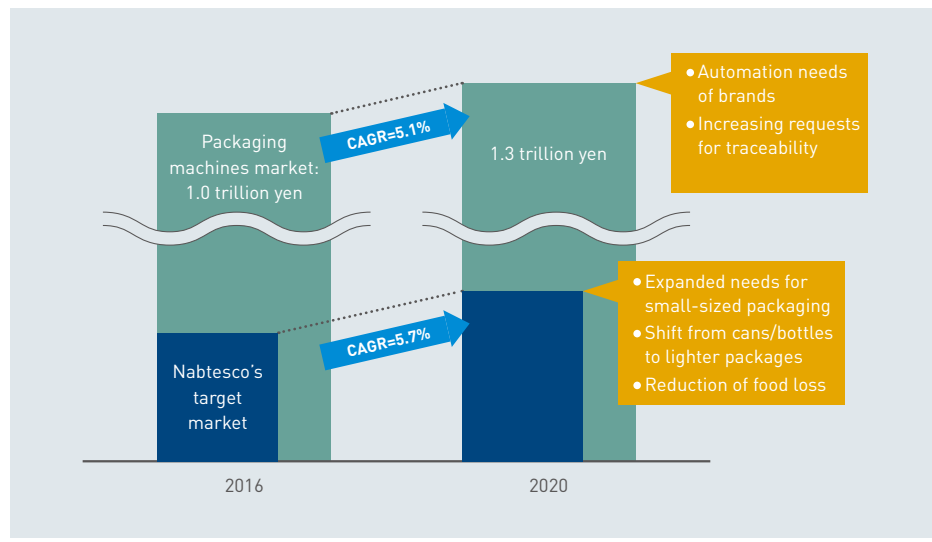
**High-Speed Automatic Filler/Sealer**

This ten-process rotary filler/sealer can be used to pack a range of foods, including not only liquids but also products containing both liquid and solid substances. Moreover, this machine allows the filling and sealing of two bags at the same time, which means that it has the production capacity equivalent to that of two conventional machines, while requiring the floor space and support equipment for one machine. Further, a range of test equipment can be mounted on the machine. The filler/sealer also supports deaeration using steam.



> **FACT SHEET**

**Market Size and Growth Forecast for Packaging Machines**



Source: Packaging machinery market: freedonia  
Nabtesco's target market: Nabtesco's assumption

**Measures for Medium- to Long-Term Growth**

We will strengthen our bases and official distributors outside of Japan to promote sales mainly in Europe, the United States, China and Southeast Asia. Also in line with the sophistication of customer needs, we will maintain and increase a competitive edge through the development of next generation high-speed machinery and enhancement of services in Japan and overseas.

**Web**

**Packaging Machines**

<https://www.nabtesco.com/en/products/packing.html>

**Major customers**  
Sugar and salt manufacturers, food and beverage manufacturers, detergent manufacturers, hair-care and cosmetics manufacturers pet food manufacturers, beverage manufacturers in North America, food manufacturers in China and others

**Production base (as of the end of December 2017)**  
Iwakuni City, Yamaguchi Prefecture, Japan / Dalian, China

**Market share**  
Packaging machines for retort pouch foods: Approx.85% domestic market share

**History of business development**  
In line with Japan's economic growth, requirements for automation and energy conservation began to increase. In 1964, we started developing an automatic packaging machine, and thus entering the packaging machine market. In the middle of the 1960s, automatic packaging machines were rapidly adopted by sugar and salt manufacturers as well as by confectionery companies. In the 1970s, requirements for automatic food processing machines increased among frozen food manufacturers due to the spread of so-called fast food and the growth of the restaurant industry. In response, we began developing automatic food machines and became the first company to develop a curry cubes packaging machine in Japan. We also succeeded in developing a vacuum packaging machine.  
Further, in 1994 we began supplying packaging machines for spout bags, and in 2011, established a production base in Dalian, China. Additionally, in 2013 we established a local corporation for sales promotion and service provision in the United States. We are thus favorably expanding the business.

- 1964** Developed an automatic packaging machine and started the packaging machines business.
- 1970** Delivered Japan's first retort pouch curry packaging machine.
- 1976** Began delivering vacuum packaging machines.
- 1994** Began delivering spout bag packaging machines.
- 2011** Established a subsidiary in Dalian, China.
- 2013** Established a local distribution company TOYO JIDOKI AMERICA CORP for packaging machines.

## Major Financial Indicators

(Million yen)

|   | 2008/3  | 2009/3  | 2010/3  | 2011/3  | 2012/3  | 2013/3  | 2014/3  | 2015/3  | 2015/12 <sup>3</sup> | 2016/12 <sup>4</sup> | 2017/12 <sup>4</sup> |
|---|---------|---------|---------|---------|---------|---------|---------|---------|----------------------|----------------------|----------------------|
| Net sales   | 174,254 | 158,171 | 126,249 | 169,304 | 198,527 | 179,543 | 202,292 | 219,657 | 187,000              | 244,968              | <b>282,422</b>       |
| Cost of sales                                       | 132,642 | 124,041 | 97,817  | 127,712 | 148,184 | 134,859 | 148,321 | 158,693 | 136,576              | 175,508              | <b>201,982</b>       |
| Selling, general and administrative expenses (SG&A) | 22,183  | 22,118  | 20,467  | 21,380  | 27,484  | 29,670  | 33,877  | 37,347  | 35,129               | 44,294               | <b>51,285</b>        |
| Operating income                                    | 19,429  | 12,012  | 7,965   | 20,212  | 22,859  | 15,013  | 20,092  | 23,615  | 15,294               | 25,982               | <b>29,468</b>        |
| Income before income taxes and minority interests   | 18,433  | 7,932   | 8,012   | 21,954  | 24,848  | 18,997  | 23,522  | 27,026  | 15,358               | 26,779               | <b>34,907</b>        |
| Income taxes  | 6,370   | 2,778   | 3,272   | 7,485   | 8,874   | 5,598   | 8,140   | 9,254   | 5,731                | 7,843                | <b>8,338</b>         |
| Minority interests <sup>*1</sup>                    | 1,038   | 728     | 723     | 1,081   | 1,217   | 129     | 404     | 25      | (1,432)              | 330                  | <b>1,423</b>         |
| Net income <sup>*2</sup>                            | 11,025  | 4,426   | 4,017   | 13,388  | 14,757  | 13,269  | 14,978  | 17,746  | 11,059               | 18,606               | <b>25,146</b>        |
| <b>At year-end</b>                                  |         |         |         |         |         |         |         |         |                      |                      |                      |
| Current assets                                      | 99,237  | 84,306  | 89,893  | 119,003 | 123,929 | 112,048 | 134,159 | 139,321 | 128,575              | 143,792              | <b>165,695</b>       |
| Tangible fixed assets                               | 43,346  | 45,207  | 44,102  | 44,442  | 51,509  | 54,475  | 55,225  | 56,877  | 55,916               | 63,155               | <b>70,700</b>        |
| Total assets  | 163,317 | 144,685 | 149,481 | 180,729 | 208,093 | 203,056 | 233,984 | 245,992 | 233,381              | 256,973              | <b>301,557</b>       |
| Current liabilities                                 | 58,183  | 41,209  | 43,611  | 74,892  | 70,897  | 52,322  | 73,161  | 64,830  | 73,000               | 74,876               | <b>96,934</b>        |
| Interest-bearing debt                               | 23,115  | 19,160  | 19,920  | 20,158  | 31,695  | 26,389  | 26,203  | 16,659  | 15,332               | 16,949               | <b>27,720</b>        |
| Net assets  | 82,492  | 81,716  | 85,168  | 96,531  | 107,467 | 120,857 | 139,471 | 158,664 | 148,924              | 155,904              | <b>177,002</b>       |
| Retained earnings                                   | 47,412  | 49,669  | 52,662  | 64,263  | 74,816  | 83,606  | 94,225  | 107,554 | 107,487              | 125,493              | <b>143,349</b>       |

(Million yen)

|  | 2008/3  | 2009/3  | 2010/3  | 2011/3  | 2012/3   | 2013/3   | 2014/3   | 2015/3   | 2015/12 <sup>*3</sup> | 2016/12 <sup>*4</sup> | 2017/12 <sup>*4</sup> |
|--|---------|---------|---------|---------|----------|----------|----------|----------|-----------------------|-----------------------|-----------------------|
| <b>Cash flows</b>                      |         |         |         |         |          |          |          |          |                       |                       |                       |
| Cash flow from operating activities    | 18,249  | 14,055  | 14,892  | 27,997  | 15,104   | 12,952   | 27,597   | 19,949   | 8,746                 | 27,730                | <b>23,071</b>         |
| Cash flow from investing activities    | (8,969) | (9,329) | (6,156) | (4,420) | (27,464) | (13,693) | (8,064)  | (7,880)  | (4,886)               | (14,989)              | <b>(20,186)</b>       |
| Cash flow from financing activities    | (5,748) | (6,189) | (684)   | (1,850) | 6,036    | (10,090) | (8,175)  | (15,888) | (19,090)              | (4,808)               | <b>(950)</b>          |
| <b>Per share of common stock (Yen)</b> |         |         |         |         |          |          |          |          |                       |                       |                       |
| Net income per share                   | 86.77   | 34.82   | 31.70   | 105.91  | 116.74   | 104.57   | 117.95   | 140.24   | 88.85                 | 150.64                | <b>203.85</b>         |
| Net assets per share                   | 609.08  | 601.75  | 628.29  | 713.77  | 784.12   | 894.86   | 1,035.68 | 1,184.17 | 1,150.41              | 1,245.90              | <b>1,414.50</b>       |
| Cash dividends per share               | 16.00   | 13.00   | 9.00    | 25.00   | 34.00    | 34.00    | 38.00    | 44.00    | 44.00                 | 50.00                 | <b>72.00</b>          |
| <b>Ratio (%)</b>                       |         |         |         |         |          |          |          |          |                       |                       |                       |
| Operating income margin                | 11.2    | 7.6     | 6.3     | 11.9    | 11.5     | 8.4      | 9.9      | 10.8     | 8.2                   | 10.6                  | <b>10.4</b>           |
| Return on assets (ROA)                 | 6.8     | 2.9     | 2.7     | 8.1     | 7.6      | 6.5      | 6.9      | 7.4      | 4.6                   | 7.6                   | <b>9.0</b>            |
| Return on equity (ROE)                 | 14.7    | 5.8     | 5.2     | 15.8    | 15.6     | 12.5     | 12.2     | 12.6     | 7.6                   | 13.0                  | <b>15.9</b>           |
| Payout ratio                           | 18.4    | 37.3    | 28.4    | 23.6    | 29.1     | 32.5     | 32.2     | 31.4     | 49.5                  | 35.1                  | <b>35.3</b>           |
| Equity ratio                           | 47.4    | 52.9    | 53.1    | 49.9    | 47.6     | 56.2     | 56.0     | 60.9     | 60.9                  | 57.6                  | <b>55.6</b>           |

\*1 Net income or net loss attributable to non-controlling interests

\*2 Net income attributable to shareholders of the parent company

\*3 Due to the change of the accounting closing date of fiscal year since FY2015/12, the results for FY2015 is calculated on a basis of 9 months for Nabtesco Corporation and the other consolidated subsidiaries in Japan, and 12 months for the overseas consolidated subsidiaries.

\*4 Adopted IFRS from the year ended December 31, 2017. Figures for the fiscal year ended December 31, 2016 have been restated in IFRS terms.

## Financial Information

| Consolidated Balance Sheets                       | (Million yen)                                |                         |                         |
|---|--|-------------------------|-------------------------|
|   | Date of transition to IFRS (January 1, 2016) | As of December 31, 2016 | As of December 31, 2017 |
| <b>Assets</b>                                     |  |                         |                         |
| <b>Current assets</b>                             |  |                         |                         |
| Cash and cash equivalents                         | 34,710                                       | 41,780                  | <b>44,121</b>           |
| Trade receivables                                 | 59,790                                       | 65,569                  | <b>76,874</b>           |
| Other receivables                                 | 1,361  | 1,264                   | <b>1,216</b>            |
| Inventories                                       | 28,760                                       | 32,704                  | <b>40,298</b>           |
| Other financial assets                            | 385  | 166                     | <b>190</b>              |
| Other current assets                              | 1,742  | 2,309                   | <b>2,996</b>            |
| <b>Total current assets</b>                       | <b>126,747</b>                               | <b>143,792</b>          | <b>165,695</b>          |
| <b>Non-current assets</b>                         |  |                         |                         |
| Property, plant and equipment                     | 52,677                                       | 63,155                  | <b>70,700</b>           |
| Intangible assets                                 | 3,429  | 2,671                   | <b>5,850</b>            |
| Goodwill  | 15,098                                       | 14,361                  | <b>21,310</b>           |
| Investment property                               | 4,527  | 5,486                   | <b>5,404</b>            |
| Investments accounted for using the equity method | 18,195                                       | 15,952                  | <b>20,184</b>           |
| Other financial assets                            | 7,075  | 8,487                   | <b>8,547</b>            |
| Deferred tax assets                               | 1,142  | 1,602                   | <b>1,633</b>            |
| Other non-current assets                          | 1,523  | 1,468                   | <b>2,236</b>            |
| <b>Total non-current assets</b>                   | <b>103,665</b>                               | <b>113,181</b>          | <b>135,863</b>          |
| <b>Total assets</b>                               | <b>230,412</b>                               | <b>256,973</b>          | <b>301,557</b>          |

| Liabilities and equities             | (Million yen)                                |                         |                         |
|--------------------------------------|--|-------------------------|-------------------------|
|                                      | Date of transition to IFRS (January 1, 2016) | As of December 31, 2016 | As of December 31, 2017 |
| <b>Liabilities</b>                   |  |                         |                         |
| <b>Current liabilities</b>           |  |                         |                         |
| Trade payables                       | 42,500                                       | 48,078                  | <b>57,148</b>           |
| Bonds and borrowings                 | 15,334                                       | 5,794                   | <b>16,365</b>           |
| Other payables                       | 10,064                                       | 10,450                  | <b>12,492</b>           |
| Income taxes payable                 | 1,057  | 5,408                   | <b>4,550</b>            |
| Provisions                           | 617  | 723                     | <b>732</b>              |
| Other financial liabilities          | —  | —                       | <b>7</b>                |
| Other current liabilities            | 3,579  | 4,423                   | <b>5,641</b>            |
| <b>Total current liabilities</b>     | <b>73,151</b>                                | <b>74,876</b>           | <b>96,934</b>           |
| <b>Non-current liabilities</b>       |  |                         |                         |
| Bonds and borrowings                 | —  | 11,155                  | <b>11,355</b>           |
| Liabilities for retirement benefit   | 7,340  | 9,343                   | <b>9,339</b>            |
| Deferred tax liabilities             | 3,153  | 3,518                   | <b>4,801</b>            |
| Other non-current liabilities        | 2,022  | 2,177                   | <b>2,127</b>            |
| <b>Total non-current liabilities</b> | <b>12,516</b>                                | <b>26,194</b>           | <b>27,621</b>           |
| <b>Total liabilities</b>             | <b>85,666</b>                                | <b>101,070</b>          | <b>124,556</b>          |

|   | Date of transition<br>to IFRS<br>(January 1, 2016) | As of<br>December 31,<br>2016 | As of<br>December 31,<br>2017 |
|---|--|-------------------------------|-------------------------------|
| (Million yen)                               |  |                               |                               |
| <b>Equity</b>                               |  |                               |                               |
| Common stock                                | 10,000   | 10,000                        | <b>10,000</b>                 |
| Additional paid-in capital                  | 14,616   | 14,703                        | <b>14,956</b>                 |
| Retained earnings                           | 113,406  | 125,493                       | <b>143,349</b>                |
| Treasury stock                              | (2,718)  | (2,649)                       | <b>(3,600)</b>                |
| Other components of equity                  | 2,966  | 382                           | <b>2,831</b>                  |
| Equity attributable to owners of the parent | 138,271  | 147,929                       | <b>167,537</b>                |
| Non-controlling interests                   | 6,475  | 7,974                         | <b>9,465</b>                  |
| Total equities                              | 144,745  | 155,904                       | <b>177,002</b>                |
| Total liabilities and equity                | 230,412  | 256,973                       | <b>301,557</b>                |

|  | FY2016    | FY2017           |
|--|-----------|------------------|
| (Million yen)                                    |           |                  |
| <b>Consolidated Statements of Profit or Loss</b> |           |                  |
| Net sales  | 244,968   | <b>282,422</b>   |
| Cost of sales                                    | (175,508) | <b>(201,982)</b> |
| Gross profit                                     | 69,460    | <b>80,440</b>    |
| Other income                                     | 2,495     | <b>1,351</b>     |
| Selling, general and administrative expense      | (44,294)  | <b>(51,285)</b>  |
| Other expenses                                   | (1,679)   | <b>(1,038)</b>   |

\* Adopted IFRS from the year ended December 31, 2017. Figures for the fiscal year ended December 31, 2016 have been restated in IFRS terms.

|  | FY2016  | FY2017         |
|--|---------|----------------|
| (Million yen)  |         |                |
| Operating profit   | 25,982  | <b>29,468</b>  |
| Finance income   | 188     | <b>632</b>     |
| Finance costs  | (425)   | <b>(109)</b>   |
| Share of profit of investments accounted for using the equity method | 1,034   | <b>4,915</b>   |
| Profit before tax  | 26,779  | <b>34,907</b>  |
| Income tax expense   | (7,843) | <b>(8,338)</b> |
| Profit for the year  | 18,936  | <b>26,569</b>  |
| Profit for the year attributable to                                  |         |                |
| Owners of the parent   | 18,606  | <b>25,146</b>  |
| Non-controlling interests  | 330     | <b>1,423</b>   |
| Profit for the year  | 18,936  | <b>26,569</b>  |
| Earnings per share   |         |                |
| Basic earnings per share (yen)                                       | 150.64  | <b>203.85</b>  |
| Diluted earnings per share (yen)                                     | 150.38  | <b>203.48</b>  |

## Financial Information

|   | [Million yen] |               |
|---|---------------|---------------|
| <b>Consolidated Statements of Comprehensive Income</b>                                    | FY2016        | FY2017        |
| Profit for the year   | 18,936        | <b>26,569</b> |
| Other comprehensive income  |               |               |
| Items that will not be reclassified to profit or loss                                     |               |               |
| Remeasurement of net defined benefit liability (asset)                                    | (850)         | <b>180</b>    |
| Net changes in financial assets measured at fair value through other comprehensive income | 255           | <b>419</b>    |
| Share of other comprehensive income of investments accounted for using the equity method  | 34            | <b>19</b>     |
| Total items that will not be reclassified to profit or loss                               | (562)         | <b>618</b>    |
| Items that may be reclassified subsequently to profit or loss                             |               |               |
| Exchange differences on translating foreign operations                                    | (3,382)       | <b>2,278</b>  |
| Total items that may be reclassified subsequently to profit or loss                       | (3,382)       | <b>2,278</b>  |
| Other comprehensive income, net of tax  | (3,944)       | <b>2,896</b>  |
| Total comprehensive income  | 14,993        | <b>29,464</b> |
| Comprehensive income attributable to  |               |               |
| Owners of the parent  | 15,229        | <b>27,761</b> |
| Non-controlling interests   | (237)         | <b>1,704</b>  |
| Total comprehensive income  | 14,993        | <b>29,464</b> |

|   | [Million yen] |                |
|---|---------------|----------------|
| <b>Consolidated Statements of Cash Flows</b>                                | FY2016        | FY2017         |
| Cash flows from operating activities  |               |                |
| Profit for the year   | 18,936        | <b>26,569</b>  |
| Depreciation and amortization   | 7,422         | <b>8,974</b>   |
| Impairment losses   | 974           | <b>192</b>     |
| Gain on negative goodwill   | (353)         | —              |
| Stock-based compensation expenses   | 143           | <b>286</b>     |
| Increase (decrease) in assets and liabilities for retirement benefits       | (169)         | <b>336</b>     |
| Interest and dividends income   | (188)         | <b>(185)</b>   |
| Interest expenses   | 153           | <b>109</b>     |
| Gain on step acquisitions   | (786)         | —              |
| Share of (profit) loss of investments accounted for using the equity method | (1,034)       | <b>(4,915)</b> |
| Loss (gain) on sale and disposal of property, plant and equipment           | (638)         | <b>294</b>     |
| Income tax expense  | 7,843         | <b>8,338</b>   |
| Decrease (increase) in trade receivables                                    | (773)         | <b>(9,681)</b> |
| Decrease (increase) in inventories  | (845)         | <b>(5,735)</b> |
| Increase (decrease) in trade payables                                       | (261)         | <b>7,904</b>   |
| Others  | 599           | <b>(347)</b>   |
| Subtotal  | 31,025        | <b>32,140</b>  |
| Interest and dividends received   | 980           | <b>888</b>     |
| Interest paid   | (106)         | <b>(171)</b>   |
| Income tax paid   | (4,169)       | <b>(9,786)</b> |
| Net cash provided by operating activities                                   | 27,730        | <b>23,071</b>  |

(Million yen)

|   | FY2016          | FY2017          |
|---|-----------------|-----------------|
| <b>Cash flows from investing activities</b>   |                 |                 |
| Decrease (increase) in time deposits  | 172             | <b>(0)</b>      |
| Purchase of property, plant and equipment   | (14,474)        | <b>(11,375)</b> |
| Proceeds from sales of property, plant and equipment                                  | 1,314           | <b>193</b>      |
| Purchase of intangible assets   | (920)           | <b>(818)</b>    |
| Purchase of investments in subsidiaries resulting in change in scope of consolidation | (778)           | <b>(8,203)</b>  |
| Others  | (302)           | <b>17</b>       |
| <b>Net cash used in investing activities</b>  | <b>(14,989)</b> | <b>(20,186)</b> |
| <b>Cash flows from financing activities</b>   |                 |                 |
| Net increase (decrease) in short-term borrowings                                      | (289)           | <b>7,474</b>    |
| Proceeds from long-term borrowings  | 1,254           | <b>471</b>      |
| Repayment of long-term borrowings   | (206)           | <b>(198)</b>    |
| Proceeds from issuance of bonds   | 10,000          | <b>—</b>        |
| Redemption of bonds   | (10,000)        | <b>—</b>        |
| Proceeds from stock issuance to non-controlling interests                             | 275             | <b>—</b>        |
| Net decrease (increase) in treasury stock   | (2)             | <b>(987)</b>    |
| Dividends paid  | (5,826)         | <b>(7,447)</b>  |
| Dividends paid to non-controlling interests   | (14)            | <b>(264)</b>    |
| <b>Net cash used in financing activities</b>  | <b>(4,808)</b>  | <b>(950)</b>    |

(Million yen)

|  | FY2016        | FY2017        |
|--|---------------|---------------|
| Effect of exchange rate changes on cash and cash equivalents | (862)         | <b>407</b>    |
| <b>Net increase (decrease) in cash and cash equivalents</b>  | <b>7,070</b>  | <b>2,341</b>  |
| Cash and cash equivalents at the beginning of the year       | 34,710        | <b>41,780</b> |
| <b>Cash and cash equivalents at the end of the year</b>      | <b>41,780</b> | <b>44,121</b> |

\* Adopted IFRS from the year ended December 31, 2017. Figures for the fiscal year ended December 31, 2016 have been restated in IFRS terms.

### Operating Results for the Fiscal Year Ended December 31, 2017

During the fiscal year ended December 31, 2017, the global economy was on a mild recovery trend as international financial markets remained stable amid economic recovery in major countries, despite concerns of geopolitical risks on the back of political instability abroad. The Japanese economy witnessed a mild recovery as many companies expected robust earnings based on the improved global economy and stable domestic politics, despite signs of a slowdown of personal consumption in some areas.

Under these circumstances, the consolidated operating results of the Group for the period under review recorded net sales of ¥282.4 billion, up 15.3% year on year, and operating income of ¥29.5 billion, up 13.4% year on year, mostly reflecting the robust demand for industrial robots,

the strong demand for construction machinery in China, and the conversion of a domestic sales company of automatic doors into a consolidated subsidiary. Income before tax was ¥34.9 billion, up 30.4% year on year, due to an increase in equity in earnings of affiliates. Net income attributable to owners of the parent amounted to ¥25.1 billion, up 35.2% year on year.

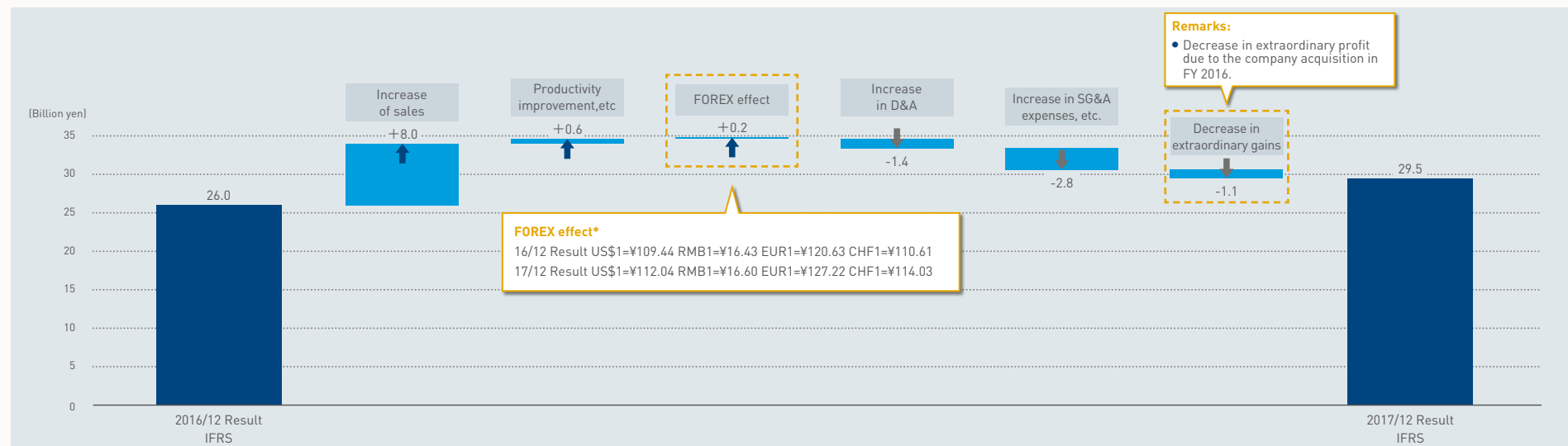
The Group has applied voluntarily International Financial Reporting Standards (IFRS) starting the period under review with the aim of improving international comparability of financial information in capital markets and the precision of business management by unifying the accounting standards and periods within the Group. Figures for the fiscal year ended December 31, 2016 have been restated in IFRS terms.

### Analysis of Factors Behind Year-on-Year Changes in Operating Income for the Fiscal Year Ended December 31, 2017

Operating income for the fiscal year ended December 31, 2017 increased ¥3.5 billion from the fiscal year ended December 31, 2016 to ¥29.5 billion. Key contributing positive factors included an ¥8.0 billion increase due to an increase in sales and a ¥0.6 billion increase due to improvement of productivity, etc.

Higher profits due to an increase in sales were primarily attributable to the growth of the Component Solutions business. This business saw significant increases in both sales and profit due to the robust demand for precision reduction gears for industrial robots and general industries as well as a rise in demand for construction machinery in China.

#### Analysis of Factors Behind Year-on-Year Changes in Operating Income for the Fiscal Year Ended December 31, 2017



\* FOREX sensitivity in O. P. (This represents the effect to be expected on operating profit if the exchange rate fluctuates by one yen) : (US\$): 33 million yen, (RMB) : 267 million yen, (EUR) : minimal, (CHF) : minimal



Higher profits due to improvement of productivity, etc. were mainly the result of efforts by each plant to promote automation and shorten lead time.

Meanwhile, primary contributing negative factors behind a decrease in operating income included a ¥1.4 billion decrease due to an increase in depreciation and amortization, a ¥2.8 billion decrease reflecting an increase in selling, general and administrative expenses, and a ¥1.1 billion decrease owing to a drop in extraordinary income.

The increases in depreciation and amortization and selling, general and administrative expenses were the result of carrying out capital expenditure as planned in accordance with the increase in demand. The decrease in extraordinary income during the period under review was because the fiscal year ended December 31, 2016 included gains from the acquisition of NABCO SYSTEMS Co., Ltd., which is engaged in the automatic door business.

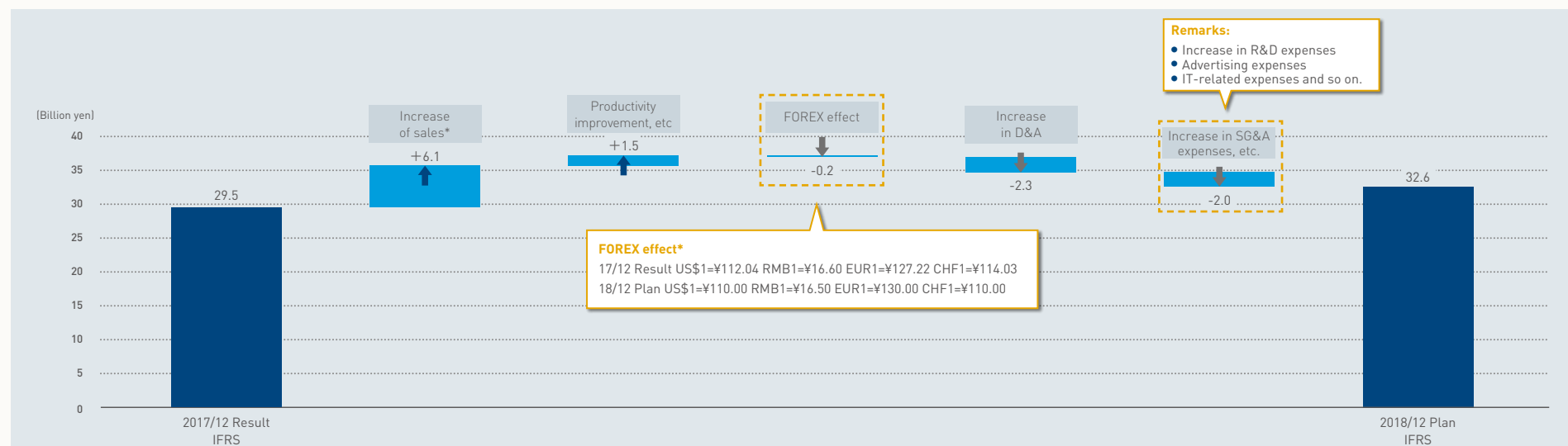
## Projection for the Consolidated Fiscal Year Ending December 31, 2018

With the world economy forecast to remain on a recovery trend during the fiscal year ending December 31, 2018, the Group expects demand for precision reduction gears for industrial robots and general industries to continue to increase, and demand for construction machinery to remain robust due to steady demands in the market. The Group also expects the environment surrounding other businesses to remain strong, and forecasts net sales and operating income to reach ¥308.0 billion (up 9.1% year on year) and ¥32.6 billion (up 10.6% year on year), respectively, for the consolidated fiscal year ending December 31, 2018.

## Analysis for Factors Behind Year-on-Year Changes in Operating Income (Plan) for the Fiscal Year Ending December 31, 2018

The Group expects operating income for the fiscal year ending December 31, 2018 to reach ¥32.6 billion, an increase of ¥3.1 billion year on year. The Group forecasts key contributing positive factors including a ¥6.1 billion increase due to an increase in sales and a ¥1.5 billion increase due to improvement of productivity, etc. In terms of drivers for higher profits due to an increase in sales, the Group expects continued growth of the Component Solutions business as well as growth in each segment. In the Transport Solutions business, orders for railroad vehicle equipment are forecast to increase in Japan and China, while in the Accessibility Solutions business, the automatic door market is expected to remain robust both

### Analysis of Factors Behind Year-on-Year Changes in Operating Income (Plan) for the Fiscal Year Ending December 31, 2018



\* FOREX sensitivity in O. P. (This represents the effect to be expected on operating profit if the exchange rate fluctuates by one yen) : (US\$) : 40 million yen, (RMB) : 299 million yen, (EUR) : minimal, (CHF) : minimal

## Financial Information

in Japan and overseas. Furthermore, the Group expects an increase in demand for packaging machines for the food industry globally in Manufacturing Solutions business. The Group forecasts that the impact of foreign exchange fluctuations will be immaterial as significant foreign exchange fluctuations are not anticipated in the fiscal year ending December 31, 2018.

Meanwhile, primary contributing negative factors behind a decrease in operating income will be a ¥2.3 billion decrease due to an increase in depreciation and amortization and a ¥2.0 billion decrease due to an increase in selling, general and administrative expenses.

Depreciation and amortization is expected to increase as a result of growth investment such as capital expenditure related to new programs for civil aircraft in the aircraft equipment business in addition to the expenses related to increased production in plants in Japan and China in line with the growth of demand for industrial robots in the precision reduction gear business.

Selling, general and administrative expenses are expected to increase, reflecting an increase in R&D costs related to the development of system products, etc. as well as increases in IT-related costs and advertising expenses.

## Status of Assets, Liabilities and Net Assets

### Assets

Total assets as of December 31, 2017 were ¥301.6 billion, an increase of ¥44.6 billion from December 31, 2016, consisting of ¥165.7 billion in current assets and ¥135.9 billion in fixed assets.

Key contributing positive factors included increases of ¥11.3 billion in trade receivables following an increase in accounts receivable, ¥7.6 billion in inventories, ¥7.6 billion in tangible fixed assets, and ¥7.0 billion in goodwill.

### Liabilities

Total liabilities as of December 31, 2017 were ¥124.6 billion, an increase of ¥23.5 billion from December 31, 2016, reflecting ¥96.9 billion in current liabilities and ¥27.6 billion in non-current liabilities. The main contributing positive factors were a rise of ¥10.8 billion in bonds and borrowings and of ¥9.1 billion in operating payables.

### Equity

Total equity as of December 31, 2017 stood at ¥177.0 billion. Equity attributable to owners of the parent was ¥167.5 billion, an increase of ¥19.6 billion from December 31, 2016. The key contributing positive factor was the increase in retained earnings due to net income attributable to owners of the parent of ¥25.1 billion, while the main contributing negative factor was the decrease of ¥7.5 billion in retained earnings due to dividend payment. As a result, the ratio of equity attributable to owners of the parent was 55.6%, and equity attributable to owners of the parent per share was ¥1,355.72.

## Status of Cash Flows

Cash and cash equivalents (hereinafter, "capital") as of December 31, 2017 stood at ¥44.1 billion, an increase of ¥2.3 billion from December 31, 2016, reflecting ¥23.1 billion in capital generated from operating activities, which was mainly used for capital expenditure, acquisition of a subsidiary, and dividend payments. Meanwhile, free cash flow (total amount of cash flows from operating activities and cash flows from investing activities) totaled ¥2.9 billion, a decrease of ¥9.0 billion from December 31, 2016.

### Cash flows from operating activities

Net cash generated from operating activities for the fiscal year ended December 31, 2017 totaled ¥23.1 billion. Principal positive factors included increases in net income, depreciation and amortization, and operating payables. Meanwhile, the main negative factors included increases in trade receivables and inventories, and the income taxes paid.

### Cash flows from investing activities

Net cash used in investing activities for the fiscal year ended December 31, 2017 amounted to ¥20.2 billion, mainly due to the purchases of tangible fixed assets and shares of a subsidiary.

### Cash flows from financing activities

Net cash used in financing activities for the fiscal year ended December 31, 2017 totaled ¥1.0 billion. The main positive factor was proceeds from loans payable, while the main negative factor was dividends paid.

## Status of Capital Expenditure, R&D and Depreciation and Amortization

The Group is currently working on production reforms, including the promotion of automation, renewal of production management systems, procurement reforms, and environmental initiatives, with the aim of promoting “production innovation” to generate competitive advantage. These efforts are led by the Production Innovation Division, which supports the initiatives by each in-house company across the Group. The Group will also make aggressive capital expenditure that will contribute to the modernization of outdated equipment, plants, etc. as well as innovation of production technologies.

Capital expenditure for the fiscal year ended December 31, 2017 was ¥15.5 billion. The main purposes of capital expenditure were for increased production in plants in Japan and China in the precision reduction gear business, which is seeing continuous growth in demand, and for enhancing capacity of a new program for civil aircraft in the aircraft equipment business.

Capital expenditure for the fiscal year ending December 31, 2018 will be ¥30.4 billion. In the precision reduction gear business, the Group will maintain the introduction of new machinery and equipment with the aim of establishing a manufacturing system at a plant in China that was launched in 2016 while making aggressive investments aimed at enhancing the productivity of the Tsu Plant in Japan as a mother plant. In the aircraft equipment business, the Group will continue to make investments to boost production toward the launch of an actuator plant complex in 2018, following the surface treatment plant complex and the precision components plant complex completed in 2016.

R&D costs for the fiscal year ending December 31, 2017 amounted to ¥8.7 billion. During the fiscal year under review, the Group mainly developed and launched energy-saving and environment-related products in the Component Solutions and Transport Solutions businesses. The Group will continue to focus on the development of system

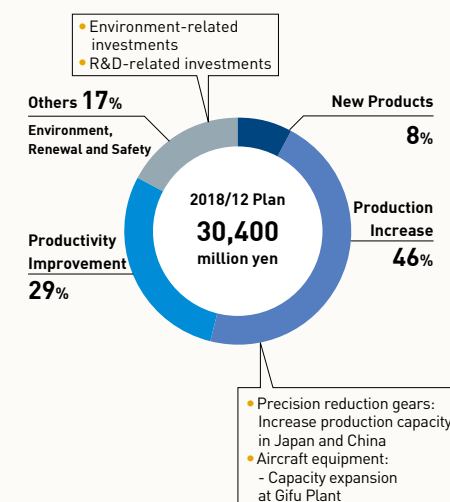
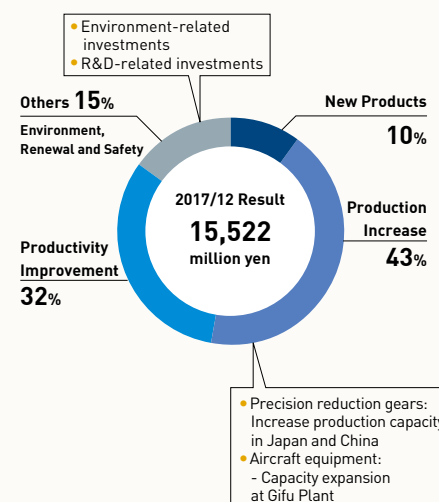
### Status of Capital Expenditure, R&D and Depreciation and Amortization

(Billion yen)

|              | 2016/12<br>Result | 2017/12<br>Result | 2018/12<br>Plan |
|--------------|-------------------|-------------------|-----------------|
| CAPEX        | 14.5              | 15.5              | 30.4            |
| R&D          | 7.4               | 8.7               | 10.2            |
| Depreciation | 7.4               | 9.0               | 11.2            |

### Breakdown in Capital Expenditure

#### By Usage



## Financial Information

products and make necessary investments in the future with the aim of moving forward to become a system manufacturer that provides system products by shifting from a business model focused on the provision of component products in light of changes in the market environment.

Depreciation and amortization for the fiscal year ending December 31, 2017 stood at ¥9.0 billion. Depreciation and amortization increased by ¥1.6 billion from the fiscal year ended December 31, 2016 as a result of investments for increased production at plants in Japan and China in the precision reduction gear business, equipment enhancement for the Gifu Plant in the aircraft equipment business, etc.

### Operating Results by Business Segment

Forecasts for operating results for the fiscal year ending December 31, 2018

#### (1) Component Solutions business (CMP)

Net sales and operating income in this segment for the fiscal year ending December 31, 2018 are expected to amount to ¥129.5 billion (up 13.7% year on year) and ¥23.8 billion (up 16.5% year on year), respectively.

Net sales in the precision reduction gear business are forecast to increase from the previous fiscal year, reflecting the continued expansion of demand due to further penetration of automation and labor saving.

The hydraulic equipment business is also expected to record an increase in sales driven by robust demand for construction machinery on a global basis.

Operating income in this segment is expected to increase from the previous fiscal year on account of a rise in profits reflecting increased sales in the precision reduction gear and hydraulic equipment businesses.

#### (2) Transport Solutions business (TRS)

Net sales and operating income in this segment for the

fiscal year ending December 31, 2018 are expected to reach ¥83.6 billion (up 5.6% year on year) and ¥9.3 billion (up 10.9% year on year), respectively.

Sales of railroad vehicle equipment business are expected to rise on the back of robust demand in Japan as well as an increase in demand for subways in China.

Sales of aircraft equipment business are expected to see a minor increase year on year due to the continued lean season in demand in preparation for the switch to mass production of the B777x.

Sales of commercial vehicle equipment business are also forecast to see a minor increase year on year due to the continued robust demand in the Japanese market.

Marine vessel equipment business is expected to see an increase in sales due to a mild recovery in the marine transport market.

Operating income in this segment is expected to rise year on year due to increased profits on the back of increases in sales in each business, as well as to aggressive capturing of MRO demand.

#### (3) Accessibility Solutions business (ACB)

Net sales and operating income in this segment for the fiscal year ending December 31, 2018 are expected to amount to ¥75.5 billion (up 4.3% year on year) and ¥6.0 billion (up 16.0% year on year), respectively.

Sales of the automatic door business are expected to increase from the previous fiscal year by capturing demand for doors for buildings and platform doors in Japan and abroad amid a robust market.

Operating income in this segment is forecast to see a minor increase year on year, even if strategic investments for the future are incorporated, as one-time expenses related to the integration of North American sites carried out in 2016 have decreased.

#### (4) Manufacturing Solutions business (MFR)

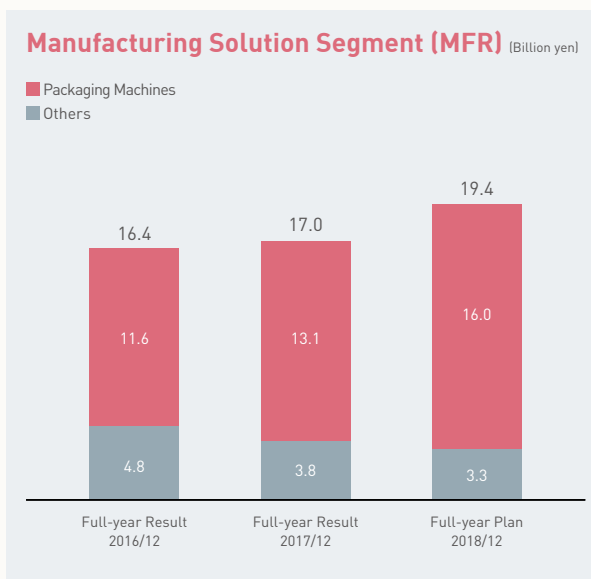
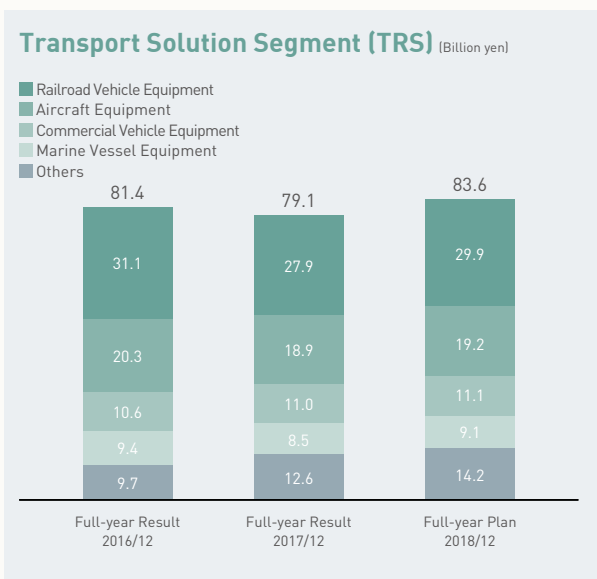
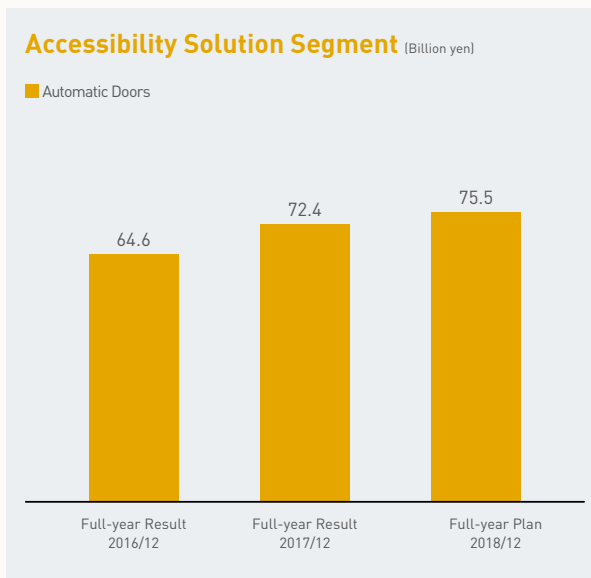
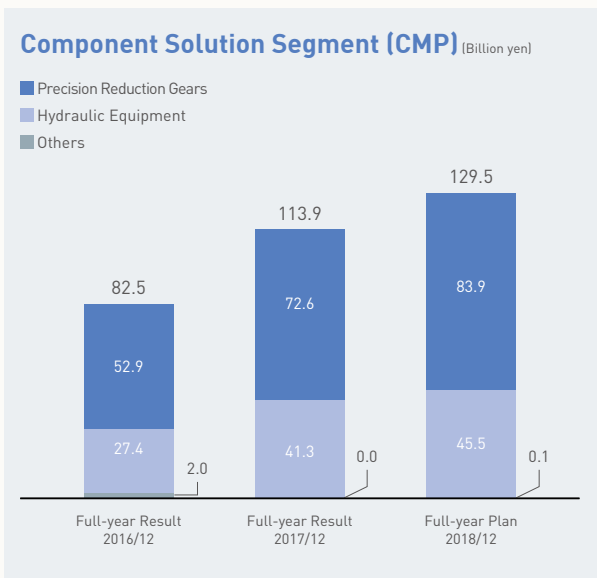
Net sales and operating income in this segment for the fiscal year ending December 31, 2018 are expected to

reach ¥19.4 billion (up 13.9% year on year) and ¥2.3 billion (up 16.0% year on year), respectively.

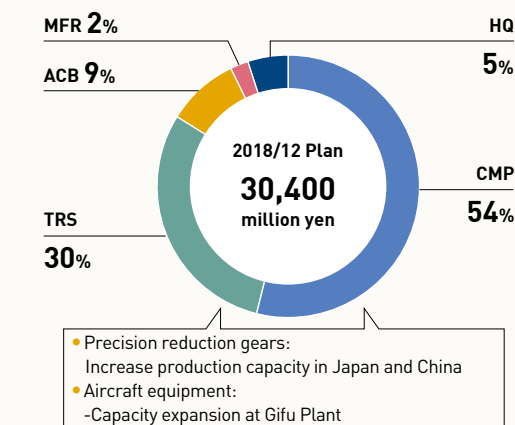
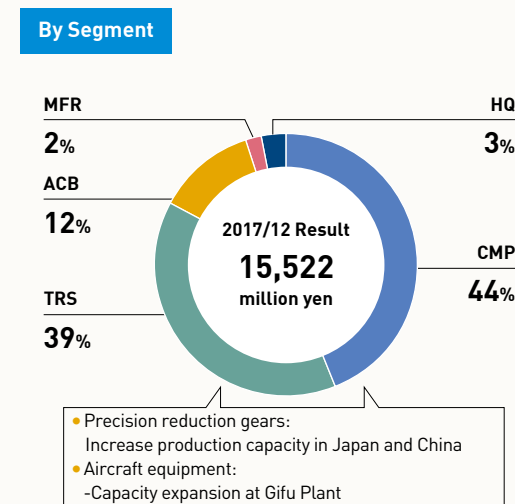
The packaging machine business is forecast to record increased sales on the back of continued robust demand in Japan.

Operating income in this segment is expected to record a minor increase year on year on the back of an increase in profits due to greater sales in the packaging machine business.

Sales by Business (IFRS)



Breakdown in Capital Expenditure



## Financial Management and Measures to Solve ESG Issues

In the medium-term management plan that targets the period until the end of FY2020, we declare Market Creation, Technology Innovation, and Operational Excellence to be our core management strategies. Based on these strategies, we will promote financial management and also implement a range of measures to solve ESG issues for the enhancement of our operational basis. Through these efforts we will meet the three commitments we have made in the management plan.

### **Improving capital efficiency to achieve ROE of 15%**

We have set the achievement of ROE of 15% as one of our commitments under the medium-term management plan. For the fiscal year ended December 31, 2017, our actual ROE came to 14.3%<sup>\*1</sup> and is still below the target of 15%. In order to achieve the 15% goal as early as possible, it is mandatory for us to further improve capital efficiency through effective use of our operating assets and disciplined balance sheet management. We will strive to enhance the profit margin on sales and total assets turnover as elements comprising ROE while considering how to utilize the financial leverage as necessary.

In terms of the profit margin on sales, we will firstly aim to achieve improvement of the operating income ratio as well as the growth of net sales. While the impact of changes in production and sales volume on profitability is relatively large for the Component Solutions Segment, we will work to improve profitability by making more efficient use of the production equipment. In the precision reduction gear business, demand for industrial robots and automation facilities is expected to grow from a medium- to long-term perspective on the back of an expansion of needs for labor saving and automation. It is our policy to steadily increase production capacity to ensure stable supply, thus offsetting an increase in depreciation by increased profit in line with an increase in net sales. In the hydraulic equipment business, the effects of structural reforms of the production system in China implemented during FY2015 have become apparent in the recovery of demand in the Chinese machinery market. We aim to expand the scope of value creation for customers by promoting the modularization and systematization of our products.

In other business segments, we conduct the MRO<sup>\*2</sup>

business, which helps us mitigate the influence exerted by changes in the business environment. In the railroad vehicle equipment business in the Transport Solutions Segment, it is anticipated that MRO demand for high-speed railway and subway trains in China will continue, although the risk of a shift to entirely domestic production is becoming obvious in the Chinese high-speed railway market. We are also working to win orders from railway operators in Southeast Asia, where development of railway infrastructure is expected to grow, via the MRO site that we established in Thailand. Meanwhile, the aircraft equipment business is likely to benefit from an increase in MRO demand for the B777X in the 2020s, in addition to MRO demand for the B737 MAX, for which the effect of mass production will contribute to our performance. We will endeavor to further expand the MRO business by promoting cross-divisional efforts in other segments with MRO elements.

In order to improve total assets turnover, it is essential to utilize the assets of each business effectively. In FY2017, we introduced ROIC (return on invested capital) as an integral management indicator with broader awareness on cost of capital to improve profitability and raise capital efficiency across the Group. By adding "ROIC improvement ratio" as a performance evaluation incentive for each business segment and combining it with other indicators such as "sales growth ratio" and "operating profit improvement ratio," we will further promote the effective use of our operating assets based on growth as an evaluation indicator while reflecting our investors' perspectives on business operations.

In the administrative departments, we will allocate capital generated from the business departments to growth investment and engage in financial management including control of the balance of cash on hand, adequate

liability management, and stable and flexible shareholder returns.

<sup>\*1</sup> Excluding the equity method-based investment profit gained by the affiliated company named Harmonic Drive Systems Inc.

<sup>\*2</sup> MRO: Maintenance, repair and overhaul

### **Promoting ROIC improvement in manufacturing bases**

As a measure to improve ROIC, we will use the "ROIC tree" and expand the effective utilization of management resources at each business site. For instance, while the improvement of operating assets turnover, one of the key elements of ROIC improvement, can be divided into themes such as improvement of fixed assets turnover, inventory turnover, etc., individual themes are closely related to the improvement of the operating efficiency of each business. By using the ROIC tree as one of the management indicators, we will generate cash by implementing necessary measures at our manufacturing bases.

We are currently pushing forward cross-divisional activities toward fostering "manufacturing innovation" including the enhancement of our production capability, procurement ability and production management ability. These activities constitute the practical implementation of improvements described in the ROIC tree at manufacturing bases. We will seek to realize ROIC improvement while pursuing the reinforcement of our competitiveness in terms of manufacturing capabilities.

### **Promoting financial management to realize growth investment and shareholder returns**

In the medium-term management plan, we have made a commitment to achieving a consolidated payout ratio at 35% or over in terms of shareholder returns. To fulfill this com-

mitment, we have been working to maintain a sound balance sheet and continuously increase cash dividends in accordance with profit growth. The cash dividend for the fiscal year ended December 31, 2017 came to 72 yen per share, a year-on-year increase of 22 yen, and the consolidated payout ratio was 35.3%. For the fiscal year ending December 31, 2018, we plan to increase the dividend to 73 yen per share.

Nabtesco has generated stable operating cash flows (exceeding about 20 billion yen on average for the past five years), utilizing them for growth investment and shareholder returns. Looking at the balance sheet as of December 31, 2017, it is possible to lower the equity ratio to 45% on the precondition that we continue to receive a credit rating of A. It is estimated that we can potentially procure debt of about 70 billion yen in theory. As just described, our strong balance sheet and ability to generate stable cash flows serve as a cornerstone of our financial capital, which underpins growth investment and shareholder returns.

As for growth investments, we will steadily make investments with a focus on the themes that will strengthen our value creation process so that we can be competitive on a long-term basis. In the precision reduction gear business,

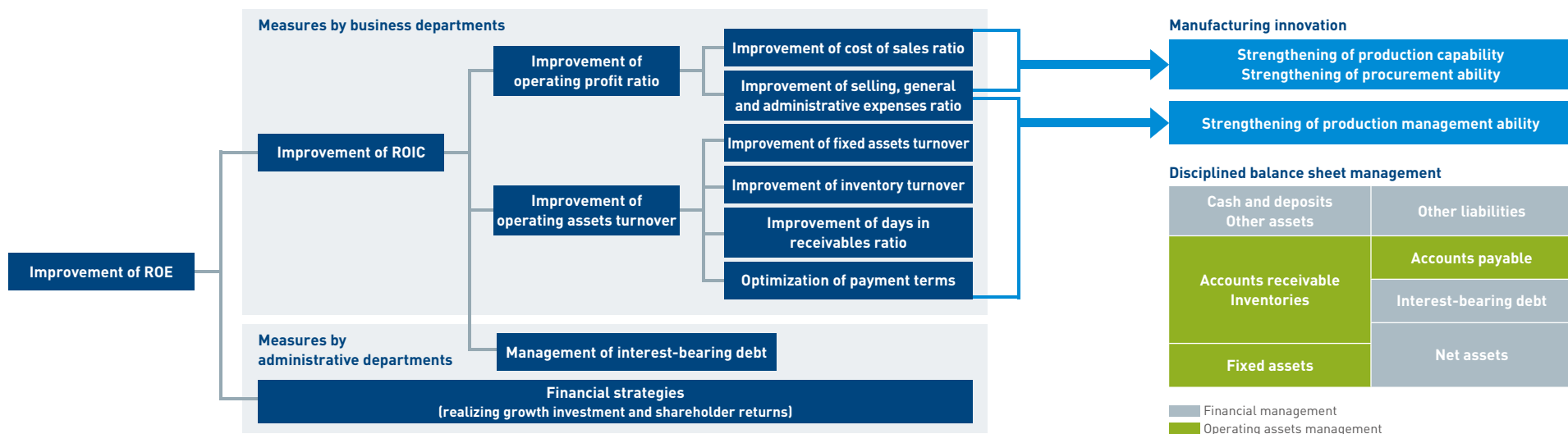
in which we can expect an increase in demand on a medium-term basis, we will continue to introduce new equipment to our manufacturing facilities in China while also proactively investing for higher productivity at the Tsu Plant, which is a mother plant for the business. In the aircraft equipment business, we are continuously expanding our production capacity. Specifically, in addition to the facilities built within the Gifu Plant in 2016 for surface treatment and precision components, we will launch new facilities for actuators in 2018. As for the R&D expenses, we aim to shift from a business model that focuses on the provision of components to a model that focuses on the provision of systems, thereby making tremendous progress toward becoming a manufacturer of systems. To this end, we will make necessary investments in the development of systems.

For the solution of ESG issues, we are likewise spending steadily to implement necessary measures. For the environment (E), we increased the FY2017 budget for investments in environment-friendly equipment to about 2.3 times that of the previous fiscal year and installed a geothermal air-conditioning system and a zero liquid discharge system at the new manufacturing facilities built within the Gifu

Plant for the aircraft equipment business. With the FY2018 budget for investments in environment-friendly equipment being increased to about 1.7 times that of FY2017, we will introduce solar panels and other equipment not only at our new plants but also at the existing facilities. For society (S), in line with the progress of work style reforms, we will introduce automated equipment and robots to our production sites while making use of RPA tools at our administrative departments. We are thus proactively making investments in a cost-effective manner.

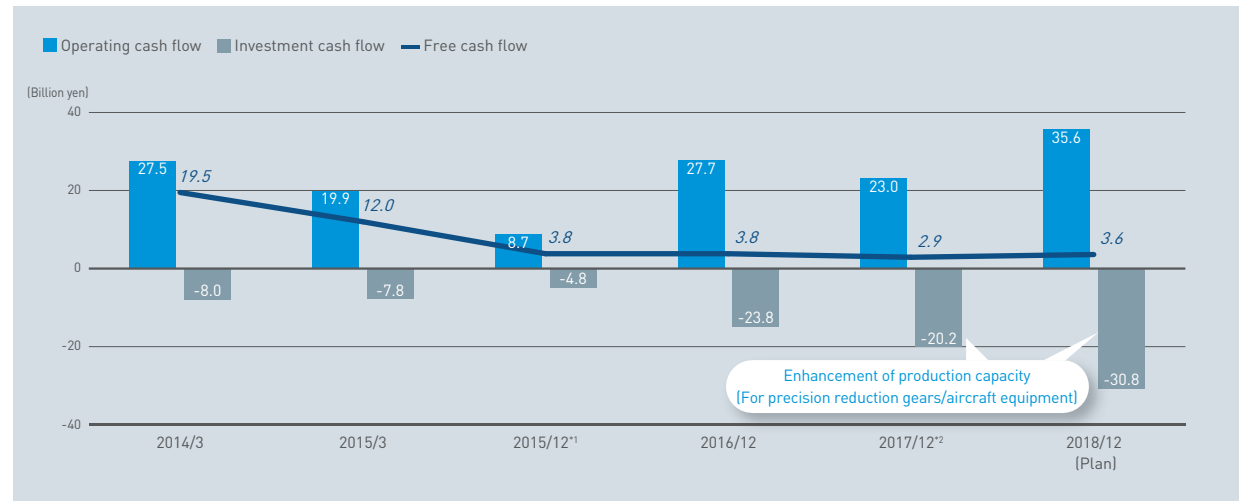
For the return of profit to shareholders, we have gradually increased cash dividends in line with profit growth. During the fiscal year ended December 31, 2015, we repurchased treasury stock amounting to about 10.0 billion yen as part of measures to return profits to shareholders and subsequently cancelled all of the acquired shares. We will continue to pursue the improvement of capital efficiency by promoting financial management to realize aggressive growth investment and stable and flexible shareholder returns toward achieving sustainable profit growth in the future.

**Measures for improving capital efficiency**



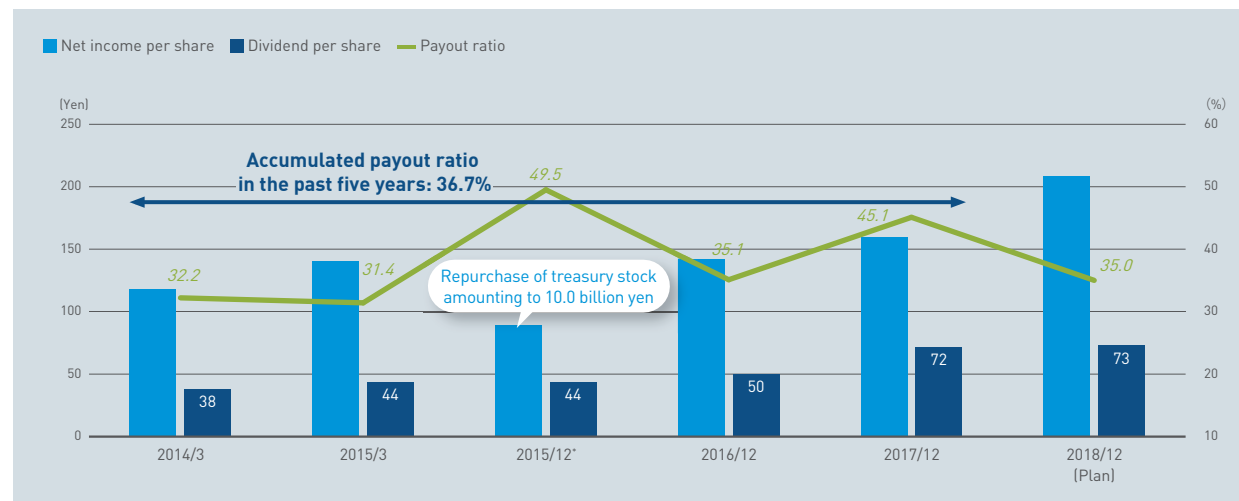
# Financial Management and Measures to Solve ESG Issues

## Cash Flows by Fiscal Year



\*1 The results are calculated on a 9-month basis for Nabtesco and its consolidated subsidiaries in Japan and on a 12-month basis for the overseas consolidated subsidiaries.  
 \*\*2 The Nabtesco Group has applied the International Financial Reporting Standards (IFRS) to its accounting since the fiscal year ended December 31, 2017 (2017/12). For comparison with the results for 2017/12, the results for 2016/12 were also recalculated in line with the IFRS.

## Change in Shareholder Returns



\* Nabtesco has changed the accounting closing date of fiscal year from March 31 to December 31 since FY2015. In this report, the results for FY2015/12 is calculated on a basis of 9 months for Nabtesco Corporation and the other consolidated subsidiaries in Japan (April to December 2015), and 12 months for the overseas consolidated subsidiaries (January to December 2015).

## Focus on solving ESG issues for achieving sustainable value creation

In the medium-term management plan, we are committed to focusing on solving ESG issues, thereby clearly showing our determination at the management level to achieve sustainable value creation by promoting CSR-oriented management and to continue to meet the expectations of our stakeholders.

In order to implement measures for the solution of ESG issues in a systematic manner, our CSR Committee, which directly reports to the CEO, examines the material CSR issues (materiality) and clarifies relevance between the materiality and the 17 Sustainable Development Goals (SDGs) set out by the United Nations. The committee also formulated the CSR Basic Policy in FY2016 to summarize the selected material issues as well as to ensure management transparency and provide safety, comfort and a sense of security. We will continue to contribute to achieving SDGs through the systematic promotion of individual activities while allocating our resources to a broad range of ESG issues in an efficient and effective manner.

With regard to the "E (environmental)" issues, we have set long-term targets to reduce CO<sub>2</sub> emissions to mitigate climate change. We aim to reduce CO<sub>2</sub> emissions per unit of sales by 30% in FY2030 and by 80% in FY2050 relative to FY2015.

In FY2017, we incorporated the environment contribution achievement ratio into the performance evaluation of business departments in order to achieve sustainable enhancement of environmental management. We will continue to increase production efficiency and environmental performance at our plants by combining a range of measures, including making investments.

As for "S (social)" issues, we are accelerating our initiatives for human resources. For example, we are promoting work style reforms to make effective use of the individual capabilities existing within our diverse workforce, while promoting diversity, better work-life balance, and the management of human rights. In 2017, we set



the Nabtesco Group Human Rights Policy in line with the United Nations Principles on Business and Human Rights and other guidelines, and we conducted a survey on human rights-related risks at 41 bases in Japan and abroad (covering 95% of on-site employees) in April 2018. We will continue working to reduce human rights-related risks through the due diligence process for human rights.

For the development of local communities, which is one of the material CSR issues, we established the Nabtesco Group Policy on Community Investment in FY2018 to clarify the policy, purposes, and scope of activities regarding the development of the local community. We will continue to make community investments proactively to build stronger relations of trust with local communities.

For "G (governance)" issues, we promote risk management and compliance in the globalization of our businesses. The Compliance Committee and the Risk Management Committee established in FY2016 play a key role in enhancing our initiatives across the Group.

In addition, we will make continuous efforts to further develop the governance system to enhance corporate value. In March 2017, we increased the number of members of the Nomination Committee from three to five. We will continue to leverage versatile perspectives for the selection of directors while enhancing personnel development programs for the next generation of management candidates.

We will realize sustainable growth by pursuing "Operational Excellence" through in-house innovations based on a wide range of financial and non-financial initiatives as well as external engagement through "Technology Innovation" and "Market Creation."



Web

Nabtesco Group  
Human Rights Policy

<https://nabtesco.disclosure.site/en/themes/113>



Web

Nabtesco Group  
Community Investment Policy

<https://nabtesco.disclosure.site/en/themes/113>



Web

For ESG Investors

<http://nabtesco.disclosure.site/en/themes/175>

## Nabtesco Group's Approach to ESG Issues

### Materiality (Material CSR Issues)

We use the concept of materiality (material CSR issues) to implement systematic CSR activities in fulfilling our corporate social responsibility. (For details on the process of reexamining materiality, see P.09.) The chart on the right summarizes the major impacts on our corporate activities from the identified issues. We will input resources to deal with a range of ESG-related issues in an efficient and effective manner by recognizing the potential impact of each issue.

### Support the External Initiatives

#### Participation in the United Nations Global Compact














The United Nations Global Compact (UNGC) is an international initiative that calls on companies and organizations to demonstrate responsible and creative leadership and take action as good corporate citizens for the achievement of sustainable growth. Signatories of the UNGC are required to comply with the “ten principles” set in the areas of human rights, labor standards, the environment, and anti-corruption, and implement voluntary measures with a strong commitment from their senior management.

Nabtesco signed the UNGC to show its support for the initiative in April 2014. Since then, the Company has been donating a certain amount of money every year to contribute to the implementation of the aforementioned ten principles including the protection of human rights. We have been proactively participating in symposiums and study groups organized by the Global Compact Network Japan. In fiscal 2017, we have participated in the study groups on SRI/ESG, reporting, environmental management, supply chains, anti-corruption, and human rights due diligence. Building on the cooperation and dialogues with external initiatives that we have engaged in by participating in these events, we will continue to interact with other participating companies and learn from advanced examples how to better foster CSR-oriented management at our Company.

#### Measures for SDGs (Sustainable Development Goals)

We have taken proactive measures for achieving the Sustainable Development Goals (SDGs). By setting targets associated with those goals among the 17 SDGs that have strong relevance to our material CSR issues, and thereby addressing materiality, we are striving to realize a more sustainable society. (For details on SDGs, see P.09.)

|  |                | Materiality  |                 |   |  |
|--|----------------|--|-----------------|---|--|
| General Category   | ESG Category   | Material CSR Issues  |                 |   |  |
| Ensure management transparency   | Governance (G) | <b>Strengthen corporate governance</b><br>Dialogue on Governance ▶ P.33<br>Corporate Governance ▶ P.75   |                 |   |  |
|  |                | <b>Promote risk management and compliance behavior</b><br>Promote Risk Management and Compliance Behavior ▶ P.77   |                 |   |  |
|  |                | <b>Ensure proactive dialogue with stakeholders</b><br>Ensure Proactive Dialogue with Stakeholders ▶ P.78   |                 |   |  |
| Provide safety, comfort and a sense of security  | Society (S)    | <b>Enhance customer satisfaction Ensure quality and safety</b><br>Road Map for Growth ▶ P.39<br>Producing Innovations ▶ P.89<br>Intellectual Property Activities to Support Innovation ▶ P.91<br>Manufacturing Innovation to Win the Global Competition ▶ P.92<br>Management of Quality ▶ P.93<br>Management of Occupational Safety ▶ P.94 |                 |   |  |
|  |                | <b>Develop human capital and promote workplace diversity, Provide safe and comfortable workplaces</b><br>Work Style Reforms ▶ P.97<br>Fostering Workplace Diversity ▶ P.98<br>Human Capital Development ▶ P.100<br>Increasing Employees' Awareness of The Nabtesco Way ▶ P.100   |                 |   |  |
|  |                | <b>Respect human rights and prevent corruption</b><br>Human Rights Management ▶ P.99   |                 |   |  |
|  |                | <b>Fair, proper and transparent procurement activities</b><br>Nabtesco Group's Procurement Activities ▶ P.96   |                 |   |  |
|  |                | <b>Local community development</b><br>Nabtesco Group's Community Investment ▶ P.101  |                 |   |  |
|  |                | Environment (E)  | Environment (E) | <b>Countermeasures for climate change</b><br>Environmental Management ▶ P.103     |  |
|  |                |  |                 | <b>Environmentally friendly manufacturing</b><br>Environmental Management ▶ P.103 |  |
| <b>Reduction of environmental impact through products and services</b><br>Environmental Management ▶ P.103 |                |  |                 |   |  |
|  |                | <b>Recycling, reuse and remanufacture of Products</b><br>Environmental Management ▶ P.103  |                 |   |  |

| Major Impacts on Our Corporate Activities  |   | Major SDGs of Relevance   |
|--|---|---|
| Negative Impact:<br>Trust of stakeholders declines   | Positive impact:<br>Trust of stakeholders is gained   |   |
| <p><b>As a result of functional deficiency of corporate governance,</b></p> <ul style="list-style-type: none"> <li>● corporate value is damaged.</li> </ul>  | <p><b>As a result of the enhancement of management supervision function, faster decision-making and ensuring of management transparency,</b></p> <ul style="list-style-type: none"> <li>● corporate value can be maintained or improved.</li> </ul>   |   |
| <p><b>As a result of the realization of risks and breaches of compliance,</b></p> <ul style="list-style-type: none"> <li>● business operations are interrupted or suspended; or</li> <li>● financial cost increases.</li> </ul>  | <p><b>As a result of appropriate risk management,</b></p> <ul style="list-style-type: none"> <li>● competitiveness in the product market is maintained or improved; or</li> <li>● business operations can be continued.</li> </ul> <p><b>As a result of the reinforcement of the global compliance system,</b></p> <ul style="list-style-type: none"> <li>● corporate value can be maintained or improved.</li> </ul>   |       |
| <p><b>As a result of the decline in trust of stakeholders,</b></p> <ul style="list-style-type: none"> <li>● competitiveness decreases; or</li> <li>● reputation is damaged.</li> </ul>   | <p><b>As a result of cooperation with stakeholders and development of relationships of trust,</b></p> <ul style="list-style-type: none"> <li>● business operations can be continued and business opportunities can be generated; or</li> <li>● talented people can be secured; or</li> <li>● reputation can be maintained or improved.</li> </ul>   |   |
| <p><b>As a result of the lack of meeting of customer and social needs,</b></p> <ul style="list-style-type: none"> <li>● competitiveness in the product market declines.</li> </ul> <p><b>As a result of deficiencies, accidents, etc. involving products,</b></p> <ul style="list-style-type: none"> <li>● business operations are interrupted/suspended or financial loss is incurred; or</li> <li>● financial cost increases.</li> </ul> | <p><b>As a result of the pursuit of customer needs,</b></p> <ul style="list-style-type: none"> <li>● in-house technologies are enhanced, or human resources are developed.</li> </ul> <p><b>As a result of the provision of products that provide safety, comfort and a sense of security,</b></p> <ul style="list-style-type: none"> <li>● trust of customers is gained.</li> </ul> <p><b>As a result of the contribution to solving social issues through business operations,</b></p> <ul style="list-style-type: none"> <li>● competitiveness in the product market is improved.</li> </ul> |       |
| <p><b>Due to the lack of ability to develop human resources and the lack of diversity,</b></p> <ul style="list-style-type: none"> <li>● organizational power and loyalty of employees decrease.</li> </ul> <p><b>As a result of labor issues or labor accidents,</b></p> <ul style="list-style-type: none"> <li>● productivity decline.</li> </ul>   | <p><b>As a result of the acquisition and development of capable and versatile human resources,</b></p> <ul style="list-style-type: none"> <li>● organizational capabilities and loyalty of employees improve.</li> </ul> <p><b>As a result of the realization of safe and pleasant working environments,</b></p> <ul style="list-style-type: none"> <li>● productivity is enhanced.</li> </ul>  |       |
| <p><b>As a result of the realization of human rights and corruption risks,</b></p> <ul style="list-style-type: none"> <li>● reputation is damaged; or</li> <li>● business operations are interrupted or suspended.</li> </ul> <p><b>As a result of the strengthening of relevant laws and regulations,</b></p> <ul style="list-style-type: none"> <li>● financial cost increases.</li> </ul>   | <p><b>As a result of preventing human rights and corruption risks,</b></p> <ul style="list-style-type: none"> <li>● reputation is maintained and improved.</li> </ul>   |       |
| <p><b>As a result of the realization of procurement risks,</b></p> <ul style="list-style-type: none"> <li>● supply of raw materials and components is suspended.</li> </ul> <p><b>As a result of the interruption or suspension of business operations,</b></p> <ul style="list-style-type: none"> <li>● financial cost increases.</li> </ul>  | <p><b>As a result of controlling procurement risks,</b></p> <ul style="list-style-type: none"> <li>● raw materials and components are procured sustainably.</li> </ul> <p><b>As a result of securing high-quality suppliers,</b></p> <ul style="list-style-type: none"> <li>● competitiveness in the product market is improved.</li> </ul>   |   |
| <p><b>As a result of sluggish local economy/society,</b></p> <ul style="list-style-type: none"> <li>● the product market shrinks and employment opportunities are lost.</li> </ul>   | <p><b>As a result of the development of trust with local communities and contribution to local communities,</b></p> <ul style="list-style-type: none"> <li>● reputation is maintained and improved, or</li> <li>● the product market expands and employment opportunities are gained.</li> </ul>  |   |
| <p><b>As a result of the realization of natural disaster risks and energy risks,</b></p> <ul style="list-style-type: none"> <li>● business operations are disrupted.</li> </ul> <p><b>As a result of the strengthening of climate change-related laws and regulations,</b></p> <ul style="list-style-type: none"> <li>● financial cost increases.</li> </ul>   | <p><b>As a result of preventing natural disaster risks and energy risks,</b></p> <ul style="list-style-type: none"> <li>● business operations can be continued.</li> </ul> <p><b>As a result of contributing to mitigating climate change issues,</b></p> <ul style="list-style-type: none"> <li>● reputation is maintained and improved.</li> </ul>  |   |
| <p><b>As a result of the realization of environmental risks (violation of environmental laws and regulations or environmental pollution caused by business operations),</b></p> <ul style="list-style-type: none"> <li>● financial cost due to damages, compensation, etc. increases.</li> </ul>   | <p><b>As a result of the contribution to solving environmental issues,</b></p> <ul style="list-style-type: none"> <li>● reputation is maintained and improved.</li> </ul>   |   |
| <p><b>As a result of environmental pollution caused by the provision of products and services,</b></p> <ul style="list-style-type: none"> <li>● competitiveness in the product market declines.</li> </ul>   | <p><b>As a result of the provision of products and services with high environmental performance,</b></p> <ul style="list-style-type: none"> <li>● the product market expands and competitiveness is enhanced.</li> </ul>  |   |
| <p><b>As a result of a shortage of resources,</b></p> <ul style="list-style-type: none"> <li>● business activities become stagnant.</li> </ul> <p><b>As a result of the lack of environmental performance for products,</b></p> <ul style="list-style-type: none"> <li>● competitiveness in the product market declines.</li> </ul>  | <p><b>As a result of the recycling of raw materials and components,</b></p> <ul style="list-style-type: none"> <li>● sustainability of business activities is improved.</li> </ul> <p><b>As a result of the contribution to developing a recycling-oriented society,</b></p> <ul style="list-style-type: none"> <li>● competitiveness in the product market increases.</li> </ul>   |   |

## Materiality Ensure Management Transparency

- Strengthen corporate governance - Promote risk management and compliance behavior - Ensure proactive dialogue with stakeholders

**Management transparency is one of the Nabtesco Group's material CSR issues, a precondition for the Group's sustainable growth, and is therefore valuable for both the Nabtesco Group and its external stakeholders. The Nabtesco Group will ensure management transparency by strengthening corporate governance, promoting risk management and compliance behavior, and ensuring proactive dialogue with stakeholders.**

## Strengthen Corporate Governance

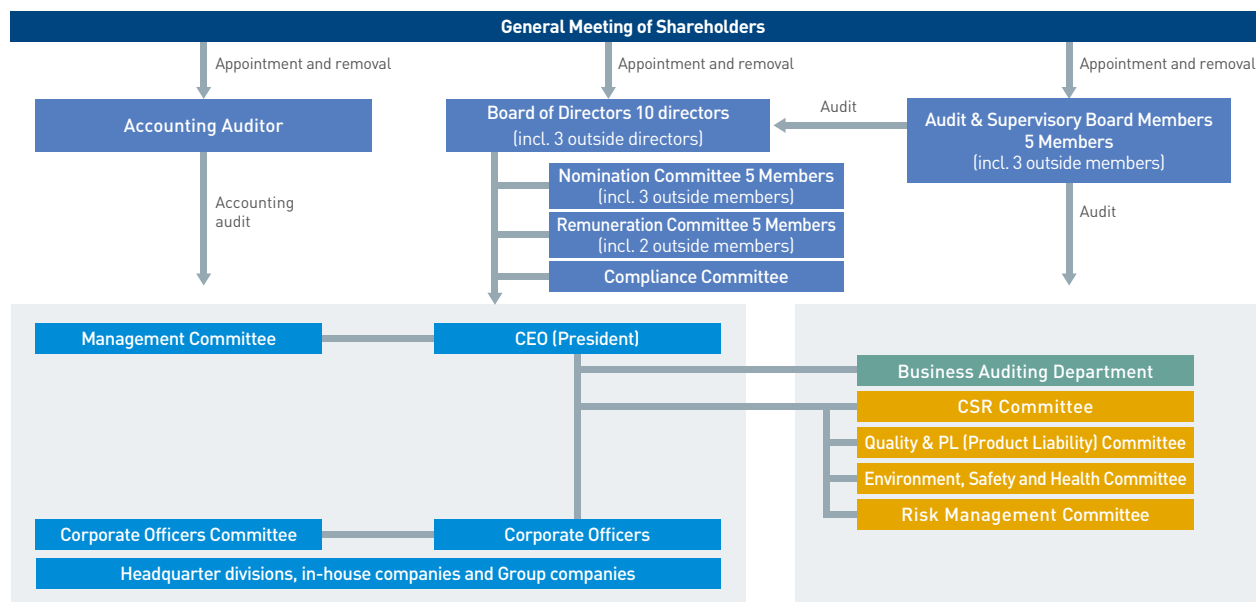
### Basic Approach to Corporate Governance

Nabtesco established the Nabtesco Corporate Governance Basic Policy on October 30, 2015. The Policy can be found on our website. We will be committed to achieving sustainable growth, increasing its corporate value on a medium- to long-term basis, and earning greater trust from stakeholders based on the principles and spirit of Japan's Corporate Governance Code, which was established by Tokyo Stock Exchange. To fulfill this commitment, we will work on improvement of our corporate governance.

### Measures to Enhance Corporate Governance

Given the content and characteristics of business operations covered by our Group, we have adopted an executive officer system and an in-house company system as a means of expediting decision-making and clarifying the responsibility for executing certain business operations. As a means of controlling these systems, we have established corporate governance under which the Board of Directors, Audit & Supervisory Board (Members), Accounting Auditors, and the Management Committee—an organization tasked with carrying out the deliberation of important issues relating to executing business operations—have been set up to clearly divide the functions of decision-making, the control and execution of business, and the monitoring and supervision of management.

Corporate Governance System (As of March 27, 2018)



### Measures to Ensure Effectiveness of Board of Directors and Its Evaluation

Nabtesco conducts a yearly analysis and evaluation of the effectiveness of the Board of Directors based on the self-evaluations of the Directors to improve its functions. In FY2017, the company conducted an anonymous self-evaluation questionnaire survey (with the design of questions and aggregation of responses performed by an independent third party) of the Directors and Audit & Supervisory Board members, and the Board analyzed and

evaluated the results. According to the results, the Directors believe that the number of the Directors and the structure of the Board of Directors are appropriate and that open, natural and constructive discussion is being held, among others. Considering the judgment that the understanding of and insight into the company's business has deepened especially among outside directors through the meeting of the Board of Directors held at factories, which started from FY2017, the effectiveness of the Board is considered to be well secured.

On the other hand, with respect to how to hold a

at the meeting of the Board of Directors, the following issues were found: securing enough time to deliberate important issues in management, including growth strategies; delegating authority further to lower branches in order to secure such time; and increasing efficiency in the administration of the Board of Directors, among others.

## Compensation System for Directors

Compensation to directors is established in such a way that it functions as a healthy incentive for the company's sustainable growth. Compensation to directors comprises "monthly compensation," which is made up of fixed compensation and short-term performance-linked compensation, and "stock compensation," which is offered in consideration of medium- to long-term performance. ROE, net sales, operating income, net income, R&D indicators and environmental indicators are used as the major performance indicators. Compensation of independent outside directors is only paid on a fixed basis in light of their roles and independence. In order to ensure the directors' desire and enthusiasm to contribute to the increase of corporate value and to raise the awareness of shareholder-oriented management, the company has adopted and introduced the Board Benefit Trust (BBT) as a stock compensation plan.

BBT, compared with existing stock compensation-type stock options, as a remuneration system, has the potential to further increase the motivation of Directors, etc. to contribute to improving the medium- to long-term business performance of the Group as a whole and boosting corporate value, as well as to further increase shareholder-centric management awareness by additionally clarifying the link between compensation of Directors, the business performance and share value of the company, and by having Directors share with shareholders not only the benefits of rising share prices, but also the drawbacks of falling share prices.

Total amount of compensation for directors (excluding outside directors) in FY2017 amounted to 377 million yen.

## Explanation of Company Organizations

| Organization Name                   | Roles and Responsibilities   | No. of People                  | Frequency of meetings in FY2017                   |
|-------------------------------------|--|--------------------------------|---|
| Board of Directors                  | Formulates the Group's basic policies and strategies, makes decisions about the execution of important business matters and supervises the way business is carried out.  | 10 (incl. 3 outside directors) | 18 times<br>(At least once a month, in principle) |
| Nomination Committee                | Deliberates on candidates for Directors, Audit & Supervisory Board Members and the CEO as well as succession plans for the CEO etc, and reports the results to the Board of Directors. The Committee consists of five members including three outside members (two Outside Directors and one Audit & Supervisory Board Member).  | 5 (incl. 3 outside members)    | 3 times   |
| Remuneration Committee              | Deliberates on policies and management of remuneration for directors and corporate officers and reports the results to the Board of Directors. The Committee consists of three members including two outside members (one Outside Director and one Audit & Supervisory Board Member).  | 3 (incl. 2 outside members)    | 2 times   |
| Compliance Committee                | The Committee is responsible for promoting compliance in the Nabtesco Group by providing advice on basic policies and priority issues related to the Group-wide compliance system to the Board of Directors.   | 7 (incl. 2 outside members)    | 2 times   |
| Audit & Supervisory Board (Members) | The Audit & Supervisory Board audits the execution of duties by Directors and prepares audit reports. To reinforce coordination with the internal audit division, the accounting division in charge of promoting internal control and the compliance risk management division, the Audit & Supervisory Board holds information-sharing conferences. In addition, in order to respond to the strengthening of Group management, the Audit & Supervisory Board regularly holds Group Audit & Supervisory Board including Audit & Supervisory Board of Group companies. | 5 (incl. 3 outside auditors)   | 13 times  |
| Corporate Officers Committee        | The Corporate Officers Committee is the body devoted to the execution of business pursuant to the policies and strategies of the Board of Directors under the supervision of the Board. It is composed of 23 members including the corporate officers of the Group's four subsidiaries.  | 23                             | 13 times  |
| Management Committee                | In line with the policies decided by the Board of Directors, the Management Committee serves as the body that discusses important matters relating to execution of the Group's business and reports on results and the execution of business. It is composed of the CEO, in-house company presidents, corporate division executive officers, and general managers.   | —                              | 20 times<br>(At least once a month in principle)  |
| Business Auditing Department        | With the aim of contributing to sound management control and in an attempt to improve the effective operation and quality of Group management activities, the Business Auditing Department was established to strengthen internal business auditing. It conducted internal business audits of headquarter divisions, in-house companies and consolidated subsidiaries in FY2017.   | 7                              | —   |

\* No. of people and frequency of meetings show the aggregated figures of FY2017.

## Claw-back Clause

The bylaws for compensation provide for a claw-back clause in which, in the event of a significant retrospective change in the business results of a past year, on which the calculation of performance-linked compensation was based, as a result of the revision of operating results due to inappropriate accounting or for other reasons, or if the company incurs a serious loss due to wrongful or illegal acts by a director or Audit & Supervisory Board member, the company is entitled to demand the return of performance-linked compensation paid to directors or Audit & Supervisory Board members, in whole or in part.

# Promote Risk Management and Compliance Behavior

## Risk Management in General

The Nabtesco Group has a system in place to ensure that profits and losses, capital efficiency, quality issues, extraordinary accidents and other matters concerning the execution of business operations are reported to the Board of Directors appropriately and in a timely manner, thereby detecting risks at their early stages and minimizing losses.

In FY2017, to properly implement risk and crisis management at the Nabtesco Group and to maintain and improve its corporate value, we conducted risk assessment on Nabtesco and the group companies in Japan according to the risk management rules, which were overhauled in FY2016, and the detailed rules on risk management.

Given that risks faced by corporations have been multiplying and becoming increasingly diversified, we identified serious Group-wide risks based on the results of the risk assessment and discussed the countermeasures to address them at a meeting of the Risk Management Committee, which was established in FY2016 as a forum for Group-wide risk management activities for prompt actions.

In FY2017, we managed the following types of risks and prevented losses.

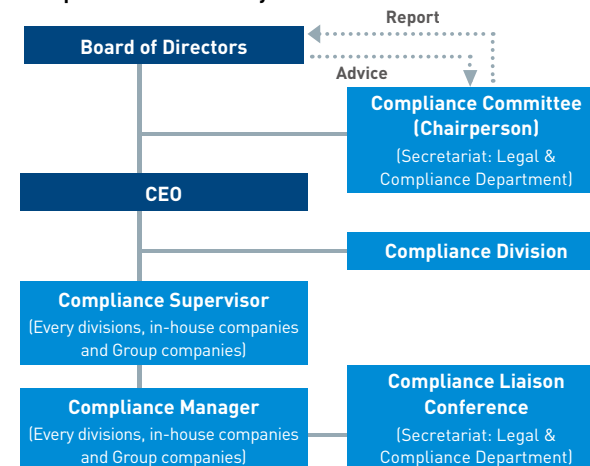
- |  |   |
|--|---|
| (1) Risks relevant to the economy and markets    | (8) Risks relevant to information security              |
| (2) Risks relevant to overseas operations        | (9) Risks relevant to intellectual property             |
| (3) Risks relevant to large-scale disasters      | (10) Risks relevant to laws, ordinances and regulations |
| (4) Risks relevant to exchange rate fluctuations | (11) Risks relevant to environment                      |
| (5) Risks relevant to procurement                | (12) Risks relevant to corporate acquisition etc.       |
| (6) Risks relevant to product quality            | (13) Risks relevant to impairment loss of fixed assets  |
| (7) Risks relevant to competition                |   |

We also ensure the rationality, appropriateness and legality of decision-making and manage risks through compliance with, and thoroughgoing implementation of, the Group regulations for responsibility and authority. We have also established company regulations that set forth reporting procedures in the event of accidents, disasters, critical quality problems and other incidents that may have a seriously negative impact on the Group's business results, financial standing or credit. We thus have established a prompt and proper information communication and emergency response system in case of a contingency.

With regard to monitoring, expert members at the Headquarters, such as the Business Auditing Department,

conduct cross-organizational audits of operational risk management and offer necessary and appropriate advice with regard to operational improvement.

### Compliance Promotion System



**Web**  
 Risk Factors  
[https://www.nabtesco.com/en/ir/policy/risk\\_factors.html](https://www.nabtesco.com/en/ir/policy/risk_factors.html)

### Established a global compliance system

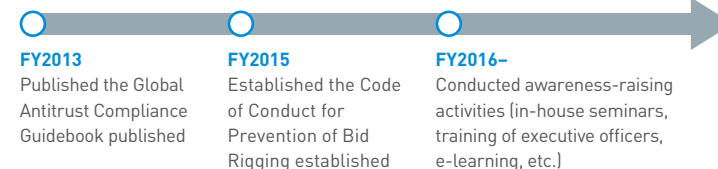
#### Globalized the internal reporting system



### Initiatives on Anti-Corruption Measures



### Measures implemented to prevent bid rigging



## Establishment of the Nabtesco Group Code of Ethics

To strengthen the Group-wide and global compliance system, the Nabtesco Group has established the Nabtesco Group Code of Ethics.

The Legal & Compliance Department, which is in charge of compliance issues, fulfills a central role by increasing employees' compliance awareness in addition to fostering their compliance with laws and regulations in order to enhance the Group's corporate value over the medium- to long-term. The Nabtesco Group Code of Ethics shows, from the compliance viewpoint, the basic approach to be taken by members of the Nabtesco Group for the implementation of Corporate Philosophy in their business activities.

In order to help employees deepen their understanding of this Code of Ethics and take actions that are in line with it, we have prepared a Compliance Handbook, which is used for compliance education and awareness-raising activities. The Code of Ethics and the Compliance Handbook is available in nine languages (Japanese,

### Nabtesco Group Code of Ethics

#### Scope of Application

#### Implementation of the Nabtesco Group Code of Ethics

- (1) Behavioral Requirements for Directors, Officers and Employees
- (2) Behavioral Requirements for Executives and Managers
- (3) Reporting a Violation of this Code
- (4) Discipline

#### 1. General Standards

#### 2. Relationships with Company

- (1) Respect for Human Rights
- (2) Discrimination and Harassment
- (3) Building Safe and Positive Workplace Environments
- (4) Political and Religious Activities
- (5) Conflicts of Interest

#### 3. Fair and Honest Business Activities

- (1) Fair Transactions
- (2) Anti-bribery, Gifts and Entertainment
- (3) Trade Control
- (4) Relationship with Politics and Governments
- (5) Relationship with Anti-Social Forces

#### 4. Management of Company Assets and Other Property

- (1) Management of Company Assets
- (2) Management of Confidential Information
- (3) Management of Financial Information
- (4) Protection of Personal Information
- (5) Protection and Respect for Intellectual Property
- (6) Insider Trading

#### 5. Relationships with Society

- (1) Relationships with Society
- (2) Disclosure of Company Information

English, Simplified Chinese, Traditional Chinese, Korean, Thai, German, Italian and French) on Nabtesco's website.

We also conducted education activities at all Nabtesco

Group companies outside Japan to disseminate the Code of Ethics from FY2017 to FY2018.

## Ensure Proactive Dialogue with Stakeholders

### Dialogue with shareholders and investors

In order to meet the long-term expectations of shareholders and investors, the Nabtesco Group is fostering disciplined management with a focus on capital cost. Regarding ownership of our shares, non-Japanese shareholders account for more than 50% (51.8% as of the end of December 2017). Our shares also feature large ownership by institutional investors who make long-term growth investments\*. We are fostering proactive dialogue with both domestic and overseas investors for the sophistication of our management.

As part of our effort for continued communication with overseas shareholders and investors, we have extensive

contact with offshore investors who make long-term investments. By promoting dialogues with these investors we have been able to build an excellent shareholder base. When meeting investors, we proactively solicit their frank opinions on our capital policies and incorporate their views into our management. We thus engage in bidirectional communications.

In addition to management and financial information, we also disclose non-financial information such as details on ESG issues in a proactive way. With an eye to helping our stakeholders understand the whole picture of the Nabtesco Group's value creation process, we have been publishing an annual integrated report since FY2014, while providing

more ESG-related information at our corporate website.

Moreover, we regard the general meeting of shareholders as a precious opportunity to engage with our shareholders directly. In order to provide them with enough time to examine the agenda for the general meeting and exercise their voting rights appropriately, we work to disclose and send out the notice of convocation as early as possible. After the general meeting, we also hold a briefing on our businesses. Through these opportunities we have dialogues with our shareholders and help them deepen their understanding of the Nabtesco Group's businesses.

\* Growth investments are made with a focus on the growth possibility of companies.

### Measures for Facilitating Participation in General Meeting of Shareholders and Execution of Voting Rights

| Item   | Outline   |
|--|---|
| Early dispatch of the notice of convocation                              | We have been sending the notice of convocation to shareholders three weeks prior to the Meeting since FY2007.   |
| Early disclosure of the notice of convocation (disclosed on the website) | We have been making early disclosure of the notice of convocation since FY2013. In FY2016, the disclosure was made approximately one month before the day of the General Meeting.   |
| Participation in the ICJ platform*                                       | We have participated in the ICJ platform in FY2007 to enable institutional investors and others in Japan and abroad who cannot attend the Meeting to execute their voting rights via the Internet.                                    |
| Organization of a meeting to explain the Group's business activities     | Since FY2009, following the General Meeting of Shareholders, we have been holding a further meeting to explain our business activities to shareholders and deepen their understanding of the Nabtesco Group.                          |
| Provision of an English summary of the notice of convocation             | We translated the summary of the notice of convocation and posting it on our website since FY2011. Additionally, in FY2016, we have published an English edition of parts of business report and financial statements on our website. |

\* ICJ platform: Infrastructure to facilitate the disclosure of information concerning the agenda of shareholders' meetings, execution of shareholders' voting rights and tabulation of voting results. The platform was established by ICJ, a joint venture launched by three companies including the Tokyo Stock Exchange, and has been in operation since 2005.

### Investor Relations (IR) Activities for Institutional and Individual Investors

|  |  |
|--|--|
| Briefings on financial results   | We organize meetings following the end of the second and fourth quarters in which the CEO reports the financial results to participants.   |
| Participation in IR conferences and implementation of overseas roadshows | In order to foster communication with institutional investors both in Japan and overseas, we participated in five IR conferences in Japan and two overseas, and also held five overseas roadshows in FY2017.   |
| Organization of one-on-one interviews and small meetings                 | We proactively share information with securities analysts and institutional investors to gain their understanding and help them to make appropriate evaluations. In FY2017, we accepted over 400 requests from analysts and investors for one-on-one interviews including telephone inquiries. |
| Factory tours  | We organize factory tours at our production bases in Japan and overseas as often as deemed appropriate.  |
| Overseas IR activities   | In FY2017, we conducted IR activities in Europe, the United States, Canada, Singapore, Hong Kong and China.  |
| Briefing on the company with individual investors                        | We held IR briefings across Japan, with an eye to fostering communication with individual investors through new approaches.  |

### Dialogue with External Stakeholders

The Nabtesco Group has customers engaged in a range of fields, including manufacturing and infrastructure establishment. Our excellent customer base provides us with a sustainable source of profits. The Group regularly conducts a customer satisfaction survey and promotes dialogues with customers in its pursuit of QCD performance that meets their needs.

The Nabtesco Group deals with around 1,000 suppliers, including both large and small operators. For its medium- to long-term growth, it is critical that the Group have a sustainable supply chain. Based on this recognition, we are closely collaborating with our suppliers through fair and appropriate transactions.

In order to increase the effectiveness of the Nabtesco Group CSR-Oriented Procurement Policy, we hold an annual briefing session for suppliers, in which about 600 companies participate. At the same time we conduct an SAQ\* survey targeting first-tier suppliers within and outside Japan.

Based on the survey results, we conduct an analysis and evaluation of each supplier and provide them with written feedback. We also visit or interview a certain number of specific suppliers for the joint creation of CSR activity promotion measures.

In addition, we proactively foster community investments so that we can contribute to the development of local communities and build relations of trust with local people. We uphold "contribution to solving social challenges faced by local communities in the regions where we operate" as one of our targets, and are proactively working with local NPOs to attain this target.

\* SAQ stands for self-assessment questionnaire.





Briefing session for suppliers



Lecture organized by an NPO (Sento-Tarui) as part of the new employee training

MEMBER OF  
**Dow Jones Sustainability Indices**  
 In Collaboration with RobecoSAM



## External Assessment

|  |   |
|--|---|
| Dow Jones Sustainability Indices (DJSI) World Index                      | The Dow Jones Sustainability Indices (DJSI) are a group of well-established global benchmarks for socially responsible investment (SRI) developed jointly by S&P Dow Jones Indices of the United States and RobecoSAM of Switzerland. Using the benchmarks, comprehensively excellent companies are nominated every year based on evaluation of their corporate social responsibility (CSR) and sustainability from economic, environmental and social perspectives. Nabtesco Corporation has been selected for inclusion in the DJSI World Index since 2016. The company has also been selected as a component company of the DJSI Asia Pacific Index every year since 2013. |
| FTSE4Good Index Series   | FTSE4Good is a well-known SRI index created by the FTSE Group in the UK. The index showcases the best overall companies each year, evaluated in terms of CSR and sustainability from the three perspectives of environment, society and corporate governance (ESG). Nabtesco has been included in the index every year since September 2009.  |
| MSCI ESG Leader Indexes  | The MSCI ESG Leader Indexes series was developed by MSCI INC. of the United States, and is one of the world's major SRI indices, composed of companies highly rated in ESG factors. Nabtesco Corporation has been successively selected for inclusion in the index since fiscal 2015.   |
| The Japan Investor Relations Association "22nd Best IR Award (2017)"     | The Japan Investor Relations Association (JIRA) annually selects companies that are conducting outstanding IR activities, a winning company is selected by a judging committee composed of analysts, investors, news organizations. We received the Prime Business Award from the JIRA in 2012, and in 2017, we were selected for the Best IR Award.  |
| Institutional Investor Best IR Professional (machinery sector, buy side) | In the IR Ranking 2017, a ranking targeting listed companies in Japan conducted by globally renowned US financial magazine Institutional Investors, Nabtesco was ranked 3rd in both the Best IR Companies (sell-side category) section and Best IR Websites (sell-side category) section. Previously, Nabtesco was ranked 1st in the Best IR Professionals section in FY2014 and 2nd in both the Best CEOs (buy-side category) and Best IR Companies (sell-side category) sections in FY2013.   |
| Internet IR awards by Daiwa Investor Relations                           | Daiwa Investor Relations Co., Ltd. evaluates the IR websites of listed companies in Japan based on its own criteria. Since FY2006 Nabtesco has received IR awards from the company for 11 consecutive years, including an excellence award won in FY2016.   |
| Listed Company Website Quality Ranking by Nikko Investor Relations       | Nikko Investor Relations Co., Ltd. evaluates the website quality of all listed company in Japan in terms of its intelligibility, usability and information quantity. Nabtesco has received a high placing for 11 consecutive years since FY2006, including the best award won in 2016.  |
| MSCI Japan Index   | The MSCI Japan Index is an index developed by U.S. organization, MSCI Inc. It is composed of shares listed on Japanese securities exchanges and is globally used as a leading investment benchmark for Japanese shares. Nabtesco has been continuously included in the index since November 2009.   |
| JPX-Nikkei Index 400   | The underlying index is JPX-Nikkei Index 400, which is composed of companies with high appeal for investors, meeting requirements of global investment standards, such as efficient use of capital and investor-focused management perspectives. The constituents are selected from all the listed companies on Tokyo Stock Exchange (TSE) based on the criteria, such as ROE and corporate governance processes. Nabtesco Corporation has been a constituent of the Index since 2014.  |
| CDP Climate A List   | CDP is an international non-profit organization that requests the world's largest companies in terms of market capitalization to disclose anti-climate change strategies and GHG emissions data, evaluates the information and publishes the scores for public view. The Nabtesco Group is recognized by CDP, based on its 2017 survey, as one of the world's leaders in corporate activities for anti-climate change measures and strategies and is included in the Climate A List, which is composed of 112 companies worldwide.  |
| CDP Supplier Climate A List  | The Nabtesco Group is included in the Supplier Climate A List (consisting of 112 companies worldwide) and recognized as one of the suppliers evaluated as global leaders in anti-climate change actions and strategies under the CDP Supply Chain Program, in which CDP gathers information on supplier companies' activities to mitigate climate change and evaluates them on behalf of global companies.  |

## Corporate Governance Effort

|  | 2004   | 2005                                    | 2006          | 2007 | 2008   | 2009                   | 2010   | 2011               | 2012                                     | 2013   | 2014                                     | 2015                                      | 2016   | 2017                                     | 2018 |  |  |
|--|--|---|---------------|------|--|------------------------|--|--------------------|--|--|--|---|--|--|------|--|--|
| Chairman of the Board                          | Representation right   | Shigeo Iwatare                          |               |      |  |                        |  |                    |  |  |  |   |  |  |      |  |  |
|  | No representation right <sup>1</sup>                                       |   | Makoto Okitsu |      |  |                        |  | Kazuyuki Matsumoto |  |  |  |   |  | Kazuaki Kotani                           |      |  |  |
| Representative Director, President & CEO       | Makoto Okitsu  | Kazuyuki Matsumoto                      |               |      |  |                        |  | Kazuaki Kotani     |  |  |  |   |  | Katsuhiro Teramoto                       |      |  |  |
| Number of Board of Directors                   | 10 directors (incl. 2 outside directors)                                   | 10 directors (incl. 1 outside director) |               |      |  |                        |  |                    | 10 directors (incl. 2 outside directors) | 10 directors (incl. 3 outside directors)           | 10 directors (incl. 2 outside directors) |   | 10 directors (incl. 3 outside directors)<br>*Including a female outside director |  |      |  |  |
| Number of Audit & Supervisory Board Members    | 5 Audit & Supervisory Board Members (incl. 3 outside members) <sup>2</sup> |   |               |      |  |                        |  | *2                 |  |  |  | *2  |  |  |      |  |  |
| Committees                                     | Group ESH (Environment, Safety, and Health) Committee                      |   |               |      |  |                        |  |                    |  |  |  |   |  |  |      |  |  |
|  | Group PL (Product Liability) Committee                                     |   |               |      | Group Quality & PL (Product Liability) Committee |                        |  |                    |  |  |  |   |  |  |      |  |  |
|  | Group Quality Committee  |   |               |      |  |                        |  |                    |  |  |  |   |  |  |      |  |  |
|  |  |   |               |      |  | Remuneration Committee |  |                    |  |  |  |   |  |  |      |  |  |
|  |  |   |               |      |  |                        |  |                    |  |  |  |   | Nomination Committee   |  |      |  |  |
|  |  |   |               |      |  |                        |  |                    |  |  |  |   |  | Compliance Committee                     |      |  |  |
|  |  |   |               |      |  |                        |  |                    |  |  |  |   |  | CSR Committee                            |      |  |  |
|  |  |   |               |      |  |                        |  |                    |  |  |  |   | Risk Management Committee  |  |      |  |  |
| Remuneration for Inside Directors <sup>3</sup> | Monthly remuneration and retirement benefit                                |   |               |      |  |                        |  |                    |  |  |  |   |  |  |      |  |  |
|  |  |   |               |      |  |                        | Monthly remuneration (Fixed compensation and short-term performance-based fee) |                    |  |  |  |   |  |  |      |  |  |
|  |  |   |               |      |  |                        | Stock-based compensation stock option (Long-term performance-based fee)        |                    |  | Stock-based compensation stock option <sup>4</sup> |  |   | Board Benefit Trust <sup>4</sup>   |  |      |  |  |
| Accounting Standard                            | Settlement of account in March (JGAAP)                                     |   |               |      |  |                        |  |                    |  |  |  | Settlement of account in December (JGAAP) |  | Settlement of account in December (IFRS) |      |  |  |

|                               | 2004 | 2005                                    | 2006   | 2007   | 2008 | 2009                      | 2010 | 2011                                      | 2012             | 2013                                  | 2014 | 2015   | 2016 | 2017   | 2018   |
|-------------------------------|------|---|--|--|------|---------------------------|------|---|------------------|---------------------------------------|------|--|------|--|--|
| Corporate<br>Philosophies etc |      | Corporate Philosophy                    |  |  |      |                           |      |   | The Nabtesco Way |                                       |      |  |      |  |  |
|                               |      | Long-term Vision (Final year: FY2014)   |  |  |      |                           |      |   |                  |                                       |      |  |      |  |  |
|                               |      |   |  |  |      |                           |      |   |                  | Long-term Vision (Final year: FY2020) |      |  |      |  |  |
|                               |      |   |  |  |      |                           |      |   |                  |                                       |      | Nabtesco Corporate Governance Basic Policy     |      |  |  |
|                               |      |   | Basic Policies for the Construction of an Internal Control System                  |  |      |                           |      |   |                  |                                       |      |  |      |  |  |
|                               |      |   |  |  |      |                           |      |   |                  |                                       |      | Risk Management Rules                          |      |  |  |
|                               |      | Nabtesco Group Code of Corporate Ethics |  |  |      |                           |      |   |                  |                                       |      |  |      | Nabtesco Group Code of Ethics                          |  |
|                               |      | Nabtesco Group Code of Conduct          |  |  |      |                           |      |   |                  |                                       |      |  |      |  | Nabtesco Group Global<br>Anti-Bribery Policy |
|                               |      | Group ESH Rules                         |  |  |      |                           |      |   |                  |                                       |      |  |      |  |  |
|                               |      | Group Quality Management Rules          |  |  |      |                           |      |   |                  |                                       |      |  |      |  |  |
|                               |      | Group Quality and PL Management Rules   |  |  |      | Group PL Management Rules |      |   |                  |                                       |      |  |      |  |  |
|                               |      |   | Nabtesco Group Environmental Philosophy/Environmental Action Plan/long-term target |  |      |                           |      |   |                  |                                       |      |  |      |  |  |
|                               |      |   |  |  |      |                           |      |   |                  |                                       |      | Nabtesco Group CSR-Oriented Procurement Policy |      |  |  |
|                               |      |   |  |  |      |                           |      | Basic Policy on Human Capital Development |                  |                                       |      |  |      |  |  |
|                               |      |   |  |  |      |                           |      |   |                  |                                       |      |  |      |  | Nabtesco Group<br>Human Rights Policy        |
|                               |      |   |  |  |      |                           |      |   |                  |                                       |      |  |      | Nabtesco Group CSR Basic Policy                        |  |
|                               |      |   |  |  |      |                           |      |   |                  |                                       |      |  |      | Nabtesco<br>Group<br>Community<br>Investment<br>Policy |  |
| Anti-takeover<br>Measures     |      |   |  | Pre-warning Anti-takeover Measures <sup>*5</sup> |      |                           |      |   |                  |                                       |      |  |      |  |  |

\*1. Kazuaki Kotani, the current Chairman of the Board, is a chairman without the right to execute business.

\*2. In FY2011 and FY2015, the number of Audit & Supervisory Board Members was temporarily four (including three Outside members) due to the resignation of a members for personal reasons.

\*3. Outside Directors are paid on a monthly basis.

\*4. Remuneration is linked to medium-term and long-term business results.

\*5. The pre-warning anti-takeover measures were introduced with the resolution of the 4th Ordinary General Meeting of Shareholders held on June 26, 2007. However, they were abolished at the conclusion of the 7th Ordinary General Meeting of Shareholders held on June 24, 2010.

## Management Team

### Board of Directors (as of March 27, 2018)



#### Kazuaki Kotani

Chairman of the Board  
(Sep. 15, 1951)

- Sep. 2003 Vice President of P. T. Pamindo Tiga T
- May 2008 General Manager, Sales Department, Power Control Company of Nabtesco Corporation
- Jun. 2009 Executive Officer of Nabtesco Corporation
- Jun. 2010 Director and General Manager, Planning Division of Nabtesco Corporation
- Jun. 2011 Representative Director, President & CEO of Nabtesco Corporation
- Mar. 2017 Chairman of Nabtesco Corporation (to present)

**Reasons for appointment** Mr. Kazuaki Kotani, as the chairperson of the Board of Directors, has worked to create an environment for frank and constructive dialogues and the free exchange of ideas and plays an important role in improving the decision-making functions of the Board of Directors. He has broad experience at the Company and extensive insight concerning global business. Due to these factors, he has been determined to be an appropriate person to realize continued improvement in corporate value, and thus appointed as Director.

**Number of shares held in Nabtesco Corporation:** 19,000



#### Katsuhiko Teramoto

Representative Director,  
President & CEO  
(Dec. 13, 1955)

- Jun. 2007 General Manager, Sales Department No. 1, Precision Equipment Company of Nabtesco Corporation
- Jul. 2008 General Manager, Overseas Sales Department, Precision Equipment Company of Nabtesco Corporation
- Jun. 2009 General Manager, Planning Department, Accessibility Innovations Company of Nabtesco Corporation
- Jun. 2011 Executive Officer of Nabtesco Corporation
- Oct. 2011 Vice President and General Manager of Planning Department, Accessibility Innovations Company of Nabtesco Corporation
- Feb. 2013 Deputy General Manager, Corporate Planning Division, and General Manager, Corporate Planning Department of Nabtesco Corporation
- Jun. 2015 Representative Director, Managing Executive Officer and General Manager of Corporate Planning Division of Nabtesco Corporation
- Mar. 2017 Representative Director, President & CEO of Nabtesco Corporation
- Mar. 2018 Representative Director (to present) and President & CEO of Nabtesco Corporation (to present)

**Reasons for appointment** Mr. Katsuhiko Teramoto serves as Representative Director and President & CEO and directs and oversees the business management appropriately. Based on his broad experience in business sectors and the corporate planning division, he takes a leading role in debates at the Board of Directors' meetings from the viewpoint of overall business promotion. He has extensive experience at Nabtesco Corporation and sound global business judgment. Due to these factors, he has been determined to be an appropriate person to realize continued improvement in corporate value, and thus appointed as Director.

**Number of shares held in Nabtesco Corporation:** 7,600



#### Shinji Juman

Representative Director,  
Managing Executive Officer,  
President of Precision  
Equipment Company of  
Nabtesco Corporation  
in charge of Production  
Innovation  
(Aug. 28, 1957)

- Jan. 2006 General Manager, Cost Control Department, Tsu Plant, Precision Equipment Company of Nabtesco Corporation
- Jun. 2006 General Manager, Manufacturing Department, Tsu Plant, Precision Equipment Company of Nabtesco Corporation
- Jun. 2009 General Manager, Tsu Plant, Precision Equipment Company of Nabtesco Corporation
- Jun. 2011 Executive Officer of Nabtesco Corporation and President, Nabtesco Automotive Corporation
- Jun. 2014 President, Precision Equipment Company of Nabtesco Corporation (to present)
- Jun. 2015 Managing Executive Officer (to present)
- Mar. 2017 Director of Nabtesco Corporation
- Jan. 2018 Manager of Production Innovation of Nabtesco Corporation (to present)
- Mar. 2018 Representative Director of Nabtesco Corporation (to present)

**Reasons for appointment** Mr. Shinji Juman has broad experience and extensive insight concerning the precision equipment business, and has experience as a corporate manager, including his role as President of Nabtesco Automotive Corporation. Due to these factors, he has been determined to be an appropriate person to realize continued improvement in corporate value, and thus appointed as Director.

**Number of shares held in Nabtesco Corporation:** 5,900



#### Daisuke Hakoda

Representative Director,  
Managing Executive Officer,  
Corporate Planning,  
Accounting & Finance,  
Information Systems,  
Corporate Communication  
and Human Resources  
Administration & Human  
Resources Division  
(Oct. 25, 1957)

- Jun. 2007 President of Nabtesco Aerospace Inc.
- Jun. 2009 General Manager, Accounting & Finance Department of Nabtesco Corporation
- Jun. 2010 General Manager, Corporate Planning Department of Nabtesco Corporation
- May 2013 General Manager of Shanghai Nabtesco Hydraulic Co., Ltd.
- Jun. 2013 Executive Officer of Nabtesco Corporation
- Jun. 2015 Director and General Manager of General Administration & Human Resources Division of Nabtesco Corporation
- Mar. 2017 Managing Executive Officer (to present), General Manager of Corporate Planning Division, and General Manager of General Administration & Human Resources Division of Nabtesco Corporation
- Jan. 2018 Managing Executive Officer, Corporate Planning, Accounting & Finance, Information Systems, Corporate Communication and Human Resources of Nabtesco Corporation (to present)
- Mar. 2018 Representative Director of Nabtesco Corporation (to present)

**Reasons for appointment** Mr. Daisuke Hakoda has broad experience as General Manager, including his role of Shanghai Nabtesco Hydraulic Co., Ltd., and has extensive insight concerning overall management, supervision and operations. He has been determined to be an appropriate person to realize continued improvement in corporate value and thus appointed as Director.

**Number of shares held in Nabtesco Corporation:** 15,721



### Koji Kaminaka

Director,  
Managing Executive  
Officer,  
President, Accessibility  
Innovations Company  
(Mar. 17, 1956)

- Oct. 2004 General Manager, Engineering Department of Nabco Company (now Accessibility Innovations Company) of Nabtesco Corporation
- Apr. 2008 Plant Manager, Konan Plant of Nabco Company (now Accessibility Innovations Company) of Nabtesco Corporation
- Sep. 2011 General Manager, Product Planning Department, Accessibility Innovations Company of Nabtesco Corporation
- Jun. 2013 Executive Officer of Nabtesco Corporation
- Oct. 2013 Vice President, Accessibility Innovations Company of Nabtesco Corporation
- Mar. 2016 Managing Executive Officer (to present) and President, Accessibility Innovations Company of Nabtesco Corporation (to present)
- Mar. 2018 Director of Nabtesco Corporation (to present)

**Reasons for appointment** Mr. Koji Kaminaka has broad experience and extensive knowledge of the automatic door systems business. Because of this, he is considered to be an appropriate person to realize continued improvement in corporate value and has been appointed as Director.

**Number of shares held in Nabtesco Corporation:** 7,360



### Goro Hashimoto

Director,  
Executive Officer,  
General Administration,  
Legal & Compliance  
(Feb. 7, 1957)

- Jan. 2009 General Manager, Legal Department of Nabtesco Corporation
- Jun. 2015 Director, Executive Officer and General Manager of Compliance Division of Nabtesco Corporation
- Jan. 2018 Executive Officer, General Administration, Legal & Compliance of Nabtesco Corporation (to present)

**Reasons for appointment** Mr. Goro Hashimoto has broad experience and extensive insight concerning legal matters, compliance and risk management. He has therefore been determined to be an appropriate person to realize continued improvement in corporate value and appointed as Director.

**Number of shares held in Nabtesco Corporation:** 1,600



### Toshiaki Akita

Director,  
Executive Officer,  
General Manager,  
Technology and R&D  
Division  
(Jun. 6, 1957)

- Jul. 2008 General Manager, Engineering Management Department, Railroad Products Company of Nabtesco Corporation
- Oct. 2010 General Manager, Engineering Promotion Department, Railroad Products Company of Nabtesco Corporation
- Jul. 2012 General Manager, Planning Department, and General Manager, Engineering Promotion Department, Railroad Products Company of Nabtesco Corporation
- Jun. 2014 Deputy General Manager (Engineering), Technology and R&D Division of Nabtesco Corporation
- Jun. 2015 Executive Officer of Nabtesco Corporation (to present)
- Mar. 2016 President of Nabtec Co., Ltd.
- Jan. 2018 General Manager, Technology and R&D Division of Nabtesco Corporation (to present)
- Mar. 2018 Director of Nabtesco Corporation (to present)

**Reasons for appointment** Mr. Toshiaki Akita has broad experience and extensive knowledge of the railroad vehicle business and technology in general. Because of this, he is considered to be an appropriate person to realize continued improvement in corporate value and has been appointed as Director.

**Number of shares held in Nabtesco Corporation:** 2,193

## Management Team



**Yutaka Fujiwara**  
Outside Director  
(Apr. 20, 1951)

Apr. 1974 Joined MODEC, Inc.  
Nov. 1987 Joined The Yasuda Trust & Banking Co., Ltd. (current Mizuho Trust & Banking Co., Ltd.)  
Aug. 1994 Deputy General Manager, New York Branch of Yasuda Trust & Banking Co., Ltd.  
Jun. 1996 General Manager, Chicago Branch of Yasuda Trust & Banking Co., Ltd.  
Jul. 1998 Retired from Yasuda Trust & Banking Co., Ltd.  
Aug. 1998 Joined OMRON Corporation  
Jul. 2001 General Manager, Corporate Planning Department, Corporate Strategic Planning Group, Kyoto Head Office of OMRON Corporation  
Oct. 2002 General Manager, Corporate IR Department, Corporate Planning Division of OMRON Corporation  
Jun. 2005 Executive Officer and General Manager, Financial IR Department of OMRON Corporation  
Mar. 2007 Executive Officer and General Manager, Group Strategy Department of OMRON Corporation  
Jun. 2008 Managing Officer and General Manager, Group Strategy Department of OMRON Corporation  
Dec. 2008 Managing Officer and General Manager, IR & Corporate Information Department of OMRON Corporation  
Jun. 2011 Retired from OMRON Corporation  
Aug. 2011 President & CEO of Cross-Border Bridge Corporation (to present)  
Jun. 2013 Outside Director of Nabtesco Corporation (to present)  
Jun. 2017 Outside Director of KITZ Corporation (to present)

**Reasons for appointment** Mr. Yutaka Fujiwara has worked overseas for a number of years and has a broad range of experience and extensive knowledge and insight regarding global business. He has expertise in advanced corporate strategies and financial affairs, having been in charge of the financial affairs and investor relations sections of a listed company. The Company, having high regard for his experience and insight, has appointed Mr. Yutaka Fujiwara as Outside Director so that he may utilize his knowledge to provide supervision and advice.

**Number of shares held in Nabtesco Corporation:** 0



**Norio Uchida**  
Outside Director  
(Oct. 22, 1950)

Apr. 1973 Joined Tokyo Optical Co., Ltd. (current TOPCON CORPORATION)  
Jun. 1980 General Manager of Topcon Singapore Pte. Ltd.  
Feb. 1989 President of Topcon Australia Pty Ltd.  
Oct. 1994 Senior Vice President of Topcon Laser Systems, Inc. (current Topcon Positioning Systems, Inc.)  
Jun. 2003 Executive Officer of TOPCON CORPORATION  
Jul. 2003 President and Director of Topcon Sales Co., Ltd.  
Jun. 2005 Director and Executive Officer of TOPCON CORPORATION  
Jun. 2007 Director, Managing Executive Officer, Supervising Sales Promotion Group, and Chief of Positioning Business Unit of TOPCON CORPORATION  
Jun. 2010 Director, Senior Managing Executive Director and Supervising Corporate Planning Group of TOPCON CORPORATION  
Jun. 2011 President & Representative Director of TOPCON CORPORATION  
Jun. 2013 Advisor of TOPCON CORPORATION  
Jun. 2015 Outside Director of Nabtesco Corporation (to present)  
Sep. 2015 External Director of ULVAC, Inc. (to present)

**Reasons for appointment** Mr. Norio Uchida has served as Representative Director of Topcon Corporation and has broad experience and extensive knowledge and insight as a corporate executive. The Company, having high regard for his experience and insight, has appointed Mr. Norio Uchida as Outside Director so that we may benefit from his supervision and advice on technical development and global business overall.

**Number of shares held in Nabtesco Corporation:** 0



**Naoko Yamazaki**  
Outside Director  
(Dec. 27, 1970)

Apr. 1996 Joined the National Space Development Agency of Japan (currently Japan Aerospace Exploration Agency (JAXA))  
Sep. 2001 Certified as International Space Station (ISS) onboard astronaut  
May 2004 Acquired certification for Flight Engineer, Soyuz Spacecraft  
Feb. 2006 Acquired certification for Mission Specialist, Space Shuttle  
Apr. 2010 Crew Member of Space Shuttle Discovery as Mission Specialist, participated in Construction and Supply for ISS  
Aug. 2011 Retired from JAXA  
Sep. 2011 Honorary Chairperson of the National Soroban Education Association (to present)  
Apr. 2012 Visiting Professor of Ritsumeikan University (to present)  
Jul. 2012 Member of Committee on National Space Policy, Cabinet Office (to present)  
May. 2013 Visiting Professor of Joshibi University of Art and Design (to present)  
Jul. 2015 President of Japanese Rocket Society (to present) and Chairperson of Sorajo Committee (to present)  
Dec. 2015 Advisory Board Member of International Robot Competition Executive Committee (to present)  
Jan. 2016 Specialist Member of Council on Science Technology and Academics (Marine Resource Development Subcommittee) (to present)  
Mar. 2016 Outside Director of Nabtesco Corporation (to present)  
Jul. 2016 Member of the Long-term Global Warming Countermeasures Platform, Ministry of Economy, Trade and Industry (to present)  
Nov. 2016 Ministry of Foreign Affairs of Japan, Women's Initiative in Developing STEM Career (WINDS) ambassador.  
Sep. 2017 External Director of Optorun Co., Ltd. (to present)

**Reasons for appointment** Ms. Naoko Yamazaki has broad insight as an engineer regarding the latest developments in aerospace engineering and the field of manned space machinery systems including robotic arms. As an astronaut, she has experience in conducting crisis management in the harsh, resource-limited environment of spacecraft, etc., and has broad skills in risk management. The Company, having high regard for her experience and insight, has appointed Ms. Yamazaki as Outside Director so that we may benefit from her supervision and advice on decisions based on an objective and fair viewpoint.

**Number of shares held in Nabtesco Corporation:** 0

\* The average term of office of the above Outside Directors is 2.9 years as of June 30, 2018.

## Audit & Supervisory Board Members (as of March 27, 2018)



### Takayuki Onishi

Audit & Supervisory  
Board Member  
(Nov. 25, 1954)

- Jul. 2007 General Manager, Accounting & Finance Department of Nabtesco Corporation
- Jun. 2009 General Manager, Business Auditing Department of Nabtesco Corporation
- Apr. 2013 General Manager, Railroad Products Company of Nabtesco Corporation
- Jun. 2015 Audit & Supervisory Board Member of Nabtesco Corporation (to present)

Number of shares held in Nabtesco Corporation: 2,000



### Kensuke Ioku

Audit & Supervisory  
Board Member  
(Jan. 30, 1954)

- Mar. 2006 General Manager, Product Development Department, Power Control Company of Nabtesco Corporation
- Nov. 2007 General Manager, Technology Department, Power Control Company of Nabtesco Corporation
- Jun. 2010 General Manager, Manufacturing Department, Tarui Plant, Power Control Company of Nabtesco Corporation
- Jun. 2012 General Manager, Production Management Department and General Manager, Tarui Plant, Power Control Company of Nabtesco Corporation
- Jun. 2013 Executive Officer of Nabtesco Corporation
- Jun. 2014 General Manager, Production Innovation Division and General Manager, Purchasing Planning Department of Nabtesco Corporation
- Mar. 2016 Audit & Supervisory Board Member of Nabtesco Corporation (to present)

Number of shares held in Nabtesco Corporation: 9,600



### Hisao Katayama

Audit & Supervisory  
Board Member  
(Independent)  
(Jul. 19, 1948)

- May. 1972 Joined Toyota Motor Co., Ltd. (current Toyota Motor Corporation)
- Jun. 1999 General Manager, Machinery Department No. 2, Kamigo Plant of Toyota Motor Corporation
- Jan. 2002 General Manager, Production Engineering Department, Kamigo Plant of Toyota Motor Corporation
- Jun. 2007 President of ART METAL MFG. CO., LTD.
- Jun. 2014 Special Advisor of ART METAL MFG. CO., LTD. (to present)
- Jun. 2014 Outside Director of YUSHIRO CHEMICAL INDUSTRY CO., LTD. (to present)
- Jun. 2015 Audit & Supervisory Board Member (Independent) of Nabtesco Corporation (to present)

Number of shares held in Nabtesco Corporation: 0

## Management Team



### Zenzo Sasaki

Audit & Supervisory  
Board Member  
(Independent)  
(Nov. 1, 1952)

Apr. 1979 Appointed Public Prosecutor  
Apr. 2000 Deputy General Manager, Special Investigation Department of Tokyo District Public Prosecutor's Office  
Sep. 2002 Manager, Facilities Division, Minister's Secretariat of Ministry of Justice  
Jan. 2004 General Manager, Public Safety Department and General Manager, Transportation Department of Tokyo District Public Prosecutor's Office  
Aug. 2006 Chief Public Prosecutor of Wakayama District Public Prosecutor's Office  
Jan. 2008 Public Prosecutor of Supreme Public Prosecutor's Office  
Oct. 2008 Chief Public Prosecutor of Mito District Public Prosecutor's Office  
Jul. 2010 Chief Public Prosecutor of Sendai District Public Prosecutor's Office  
Aug. 2011 Chief Public Prosecutor of Kyoto District Public Prosecutor's Office  
Nov. 2012 Retired as Public Prosecutor  
Feb. 2013 Registered with Tokyo Bar Association, Joined Harumi-kyowa Law Offices (to present)  
Mar. 2016 Audit & Supervisory Board Member (Independent) of Nabtesco Corporation (to present)

Number of shares held in Nabtesco Corporation: 0



### Takemi Nagasaka

Audit & Supervisory  
Board Member  
(Independent)  
(Jan. 24, 1956)

Oct. 1978 Joined Musashi Audit Corporation (currently Ernst & Young ShinNihon LLC)  
Aug. 1981 Joined Sony Corporation  
Sep. 1986 Sony Corporation of America / Director, Tax Department  
Apr. 2004 Statutory Auditor of Sony Financial Holdings Inc.  
Jun. 2004 General Manager, Accounting Department of Sony Corporation  
Jun. 2004 Statutory Auditor of Sony Computer Entertainment Inc. (currently Sony Interactive Entertainment Inc.)  
Jun. 2006 Auditor of Sony Music Entertainment (Japan) Inc.  
Apr. 2007 Senior General Manager, Accounting Division of Sony Corporation  
Jun. 2010 Senior Vice President, Corporate Executive, Senior General Manager, Accounting Division of Sony Corporation  
Jun. 2013 Director of Sony Financial Holdings Inc.  
Jun. 2015 Senior Advisor of Sony Corporation  
Mar. 2016 Audit & Supervisory Board Member (Independent) of Nabtesco Corporation (to present)  
Audit & Supervisory Board Member of Solize Corporation (to present)  
Jun. 2016 Audit & Supervisory Board Member of DAIO Paper Corporation (to present)

Number of shares held in Nabtesco Corporation: 0



## Executive Officers (as of March 27, 2018)

|                            |                    |  |
|----------------------------|--------------------|--|
| President                  | Katsuhiro Teramoto | Chief Executive Officer  |
| Managing Executive Officer | Shinji Juman       | President of Precision Equipment Company of Nabtesco Corporation in charge of Production Innovation  |
| Managing Executive Officer | Daisuke Hakoda     | Managing Executive Officer, Corporate Planning, Accounting & Finance, Information Systems, Corporate Communication and Human Resources of Nabtesco Corporation |
| Managing Executive Officer | Koji Kaminaka      | President, Accessibility Innovations Company   |
| Managing Executive Officer | Yukihiro Imuta     | Manager of Business Transformation Division  |
| Managing Executive Officer | Taizo Tsuru        | President, Marine Control Systems Company  |
| Managing Executive Officer | Shigeru Naoki      | President, Railroad Products Company   |
| Executive Officer          | Goro Hashimoto     | Executive Officer, General Administration, Legal & Compliance of Nabtesco Corporation  |
| Executive Officer          | Toshiaki Akita     | General Manager, Technology and R&D Division   |
| Executive Officer          | Shigeto Kunii      | Vice President of Accessibility Innovations Company in charge of overseas business   |
| Executive Officer          | Michio Ogawa       | Representative Director, Nabtesco Automotive Corporation   |
| Executive Officer          | Kiyoshi Ando       | Technology and R&D Division in charge of European business Manager of Advanced Mobility System Department, and President of Nabtesco Europe GmbH               |
| Executive Officer          | Norimasa Takagi    | President, Aerospace Company   |
| Executive Officer          | Shoji Ijuin        | Vice President of Railroad Products Company in charge of sales   |
| Executive Officer          | Akiyoshi Kitamura  | President of Toyo Jidoki Co., Ltd  |
| Executive Officer          | Atsushi Habe       | Vice President and Manager of Sales Management Department of Precision Equipment Company   |
| Executive Officer          | Kazuyoshi Kimura   | President, Power Control Company   |
| Executive Officer          | Tadashige Eto      | President & CEO of Nabtesco Service Co., Ltd.  |
| Executive Officer          | Isao Shimizu       | General Manager of Production Innovation Division  |
| Executive Officer          | Hiroshi Nakano     | CEO of Shanghai Nabtesco Business Management Co., Ltd.   |
| Executive Officer          | Ataru Inoue        | Vice President of Nabtesco Automotive Corporation  |
| Executive Officer          | Yukihiro Mizutani  | Manager of Domestic Business and General Manager, Engineering Department of Accessibility Innovations Company  |
| Executive Officer          | Seiji Takahashi    | General Manager of Human Resources Department and Business Transformation Division and President of Nabtesco Link Corporation                                  |

- Producing Innovations - Intellectual Property Activities to Support Innovation - Manufacturing Innovation

**We can provide customers with value by continuing to meet their expectations and trust. The Nabtesco Group is working to enhance its competitive edge by meeting the diversified and advanced needs of customers in our existing businesses while also creating new products and services.**

**Moreover, we are committed to supplying high value-added products and services that meet the quality, cost and delivery (QCD) needs of customers, thereby helping them increase their own QCD performance.**

## Producing Innovations

### Promoting Comprehensive Measures to Produce Innovations

Nabtesco has been achieving further growth by accumulating technologies and know-how. We have made this achievement with each of our business departments supporting customers in developing their products based on our motion control technology for stopping and moving with precision.

Recently, in response to the diversification and sophistication of customer needs, we have been focusing more on developing and proposing mechatronic products and systems with a view to increasing our growth opportunities, in addition to supplying single components and services for which we have competitive advantages. Further, we are now expected to supply products and services that provide a preventive function through monitoring, in addition to the "stopping and moving" functions.

To meet these needs, the Nabtesco Group is accelerating measures to provide customers with a broader variety of value under the leadership of the Technology and R&D Division, and is fostering comprehensive measures to produce innovations.

### Fostering the Sharing of Advanced Technologies and Know-how across the Business Departments

One of the missions of the Technology and R&D Division is to technically support each business department in implementing measures for sustainable growth. To this end, the Division is working to acquire advanced development

methodologies, element technologies and know-how ahead of competitors and to share them with the business departments across a range of fields for product development progress. Nabtesco has been making proactive use of computer-aided engineering (CAE) and additive manufacturing (AM) as IT-based development and design tools.

In the CAE field, the Division is making fluid analysis to analyze the flows of air and oil, and is also making advanced analysis by combining structural analysis on strength and heat resistance with flow analysis. In addition, the Division is simulating manufacturing processes and sharing advanced analysis technologies widely with the business departments to make their development and manufacturing processes more efficient. In the AM field, we are making use of the know-how of CMET Inc. This Nabtesco Group company provides customers with 3D printers that use resin-based high-speed stereolithography technology. We are thus pressing forward with the development of metal additive manufacturing technology including peripheral element technologies and using these innovative technologies for manufacturing innovation in the aircraft equipment business.

Furthermore, in response to the rapid advancement of IoT and AI, we are enhancing our sensing technologies. Combining the monitoring of products by sensors with the analysis of big data makes the diagnosis of failures possible. This helps us add the monitoring function to the stopping and moving functions provided by our products, allowing us to provide high value-added products and expand the maintenance, repair and overhaul (MRO) business.

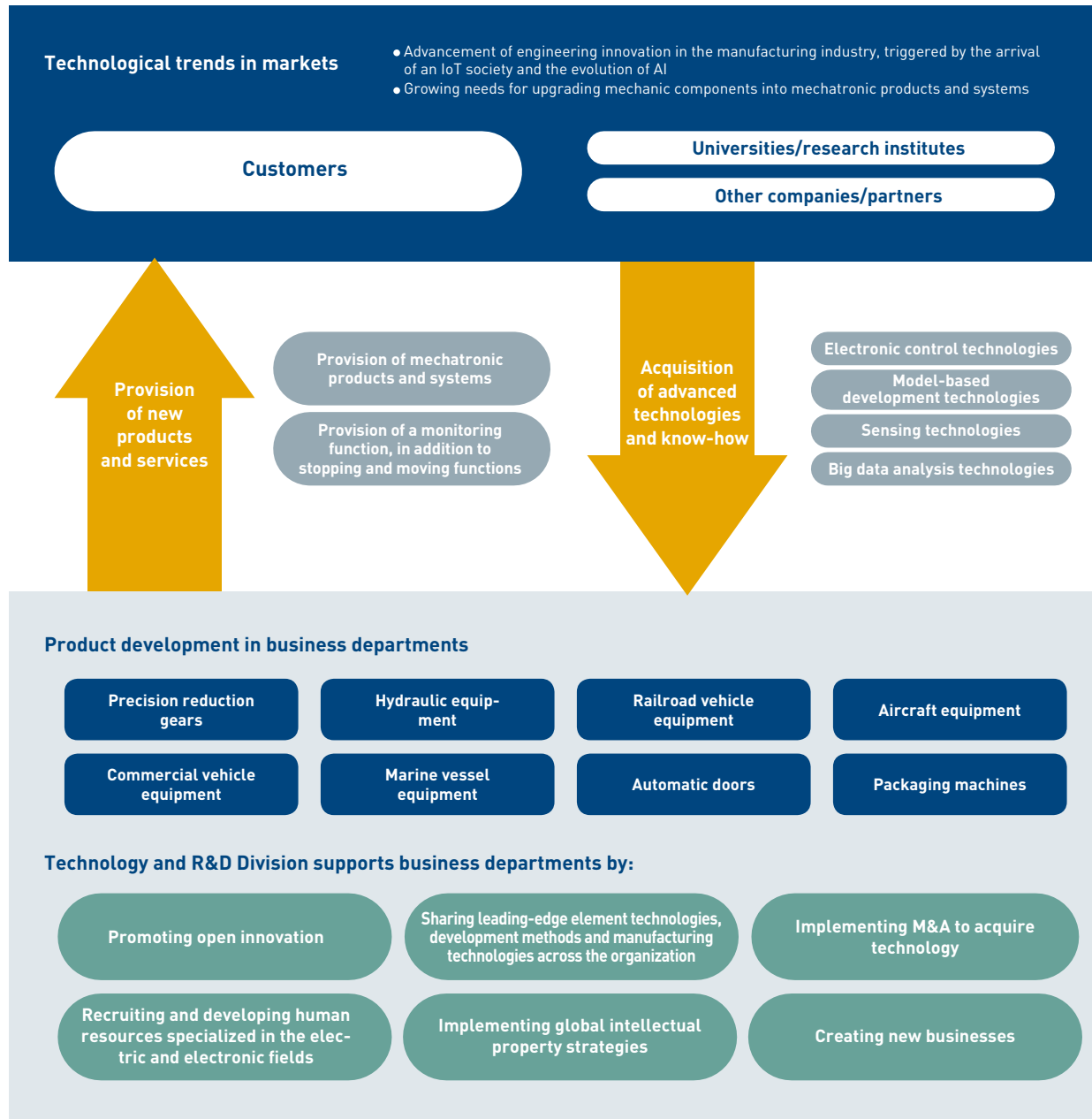
### Increasing R&D Efficiency and Promoting Human Capital Development through Proactive Open Innovation

Nabtesco is fostering open innovation. We will efficiently expand our technology and product lineups and search for new business opportunities by jointly developing technologies with companies and research institutes in and outside Japan.

Our core open innovation base is the Nabtesco R&D Center (RDC), which was newly established within the Kyoto Research Park (KRP) in 2017 by transferring the departments of the Technology and R&D Division located at the Kobe Plant. At the RDC we are making use of the power of KRP as an innovation hub housing around 400 companies, while proactively conducting R&D activities through industry-academia collaboration with both domestic and overseas companies and universities.

Furthermore, we are collaborating with the ETHZ of Switzerland to build a power electronics-related theory and develop a prototype and also starting a joint research project to develop a motion control system. Through such cooperation with both domestic and foreign research institutes, we are aiming to achieve results in R&D in leading-edge technological fields while also developing personnel versed in global technological trends.

## Measures to Develop New Products and Services



## Establishment of Corporate Venture Capital (CVC)

In June 2018, Nabtesco established Nabtesco Technology Ventures AG (NTV) in Zurich, Switzerland, which will lead the corporate venture capital (CVC) activities. In addition, we have established a strategic partnership regarding the CVC activities with Emerald Technology Ventures.

NTV supports co-creation between start-up firms and the Nabtesco Group through investment in start-up firms, aiming to globally accelerate open innovation. Through this strategic cooperation, NTV will acquire Emerald's two decades of experience in corporate venturing, its global presence across the US and Europe, and know-how on corporate value creation. By using a synergy effect created between Emerald's ability to foresee technologies and markets, accessibility to start-up firms investment opportunities, and track records in portfolio management and the Group's value chain, including technical capabilities and customer bases, the Group will establish a business portfolio that incorporates innovative technologies of the start-up firms through which we will promote co-creation.

# Intellectual Property Activities to Support Innovation

The Nabtesco Group deems its intellectual property as the base that will support the sustainable growth and enhance the business competitiveness of the Group, its customers and partners, and is implementing intellectual property strategies in its business management activities with a focus on the creation and enhancement of core value to enhance its corporate value.

## Analyzing Core Value and Implementing Measures to Enhance That Value

In its intellectual property strategies, the Nabtesco Group focuses on finding and enhancing technological elements for the future development of the Group in addition to protecting the existing businesses and profits.

The business departments analyze the core value that serves as a source of competitiveness and are implementing measures to enhance that value for the future. This core value includes technologies and ideas for products, design and manufacturing know-how, sales information, and longstanding relationships of trust with customers, as well as various other tangible and intangible intellectual properties. We are identifying these sources of value, sorting them into properties to be protected as confidential information and those to be protected in the form of patents and other rights, and are making strategic use of these properties based on appropriate management.

## Newly Including the Creation of Intellectual Property in the Performance Indicators

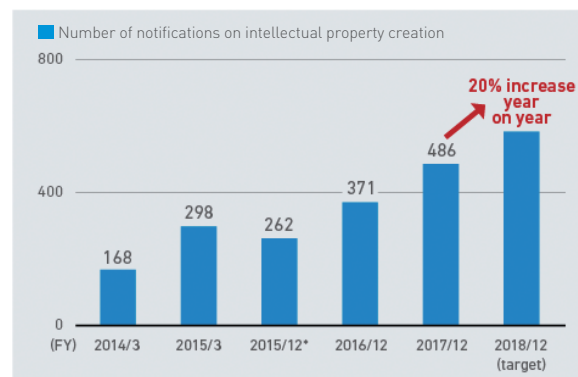
In FY2017, we newly included the creation of intellectual property in the performance indicators for the in-house companies and Group companies. In the new medium-term management plans set for each of the in-house companies, the companies are required to formulate and implement annual action plans to implement intellectual property strategies for the enhancement of their core value. In the

action plans, numerical targets will be set to encourage employees to make inventions, hit upon new technological ideas, and create know-how and new business plans. The achievement levels of the annual targets will be reported and evaluated at the firm-wide meeting on intellectual property strategies held with the participation of the CEO, Division heads and presidents of the in-house companies.

The Intellectual Property Department of the head office centrally manages information related to intellectual property, including original ideas and know-how, information about patents owned by customers and competitors, and information on technological contracts. The department will build an intellectual property strategy database, which will be accessible across the Group. Also, the intellectual property promotion committee will serve as a conduit for members of the Group to share intellectual properties for the growth of the entire Group as well as provide opportunities to discuss strategies aimed at making better use of intellectual properties.

We will speed up the rate of innovation by giving commendations to excellent in-house inventions and inventors who have contributed to increasing our corporate value under the Nabtesco Brilliant Inventor (NBI) system, thereby increasing employees' motivation toward creative activities.

### Number of notifications on intellectual property creation



\* Because the fiscal year-end was changed from FY 2015/12, this fiscal year actually contained results for nine months only.



## Commended at the FY2018 Intellectual Property Achievement Awards



Nabtesco was commended by the Minister of Economy, Trade and Industry at the FY2018 Intellectual Property Achievement Awards\*1 held by the Japan Patent Office, which is overseen by the Ministry of Economy, Trade and Industry of Japan.

Nabtesco won this honor in recognition of: (1) the system established for all members of the management team to meet and discuss the core value of the entire company, intellectual property strategies to increase and enhance the core value, and methods used to evaluate and improve its business portfolio; (2) the use of intellectual property (IP) landscaping\*2 to examine the appropriateness of development themes, analyze new business themes, identify the themes for which a patent network should be established, and engage in across-the-board searches for alliance partners and M&A targets under the leadership of the Intellectual Property Department with the view to analyze and understand management issues and work out solutions for realizing the future vision.

The Nabtesco Group has been expanding business in a range of social fields, based on the trust earned from customers that are leading companies in their industries. For the Group, intellectual property-backed management strategies also include strategies designed to protect its customers' businesses and products going forward and thereby enhance their business value. Nabtesco will continue to implement intellectual property-backed management strategies on a global scale to enhance its competitiveness and corporate value.

\*1 Intellectual Property Achievement Awards: The Japan Patent Office, which is positioned under the Ministry of Economy, Trade and Industry of Japan, gives commendations to companies that have made effective use of the intellectual property rights system and contributed to the smooth management and development of the system as well as to individuals who have contributed to the development, spread and use of the system and to raising awareness of it.

\*2 Intellectual property (IP) landscaping: Method used to make comprehensive analysis of intellectual property/market information for the creation of new business, M&As, business partnerships, and for other corporate strategies toward the success of the company's management and business.

# Manufacturing Innovation to Win the Global Competition

Since FY2016, Nabtesco Group has been committed to promoting its unique manufacturing innovation by using the ROIC tree, with an eye to becoming an overwhelmingly competitive manufacturer with improved capital efficiency. We will enhance our production capability, production management ability, and procurement ability for even higher QCD performance, thereby meeting the needs of our customers and enhancing our competitive edge.

## Analyzing Production Capacity to Identify Strengths and Weaknesses

The Nabtesco Group analyzes the numerical data of each in-house company, including the inventory turnover period, procurement cost, and per-capita value added every year to identify both the strength of the company and points to be improved. Based on the findings, we are implementing measures efficiently across the in-house companies to enhance their production capacity in a cross-organizational manner.

## Building a Status Monitoring System with ICT

As a result of analyzing the FY2017 results, we found it necessary to “visualize” what needs to be improved for higher quality, cost, delivery and electricity consumption (QCDE) performance. To meet this requirement, we will build an ICT-based status monitoring system to foster preventive management, early detection of abnormalities, and improvements. We have launched a cross-organizational ICT team to build such a visualization system as early as possible. In the preparatory phase, we identified the problems and needs of each in-house company and set out the procedures to introduce IoT technologies. We will press forward with the full-scale implementation of the system through a process of trial and error toward the optimization of the flow of things and information.

One of the challenges to be met across the company is to

enhance the automation of our production. We will develop advanced automated production lines and introduce industrial robots and automatic measurement equipment, while promoting flexibility, downsizing, and higher environmental performance of our facilities for complex processing and other advanced production processes.

## Building a Comprehensive Production System through Smart Production Management and Logistics Reform

We also identified the strengths and weaknesses of the in-house companies with regard to production management ability. At Nabtesco, the production and management systems largely differ by in-house company, but we have examined whether the production instructions and logistic activities were appropriate at the manufacturing facilities.

In accordance with the results, we will optimize “Make & Buy” (scope of manufacturing and procurement) and in the future, we will utilize AI for production instructions

and scheduling for the management of equipment operation, including quality management and shortening of downtime, toward smart production management.

## Enhancing Procurement Ability to Become Overwhelmingly Competitive in the Market

For procurement, we will mainly foster the domestic manufacture of components and reduce the direct cost by implementing a cross-organizational procurement scheme beyond the framework of the in-house companies. Moreover, we will find suppliers who can provide high performance in terms of quality, cost and delivery (QCD) and promote CSR-oriented procurement while supporting suppliers in making their business continuity plans (BCPs).

### ROIC Improvement by Building Manufacturing Solutions

| ROIC improvement measures      | Major improvement theme   | Manufacturing Innovation               | Examples at our manufacturing sites   |
|--------------------------------|---|--|---|
| Higher operating income margin | Higher productivity   | Stronger production capability         | <ul style="list-style-type: none"> <li>More advanced automation</li> <li>On-site improvement/standardization</li> <li>Development of innovative production technologies (such as metal 3D printers)</li> </ul>          |
|                                | Lower procurement cost  | Stronger procurement ability           | <ul style="list-style-type: none"> <li>Optimization of “Make &amp; Buy”</li> <li>Cross-organizational procurement</li> <li>Procurement &amp; logistics reform</li> <li>Development of experts in procurement</li> </ul> |
|                                | Lower indirect expenses   |  |   |
| Higher asset turnover          | Shorter production lead time<br>Shorter inventory turnover period | Stronger production management ability | <ul style="list-style-type: none"> <li>Smart production management (by the use of AI and IoT)</li> <li>Logistics reform</li> </ul>  |

- Management of quality and occupational safety

**In the manufacturing industry, quality is what provides the basis for customer satisfaction. Safety, meanwhile, for us means protecting people, and we give first priority to safety, rather than cost and profit. Rather than simply supplying products that meet specifications and performance requirements, we deliver value to customers based on our high-quality design and manufacturing. Moreover, we believe that we cannot supply customers with safe products without ensuring the safety of our manufacturing facilities and maintenance services or providing needed safety functions. To nurture a culture of valuing quality and safety among all employees the Nabtesco Group thus provides workers with unique education on quality through the Quality University courses and others as well as through the activities conducted by the Quality & PL Committee and ESH Committee.**

## Management of Quality

### Continuing to Cultivate a Quality-Oriented Workforce to Create an Advanced Quality Culture

The Nabtesco Group has customers active in a range of sectors. By continuing to meet the strict demands for quality, reliability and safety of these customers, who are themselves fulfilling crucial social and economic functions, we have been earning their long-term trust while also fulfilling our own corporate social responsibility.

However, the Nabtesco Group provides a variety of systems and product lineups, and cannot increase the quality of all these products by drawing upon a limited stock of technologies and methods. We are therefore introducing IT and other advanced technologies to our quality management, while attributing special importance to the creation of a culture of quality manufacturing for all our products.

Such a culture can be created as a result of long-term education, training and organizational management. We believe that helping employees gain meaningful experience that allows them to think and act in line with core principles and rules to make really effective use of available technologies will, in turn, help the entire Company improve its manufacturing quality on a long-term basis. Based on this belief, we have been providing employees with unique education, including via the "Quality University" courses.

### Building up a Basis for Preventing Errors and Failures

We founded the Quality University courses in FY2007, with 16 design engineers becoming the first students. We added a course for managers in FY2009.

In FY2012, we established the mandatory Quality University basic course for Group employees in their third year of employment. Every year about 30 to 40 young employees participate in this six-month course to learn about quality management both theoretically and practically to increase their quality awareness. The number of employees who have completed the Quality University courses totals about 300 over 10 years.



One of the fundamental contributors to lower quality is human error, which is caused by a lack of knowledge/experience, habituation, preconceived notions/misunderstandings and various other psychological factors. Nabtesco established the Quality University courses to provide employees with opportunities to learn from failure, understand

how errors that lead to failures arise, and share their know-how to prevent the recurrence of similar errors, aiming to develop a widespread corporate culture of error and failure prevention.

The Quality Promotion Department prepares all course curriculums so that participants can share knowledge of past failures experienced by Group companies across various industries while also learning about advanced quality assurance methods. Because the Nabtesco Group is engaged in a broad spectrum of industries as a manufacturer, it can



Group photo of past students of the Quality University courses (Jan. 2010)



Directors receiving training on quality engineering in Jul. 2009

provide employees with unique training to prime them to become "quality aware." In the process, the training methods are also being sophisticated, allowing the Group to establish a culture of quality manufacturing for the provision of safety, comfort and a sense of security.

### Attributing Importance to "Knowing Why" in Business Operations

Due to the recent digitization of design and manufacturing technologies, it is now possible to conduct design and other activities without a deep background understanding of technological principles. At the same time, however, this has given rise to increasing concerns about errors caused by lack of knowledge. In response, we started the "Know-why" Nabtesco activity in FY2015.

This activity is designed to encourage employees to ask "Why?" when they do not understand some aspect of their business operations and to search for the reason, principle, purpose or objective. In particular, seeking to "Know-why" about products can directly lead to the identification of core value that cannot be discovered by reverse engineering. Such value should be protected as "black box" value and also as a source for the creation of new value. In the activity, employee questions about their own business operations are collected, and those that appear repeatedly or are deemed important are picked up to be solved at meetings held in the respective workplaces. The details of the meetings are shared by related employees to improve work quality and pass on their knowledge, wisdom and technological know-how to the next generation.

The "Know-why Nabtesco" activity thus has additional significance in that it helps us to recognize and pass on core value.

### Substantially Reducing Loss Caused by Quality Defects

In addition to the aforementioned two activities, we are working to enhance the basis for our design and manufacturing quality through Group-wide training initiatives, including giving

intensive basic education on quality to new employees and instructing employees at plants in Japan, bases outside the country and at suppliers about 5S\* improvements as well as providing technical training on product liability and safety, training on risk assessment, training to enlighten workers on manufacturers' ethics, and training for mid-career hires. As a result of us continuing the activities to develop quality-aware human resources from a long-term perspective, loss caused by quality defects steadily declined. The education activities have thus contributed to the improvement of the corporate structure.

Based on this recognition, we will continue to steadily educate the next generation of young engineers using our original training programs on quality, thereby cementing our unique culture of quality manufacturing and securing a workforce able to provide customers with greater value.

\* The 5Ss are seiri (sort), seiton (set in order), seiso (shine), seiketsu (standardize) and shitsuke (sustain).

## Management of Occupational Safety

### Ensure Safety by a Three-Pronged Approach, Giving First Priority to Protecting People



For manufacturers like the Nabtesco Group, "safety" means: (1) manufacturing products in a safe manner; (2) making safe products; and (3) ensuring the safety of products during use. These three requirements should be met together, as we cannot deliver safe products to customers without ensuring the safety of our manufacturing facilities and providing necessary maintenance, service and safety functions.

Manufacturing safe products and ensuring the safety of products during use help our customers ensure the safety of their products and their end users, while ensuring the safety of our manufacturing facilities and providing even safer maintenance and service functions help protect the health and well-being of our employees and their families and reduce social losses. Based on this recognition, the Nabtesco Group is taking a three-pronged approach to safety, with first priority given to protecting people over cost reduction and profit-making.

### Centrally Fostering Environmental, Safety and Health Management

The Nabtesco Group has been implementing multifaceted measures to increase the safety of its manufacturing facilities toward achieving the goal of zero work-related accidents in the group-wide ESH activities.

ESH stands for "environment, safety and health," which are important elements that support the Nabtesco Group's business activities. Our Group Environment, Safety & Health (ESH) Committee, which reports directly to the president, centrally fosters the management of ESH across the Group, including by promoting the reduction of environmental impacts as well as ensuring the safety and health of employees.

The Group ESH Committee centrally collects, analyzes and evaluates important ESH-related information and discusses necessary measures. In addition, the committee members annually visit each of the Group's sites to carry out ESH audits to check on-site activities and give instructions as necessary. For safety, the members examine whether the accident and disaster countermeasures implemented at the sites are appropriate or not and how these measures are implemented, as well as investigating any remaining on-site safety risks. The

Group ESH Committee summarizes the audit results and the achievements made by the sites through the ESH activities for review by the Group's management team at the end of each fiscal year, and the review results are utilized to improve the activities for the next fiscal year. We have thus been executing the Plan, Do, Check and Act (PDCA) cycle to steadily increase the safety of our manufacturing facilities.

In FY2017, we assessed the fire- and chemical substance-related risks at all plants of Nabtesco Corporation, with a view to eliminating all such risks. Based on the understanding of the current situation at each site, specifically regarding their disaster control equipment, fire management, and use of chemical substances and machines, we will prioritize measures to deal with the safety management problems pointed out in the assessments.

### Conducting Multifaceted and Steady Activities

All incidents, including minor ones, are required to be reported across the Nabtesco Group for information-sharing purposes. In particular, for a serious incident, we conduct an on-site examination to analyze the cause, decide on the items to be focused on, and implement measures based on the results. In addition, we enhance our safety patrols and risk detection training to increase employees' sensitivity to risks, as well as promoting "near miss"<sup>\*1</sup> incident reporting and safety awareness-raising activities.

As a result of these efforts, the lost-work time injuries frequency rate<sup>\*2</sup> has been below the industry's average for the most recent five years. However, in order to achieve zero workplace accidents, which is the Group's overall target, we need to implement even more advanced measures.

### Starting New Activities to Nurture a Safety Culture

The proximate causes of workplace accidents are the inappropriate use of production equipment and the careless behaviors of workers, but the fundamental causes lie in the attitude and culture of the organization. In order to improve workplace safety, it is therefore necessary to nurture a safety

culture and ensure that the entire organization adopts a more safety-oriented attitude in addition to implementing measures against individual risk factors, as in the past.

To this end, we started new activities in 2017, including the STOP3 activity to enhance measures to prevent cuts/abrasions, getting caught, and falls, which account for large percentages of previous work-related accidents that have happened within the Group, as the three priorities.

To eliminate organizational factors that could lead to incidents, we are working to establish a stratified safety education system and "safety model workplaces." The stratified safety education system is intended to raise the safety awareness of managers. By educating managers on safety in addition to providing on-site workers with safety education as in the past, we aim to make all members of a workplace aware of safety and to eliminate differences in the level of awareness among workplaces and departments. For the "safety model workplace" program we designate one workplace at each of our plants to serve as a safety model workplace, where intensive measures are taken for safety, including the education of employees. We will analyze the effects of this initiative and make improvements as required, while gradually increasing the number of model workplaces.

We also began holding environmental safety forums for Group employees at which invited experts give lectures and achievements made by the safety model workplaces are reported to further increase employees' safety awareness.

The Nabtesco Group will continue to focus on nurturing a safety culture to achieve zero workplace accidents across the board.

\*1 Near miss: An event that could have resulted in injury or other incidents

\*2 Lost-work time injuries frequency rate: Please see page 22.

### Nabtesco Group Quality and PL Policy

**To fulfill our corporate social responsibility (CSR) by delivering products with the highest levels of safety, comfort, security and reliability, we will:**

- 1. Give priority to safety over anything else, based on the principle of respect for people;**
- 2. Meet safety and other quality needs of products through the integration of business activities and quality and PL activities; and**
- 3. Realize product quality, which satisfies market demand, by conducting safety and other quality evaluations prior to the release of products to the market.**

### ESH basic policy

**Always make safety the first priority based on the principle of respect for human life:**

Safety is a basic requirement for business activities

**It is a responsibility of the entire production line:**

Each employee is responsible for him/herself and his/her co-workers

**ESH should be a built-in operation:**

ESH = Integrated with your ordinary job



- Nabtesco Group's procurement activities

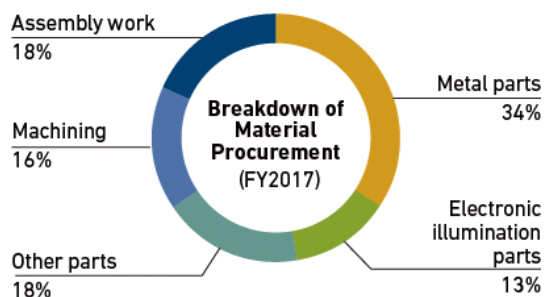
**We at the Nabtesco Group have been taking measures for manufacturing innovation by pursuing collaboration with suppliers with the aim of strengthening our comprehensive procurement capabilities from the perspectives of sustainability, including quality, cost and delivery (QCD) and technological development. In order to achieve medium- to long-term growth for the Group, it is essential to secure a sustainable supply chain. We are promoting CSR-oriented procurement by recognizing fair, proper and transparent procurement activities as one of our material CSR issues (materiality).**

## Nabtesco Group's Procurement Activities

### Fundamental Approach for Fair, Proper and Transparent Procurement Activities

The Nabtesco Group does business with about 1,000 suppliers of various scales, centering around the purchase of metal parts, and electronic and electrical components, outsourced machining, assembly and processing. Our business with suppliers is an important factor that affects the Nabtesco Group's cost structure and QCD performance. It is indispensable to secure the supply chain continuously in order to achieve medium- to long-term growth. Therefore, we develop collaboration systems through fair, proper and transparent business transactions based on the proper cost structure, and close partnerships with suppliers.

#### Material Procurement in Japan



### Establishment of Nabtesco Group CSR-Oriented Procurement Policy

In accordance with the globalization of our business, we increasingly need to respond appropriately in our supply chain to the worldwide demands related to the environment and human rights. On 2014, aiming to further foster CSR activities across the supply chain, we established the Nabtesco Group CSR-Oriented Procurement Policy. In formulating this policy, we referred to the ISO 26000 standard, the United Nations Guiding Principles on Business and Human Rights, the Electronic Industry Citizenship Coalition (EICC) Code of Conduct, and other international guidelines, and also incorporated into the policy the ideas expressed in the Nabtesco Group Code of Ethics.

### CSR Procurement in Collaboration with Suppliers

The Nabtesco group identifies the important suppliers for our business sustainability based on their trade volume, QCD (Quality, Cost, and Delivery compliance) performance, technical development capability, financial health, and other factors. To enhance our CSR-Oriented procurement, we have implemented SAQ for the primary suppliers, including key suppliers in and outside Japan every year since FY2014.

In FY2017, we expanded its scope to China and implemented SAQ, which is based on our CSR-Oriented Procurement Policy using the questionnaire method, to

1,047 suppliers (all primary suppliers including 919 suppliers in Japan and 128 suppliers in China). The questions in the questionnaire comprise six large categories and 41 middle categories based on the items in the CSR-Oriented Procurement Policy. We performed an evaluation according to the weight of each middle category item. Our goal was to obtain 80 points or more out of 100 points in each large category item by FY2017. As a result, we achieved the goal of 80 points or more in two out of the six items. We analyzed and evaluated the questionnaire results for each supplier and fed them back in a written document. In addition, we have visited certain suppliers directly to hear from them in order to prepare the ideas of initiatives aiming to facilitate the CSR activities in cooperation with them, such as the extraction of improvement items and risks in the environment, safety, and health and planning of improvement measures. We will continue to refine the SAQ by, for example, considering the addition of questions regarding CO<sub>2</sub> reduction.

\*SAQ = Self Assessment Questionnaire (self-check sheet)

**Web**  
 Nabtesco Group's CSR-Oriented Procurement Policy  
<http://nabtesco.disclosure.site/en/themes/113>

- Develop human capital and promote workplace diversity - Respect human rights

**The Nabtesco Group is implementing initiatives to make use of the abilities of individual employees for the benefit of the entire company, including a range of measures to promote work style reforms, diversity, better work-life balance, and management of human rights. We are also continuing to raise employees' awareness of The Nabtesco Way to enhance the unity of the entire Group. We will achieve Operational Excellence by increasing the Group's ability to attract job seekers and expanding the possibilities of its human capital as the driving force for the growth of the Group.**

## Work Style Reforms

### Commitment to Work Style Reforms

In 2014, a male employee of NABCO DOOR Ltd., one of the Nabtesco Group companies, committed suicide due to depression, which was caused by his working continuously without a day off and working overtime. The local Higashiosaka labor standards inspection office affirmed this incident as an occupational accident (suicide due to overwork) in September 2016, deeming that the management team of the company had failed to implement measures to reduce the employee's working hours and workload and, as a result, continuously required him to work to an excessive degree. The company has already come to a settlement with the family of the deceased, but we do not want to see any more Group employees commit suicide due to work-related problems.

After the occurrence of the incident, NABCO DOOR increased the number of workers to reduce the load on each employee and it has also worked to educate managers more on related matters. Indeed, this is a management priority for the entire Nabtesco Group, and improvements should be made as soon as possible. The Group will invest generously in measures to solve issues related to employees' work styles.

Moreover, in order to help employees work with vigor while also leading fulfilling private lives, the entire Group is committed to work style reforms. The Group will first implement measures that can be launched soon and then proceed to medium- to long-term initiatives as early as possible, with an eye to becoming an attractive employer where employees are given adequate consideration and

can work with satisfaction.

### How to Secure Talented Workers

Due to the country having a mature economy as well as a decreasing birth rate, Japan's population has been on the decline, making a drop in the working-age population a medium- to long-term social issue. In response, more companies are striving to secure human resources, while the number of employees who quit their jobs for personal reasons is on the rise. Accordingly, the fluidity of human resources will continue to increase toward the future, and it will help companies increase their competitiveness if they can increase their attractiveness to potential employees. The future business success of companies engaged in the Japanese manufacturing industry will largely depend on measures to deal with the long-term shortage of human resources. For the Nabtesco Group too, the stable employment of talented workers is becoming an even more important issue.

### Reducing the Length of Working Hours and Increasing Labor Productivity

In addition to securing talent, it is also important to increase labor productivity. According to OECD data, Japan's labor productivity (value added per one working hour) was ranked 20th among 35 OECD member states for 2016. In particular, the labor productivity of so-called white-collar workers seems to be low in the country.

Among seven major developed countries, Japan is at the bottom in terms of labor productivity, and needs to improve it for all workers in the country.

The Japanese government has been fostering work style reforms nationwide to help companies secure workers by improving the work environment to enable a diverse range of individuals to demonstrate their abilities. As part of the reforms, the government plans to tighten labor-related laws and regulations, including introducing a ceiling on overtime hours. In response, companies urgently need to increase their labor productivity.

For Nabtesco Corporation, 40 or more hours of overtime work are recorded monthly at around 25% of its administrative departments, and the company is thus required to reduce the length of employees' working hours while boosting its labor productivity.

### Reforms to Become an Attractive Company where Employees Can Work with More Satisfaction

In consideration of the aforementioned facts, we are conducting an activity called "Stage-up 2.0" for work style reforms. The reforms are classified into the following four types: (1) personnel system reform to improve work-life balance and work environment; (2) operational reform to eliminate wasteful work and simplify operations by making better use of IT, automation and AI; (3) production reform to foster the development of production and automation technologies; and (4) cultural reform to

provide the basis for other types of reform. By making reforms in terms of “personnel,” “operational,” “production” and “cultural” aspects, we aim to make Nabtesco an attractive employer offering workplaces where workers can work with satisfaction, thereby securing talented employees and increasing labor productivity.

## Measures for Work Style Reforms

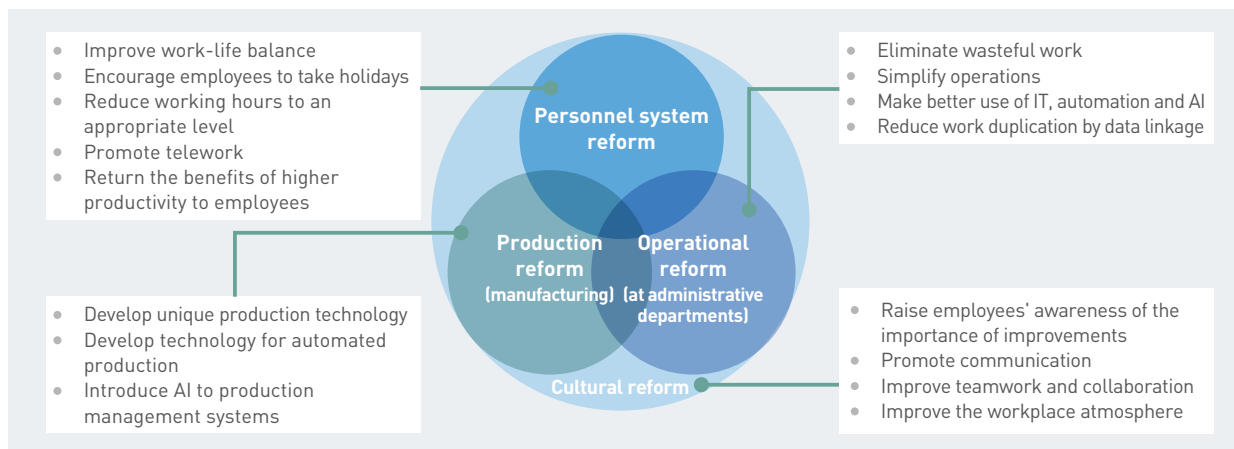
For work style reforms, we will continuously make improvements by executing a PDCA cycle. First, we will conduct a survey on employees to understand their present situations. Then, under the leadership of the Business Transformation Division, we will plan and implement improvement initiatives, measure their effects, and conduct follow-up activities by monitoring KPIs, such as per-hour labor productivity. In particular, for operational

improvement, we will make use of robotic process automation (RPA) for the automation of operations. We are also considering making use of artificial intelligence (AI) and have begun research to this end.

By executing a PDCA cycle as explained above, we will make each employee more aware of the importance of operational efficiency and provide an environment in which they have enough time to actually “Enjoy the Challenge,” as stated in our long-term vision. Also, we will promote work styles that allow employees to work with vigor while also enjoying their private life.

Through these work style reforms, the Nabtesco Group will achieve Operational Excellence, as upheld in its vision for 2020, and become an enterprise that gives great satisfaction to employees by providing them with workplaces where they can take on the challenge of pursuing creativity.

### Four Types of Reform for Work Style Reforms



# Fostering Workplace Diversity

## Active Employment of Non-Japanese Nationals Including Foreign Students Studying in Japan

Due to the maturity of the economy and the fact that the Japanese population is decreasing as a result of the declining birthrate, we can no longer expect significant economic growth to take place in the domestic market, and therefore need to promote further globalization.

Non-Japanese employees have different ways of looking at things and active attitudes toward work, and as such, they are expected to have positive effects on other personnel. As a result of implementing measures such as holding job fairs to provide information on our company targeted specifically at foreign students studying in Japan and conducting recruiting activities at overseas universities, as of December 31, 2017, foreign nationals from nine countries have joined Nabtesco's workforce.

We set the goal for the ratio of non-Japanese new graduates hired for managerial positions to around 30% each year. Accordingly, we will try to employ graduates from overseas universities in the future.

## Proactive Employment of Women

To promote employment of female employees, we hold job fairs specifically for female college students. At these job fairs, we provide students with an opportunity to directly hear the voices from the female employees. Thus, we had achieved the goal of maintaining the ratio of females among new graduates for managerial positions at no less than 20% each year up to FY2016. In FY2017, however, it went under the goal due to the scarcity of female graduates who majored in mechanical engineering and electrical/electronic engineering, who are our primary recruitment targets. Going forward, we will continue to uphold this goal and continue our efforts to recruit female workers.

## Materiality

# Develop human capital and promote workplace diversity, Provide Safe and Comfortable Workplaces

Nabtesco has established action plans pursuant to the Act on the Promotion of Women's Participation and Advancement in Workplace (enforced on April 2016). We continue to make efforts to implement these action plans.

### Promoting Employment of Persons with Disabilities

In FY2013, the statutory employment rate of persons with disabilities was raised from 1.8% to 2%. Since FY2015, we have achieved the 2% rate by actively hiring persons with disabilities as a result of our new graduate recruitment. In April 2018, the statutory employment rate of persons with disabilities was further raised to 2.2%. We will continue to maintain the statutory employment rate by systematically promoting persons with disabilities.

In FY2015, we established Nabtesco Link Corporation, a Group company intended to promote employment of persons with disabilities in Gifu Prefecture, as part of efforts to fulfill our social responsibilities. In FY2016, the company was approved by the Ministry of Health, Labour and Welfare as a Specialized Subsidiary Company that meets the requirements under the Act on Promotion of the Employment of Persons with Disabilities.

Since then, Nabtesco Link has promoted the employment of persons with disabilities and made efforts to arrange the working environment to allow employees to work with a sense of purpose. In FY2017, Gifu Prefecture selected Nabtesco Link as one of the model employers for the employment of persons with disabilities in agriculture.

### Implementing Measures for Better Work-Life Balance

Nabtesco believes that helping individual employees maintain their physical and mental health and lead a fulfilling life in accordance with their personal preferences will foster the creation of new value and ideas, which will in turn help the company to revitalize its organizations and increase its productivity. Based on this recognition we have introduced a range of systems for

better work-life balance.

In response to the popularization of mobile terminals and the emergence of new work styles, we created a handbook on the management of working hours with a view to standardizing our in-house rules and making sure every employee complies with the same rules.

The IT-based monitoring function has been partially introduced and a system is being constructed to thoroughly control work hours based on objective recording and suppress excessively long work hours. The labor and management committee regularly monitored and found that the rate of paid annual leave taken by employees reached 76.3% in FY2017 after each employee was encouraged to take four days off during the planned annual leave taking periods of June, July, October, and November. Both the management and employees will continue to promote the use of paid annual leave to elevate the rate of use.

## Human Rights Management

### Human Rights Policy

Respecting human rights in all aspects of corporate activities is the basis of Corporate Social Responsibility (CSR).

In addition, the Nabtesco Group is committed to the upholding of human rights and prevention of corruption as its material CSR issues (materiality). In FY2016, we established the Nabtesco Group Code of Ethics.

Further, Nabtesco determined the Nabtesco Group Human Rights Policy in 2017 to promote the respect of human rights, based on the International Bill of Human Rights established by the United Nations (UN), the ILO Declaration on Fundamental Principles and Rights at Work established by the International Labour Organization

(ILO), and the UN Guiding Principles on Business and Human Rights.

**Web**

---

**Nabtesco Group Code of Ethics**

<https://www.nabtesco.com/en/ir/policy/compliance.html>

**Web**

---

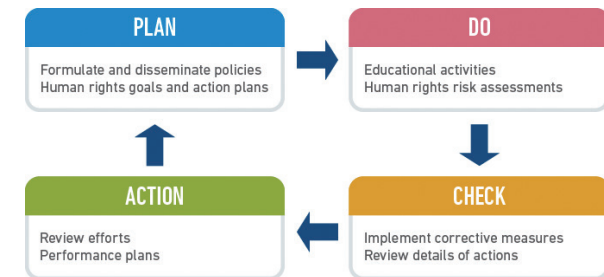
**Nabtesco Group Human Rights Policy**

<https://nabtesco.disclosure.site/en/themes/120>

### Human Rights Due Diligence

Nabtesco identifies and assesses the impact on human rights and tries to mitigate human rights risks through a human rights due diligence process. We also continuously verify the methods and effects of human rights due diligence to effectively respond to human rights impacts and risks.

In 2017, we conducted an analysis on country-specific human rights risks in 16 countries where our business locations were situated. In April 2018, we performed human rights risk assessments at 41 group companies (which cover 95% of the Group employees) located in the countries with higher risks. As a result, we have not seen any major human rights risk in the group and none of the respondents were found to be incompliant with local laws and regulations or international standards. We will conduct human risk assessments regularly onward.



# Human Capital Development

## Development of Globally Competitive Human Capital

We clearly state, "Employees are essential assets" in The Nabtesco Way.

In order to share the company's ideal image of the human capital where it is the people who make the company, and to define the direction that all employees should follow, the Nabtesco Group established the Basic Policy on Human Capital Development and has been providing a range of educational opportunities in line with this policy ever since.

As overseas business is expected to continue to expand, it is becoming increasingly important to develop globally competitive human capital. We have a system to register in advance employees slated to work overseas so that we can make systematic and shared use of information about these employees, thereby enhancing the Group's global human resource management. Moreover, to improve employees' English language skills for communication in global business settings, we introduced an overseas trainee program that includes both study and work components in FY2012, in addition to the intensive study camp for English conversation. By the end of FY2017 we had sent a total of 19 employees overseas under this program. In addition, in 2017, we also introduced overseas job training mainly involving the employees who have worked for Nabtesco for more than three years.

The Nabtesco Group is proactively endeavoring toward the development of human resources at Group companies outside Japan. For example, we are implementing various training programs aimed at improving the skills of locally hired personnel. In China, we provide business management trainings for executive candidates at

business locations to promote the appointment of locally employed staff for managerial positions. In addition, we offer an OJT-based training programs designed for skill enhancement, in which employees of overseas Group companies are assigned, for a certain period of time, to factories in Japan belonging to various business segments, including the railroad vehicle equipment, hydraulic equipment, commercial vehicle equipment, and automatic door businesses. We will continue these efforts to reinforce our overseas operational bases and to contribute to the economic and social development of the countries in which we operate.

## Increasing Employees' Awareness of The Nabtesco Way

### Activity to Increase Employees' Awareness of The Nabtesco Way

The Nabtesco Way presents the values that employees of the Nabtesco Group are expected to share to ensure that the Group will continue to be needed by society, regardless of the substantial changes occurring over time in its surrounding business environment.

In order to help employees understand The Nabtesco Way and implement the values in their daily operations, each Group base and company as well as the Group secretariat have "facilitators for The Nabtesco Way" to raise employees' awareness of the values. Specifically, the Group holds "Way briefings" to teach the values to employees who do not know about The Nabtesco Way, such as new employees, "Way meetings" to raise employees' awareness of the values and encourage them to share the values at workplaces, and "workshops," in which participants in the level-specific training seminars and other

employees selected based on certain themes deepen their understanding of and affinity for the values.

These events are designed to make each employee a driving force for the promotion of The Nabtesco Way. The number of participants in them has been increasing both within and outside Japan.

### Sharing Values among All Group Members

As of the end of December 2017, a total of 1,488 people participated in the Way briefings, 16,721 in the Way meetings, and 1,677 in the workshops in Japan and abroad.

These awareness-raising activities have proved to be effective at increasing employees' understanding of and affinity for the values. For further improvements, however, in and after 2018 we will change the content of the activities in consideration of the actual situations at each base and company. Specifically, the facilitators, who better understand the local situations, will make and implement the activity plans, a task previously done by the Group secretariat, with a view to expanding the scope of activities.

### Satisfaction with communication within the organization (based on employee questionnaire)

| (Unit: %)                               | 2013 | 2015 | 2017 | 2017 (Target) |
|---|------|------|------|---------------|
| <b>Ratio of Satisfaction</b>            | 67.1 | 68.6 | 69.3 | 78.6          |
| <b>(Male)</b>                           | 67.1 | 69.0 | 69.5 | -             |
| <b>(Female)</b>                         |      | 68.1 | 69.2 | -             |
| <b>Coverage of employee respondents</b> | 100  | 100  | 100  | 100           |

\* The calculation scope covers only Nabtesco Corporation.

\* We use the indicators "Relations between senior and junior workers" and the "State of the organization" which represent a degree of communication within the organization [The surveys have been continually conducted in FY2013, FY2015, FY2017].

\* We evaluate above two indicators according to seven grades (1: Completely disagree; 2: Disagree; 3: Somewhat disagree; 4: Neither agree nor disagree; 5: Somewhat agree; 6: Agree; 7: Completely agree) and rate the results (4 or more is defined as satisfied).

- Nabtesco Group's corporate citizenship activities

The Nabtesco Group established the Nabtesco Group Community Investment Policy in FY2018 to show its approach to community investment activities. The Group will conduct the activities in a strategic manner across the board toward the development of local communities, which is one of the Group's material CSR issues. The Nabtesco Group proactively promotes contributions to local economic development through the establishment of a production system for "locally produced and locally consumed," solutions for social challenges through the provision of our products and services, and community investment activities.

## Nabtesco Group's Community Investment

### Establishment of the Nabtesco Group Community Investment Policy

In FY2018, we established the Nabtesco Group Community Investment Policy. It is clearly stated in the policy that through our community investment activities, we will proactively engage in exchanges and cooperate with local communities in fields closely related to our business in each region where the Group conducts business as good practice of The Nabtesco Way, which comprises Our Promises, Action Guidelines, and Action Declaration. The policy states the targets of the activities as the values created for stakeholders to contribute to solving global social challenges and social challenges faced by local communities in each region where the Group conducts business. It also states that we will pursue the targets as the Group values, which are to encourage employees' challenging spirit and innovative ways of thinking by contributing to solving social issues in fields related to the Group's business and to increase the Group's brand value. Moreover, based on the values created for both parties, we aim to foster the growth of both the Nabtesco Group and local communities and to build long-term relationships of mutual trust.

We have set environment, education, and welfare as priority areas of our activities. Those three areas are highly related to the sustainable business activities of the Group and correspond to the materiality, and are also associated with the 9 items of SDGs. Through the proactive promotion of community investment activities, the Group will work to establish a trust relationship with local communities while contributing to their development.

#### Nabtesco Group Community Investment Policy

|                                   |  |   |                           |
|-----------------------------------|--|---|---------------------------|
| <b>Policy</b>                     | The Nabtesco Group promises to protect the global environment and promotes harmony with local communities and cultures by practicing The Nabtesco Way. In each region where it conducts business, the Nabtesco Group will proactively engage in exchange and cooperate with local communities in those fields closely related to its business.   |   |                           |
| <b>Targets</b>                    | <ul style="list-style-type: none"> <li>• To contribute to solving global social challenges</li> <li>• To contribute to solving social challenges faced by local communities in each region where the Group conducts business</li> <li>• To encourage employees' spirit of challenge and their innovative way of thinking by contributing to solving social challenges in those fields related to the Group's business</li> <li>• To increase the Group's brand value by contributing to solving social challenges</li> <li>• By achieving these targets, to foster the growth of both the Nabtesco Group and local communities and to build long-term relationships of mutual trust</li> </ul> |   |                           |
| <b>Priority Areas of activity</b> | <b>Relevance to the Group's business</b>   | <b>Corresponding material CSR issues (materiality)</b>  | <b>Corresponding SDGs</b> |
| <b>Environment</b>                | <ul style="list-style-type: none"> <li>• Contribution to reducing environmental impact through manufacturing</li> <li>• Commitment to addressing global and local environmental issues in each region where the Group conducts business</li> </ul>   | <ul style="list-style-type: none"> <li>• Countermeasures for climate change</li> <li>• Environment-friendly manufacturing</li> <li>• Reduction of environmental impact through products and services</li> <li>• Recycling, reuse and remanufacture of products</li> </ul> |                           |
| <b>Education</b>                  | <ul style="list-style-type: none"> <li>• Development of next-generation human resources by using the Group's expertise and resources gained through business</li> <li>• Enhancement of the value chain in collaboration with suppliers</li> </ul>  | <ul style="list-style-type: none"> <li>• Development of human capital and promotion of workplace diversity</li> <li>• Local community development</li> <li>• Fair, proper and transparent procurement activities</li> </ul>   |                           |
| <b>Welfare</b>                    | <ul style="list-style-type: none"> <li>• Revitalization of local communities through welfare equipment business</li> <li>• Support for diversity and social inclusion in each region where the Group conducts business</li> </ul>  | <ul style="list-style-type: none"> <li>• Local community development</li> <li>• Development of human capital and promotion of workplace diversity</li> <li>• Provision of safe and comfortable workplaces</li> </ul>  |                           |

## Some of the activities in the priority activity areas

### Environment

Employees of a Group company in Thailand have continued to plant mangrove trees as a means of engaging with local communities and contributing to the solution of local environmental problems. In the fifth round of the planting activity held in August 2017, a total of 180 people, including employees and their families, planted 600 young trees, thereby increasing the total number of seedlings planted in the activity to 2,850 trees. Mangrove is a generic term for vegetation that grows in intertidal zones where seawater mixes with fresh water, and these plants are expected to help purify seawater, maintain and recover local ecosystems, prevent natural disasters, and mitigate global warming. The company plans to conduct such social contribution activities on a regular basis.



**Mangrove Planting Activity Conducted by Group Companies**

|  |
|--|
| Number of mangroves planted (FY2013 to FY2017)             |
| 2017: 600<br>Accumulated total: 2,850                      |
| Number of persons who planted mangroves (FY2013 to FY2017) |
| 2017: 180<br>Accumulated total: 607                        |

### Education

The Nabtesco Group invites students, teachers, and members of the public to tour its plants, implements internship programs, and holds other local exchange events in the regions where its plants and other sites are located. The Group also continues to support the "Chikyu Kyoshitsu" environmental education project held for elementary school students, the "Nikkei Education Challenge" project in which leading members of the business community give lessons to senior high school students, and other educational programs. A total of more than 250,000 people participated in these programs in 2017.



**Development of the Next Generation of Leaders**

|   |
|---|
| Number of persons who joined various programs |
| 2017: 251,071                                 |

### Welfare

The Nabtesco Group has been donating Group-made welfare devices to major local governments in areas where its sites are located or its employees reside since FY2008, with a view to fostering exchange with local communities through its products and making employees more aware of the importance of solving social issues. We have also donated the welfare devices to areas afflicted by disasters, namely, since FY2011 we have made donations to areas affected by the Great East Japan Earthquake and since 2017 to areas affected by the earthquake in Kyushu. We have so far donated a total of 308 units.



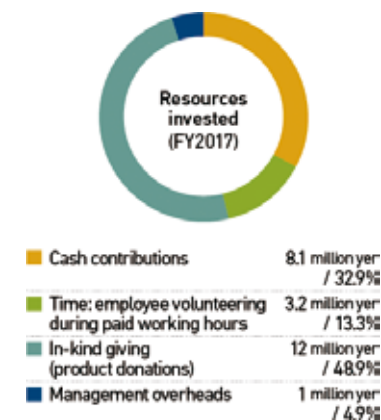
**Donation of Welfare Devices**

|  |
|--|
| Number of welfare devices donated (FY2008 to FY2017) |
| 2017: 38<br>Accumulated total: 308                   |

## Achievements of Corporate Citizenship Activities

Results of tabulating the corporate citizenship activities of the Nabtesco Group into categories are as follows.

### Resources Invested



\* Excluding commercial initiatives

**Web**

The Nabtesco Way  
<https://www.nabtesco.com/en/company/greeting.html>

**Web**

Nabtesco Group Community Investment Policy  
<http://nabtesco.disclosure.site/en/themes/140>

- Countermeasures for climate change - Environmentally friendly manufacturing - Reduction of environmental impact through products and services - Recycling, reuse and remanufacture of products

The Nabtesco Group is implementing a range of environmental initiatives to reduce its environmental impact in consideration of its materiality (material CSR issues). In 2016, the Paris Agreement came into force as an international agreement on anti-global warming measures. The agreement sets out the CO<sub>2</sub> reduction targets to be attained by the international community. To meet the needs of its stakeholders, the Nabtesco Group has also set its long-term CO<sub>2</sub> emission reduction targets to be attained by FY2015 and is speeding up its anti-climate change measures. We are also fostering multifaceted environmental measures for zero emissions and the protection of water resources as part of our efforts to fulfill our social responsibility through our manufacturing activities.

## Environmental Management

### Environmental Management System Implemented by the Group ESH Committee

The Nabtesco Group has set up the Group ESH Committee as the promotional organization related to the environment, safety, and health. We promote environmental management under this committee, which directly reports to the CEO. Since its establishment in 2003, the Company has positioned environmental measures as one of its strategic priorities, and a series of discussions have been held at meetings of the committee, in which the heads of the in-house companies and Group companies have participated. Our environmental strategies, including medium- to long-term targets, have thus been decided and implemented in a top-down manner.

### Speeding up the Execution of the PDCA Cycle through the Nabtesco Energy Management System (NEMS)

As part of our major environmental initiatives, we formulated our Environmental Philosophy and Environmental Action Plan in 2005. Since then we have been working to raise awareness of these principles across Group companies while making use of the ISO 14001 international standard as an effective tool for environmental management, utilizing it in the building and operation of our environmental management system. All Nabtesco Corporation plants and six major Group companies (Over 70% of sales) are already certified under ISO 14001, and

we are fostering environmental measures across the Group.

For energy conservation, we established the Nabtesco Energy Management System (NEMS) for the continuous execution of the PDCA cycle and have been fully operating the system since 2015.

Specifically, we have introduced environmental information management tools and an energy monitoring system to collect environmental information from our sites, analyze the collected information, and estimate the amount of energy used by each device in real time. We utilize the obtained data to make equipment investments based on our energy conservation guidelines formulated in 2015, while also using it at the monthly meetings of our sites for the promotion of energy conservation ideas and activities. Also, by sharing

information at the Board of Directors each month, we will respond quickly when these performance records and analytical data indicate improvement is necessary.

### Reducing CO<sub>2</sub> Emissions Based on a Long-Term Target

As the medium-term targets for FY2020, we are upholding a reduction in our greenhouse gas emissions in Japan relative to FY2015 levels, and a 9% or more reduction in our CO<sub>2</sub> emissions per units of sales (global) including our sites outside Japan (relative to FY2015 levels). Furthermore, we have set reduction targets of 30% for FY2030 and 80% for FY2050 (relative to FY2015 levels).

#### Measures to Climate Change Issues

| Category  | ~2010   | 2011                                      | 2012   | 2013   | 2014 | 2015   | 2016~  |
|---|---|---|--|--|------|--|--|
| Activity to increase employees' awareness of environmental philosophy | 2005: Formulated the Environmental Philosophy and Environmental Action Plan         |   | Setting of environment-related incentive system                                |  |      | Achievement of positive environmental contribution   | Introduced in-house company evaluation index |
| Environmental Management  | 2003: Six plants operated by major Group companies, have become ISO 14001 certified |   | Tools for managing environmental information                                   |  |      | NEMS (Nabtesco Energy Management)  |  |
|   |   |   | 2015: Started reporting to the Corporate Officers Committee on a monthly basis | Energy conservation guidelines                               |      | Energy monitoring system   |  |
| Expansion of target scope   | 2004: Started calculation of Scope 1 and 2  | Third-party verification of Scope 1 and 2 | Calculation of Scope 3 emissions   | Third-party verification of calculation of Scope 3 emissions |      |  |  |
| Cooperation with suppliers and customers                              |   |   |  |  |      | <ul style="list-style-type: none"> <li>Improving logistics efficiency using Scope 3 data</li> <li>Started Environmental SAQ (Self Assessment Questionnaire)</li> </ul> |  |





These targets are in line with the 2 degrees Celsius target<sup>\*1</sup> set as an international benchmark for climate change countermeasures to be implemented in and after 2020 under the Paris Agreement<sup>\*2</sup>, which came into effect in 2016. Our long-term target for Nabtesco Corporation's CO<sub>2</sub> emissions also qualifies as a Science Based Target (SBT)<sup>\*3</sup>. Nabtesco is the eighth Japanese company to get the SBT qualification.

In order to achieve the long-term target, we are making more environmental contributions through the provision of our products under the energy-saving product certification system introduced in FY2012. In the same fiscal year, we introduced an energy-saving activity commendation system to make more effective use of energy resources across the Group. Moreover, in FY2017 we included "environmental contribution achievement level" in the performance indicators for each division, with a view to improving environmental governance and making continuous improvements to our environmental management.

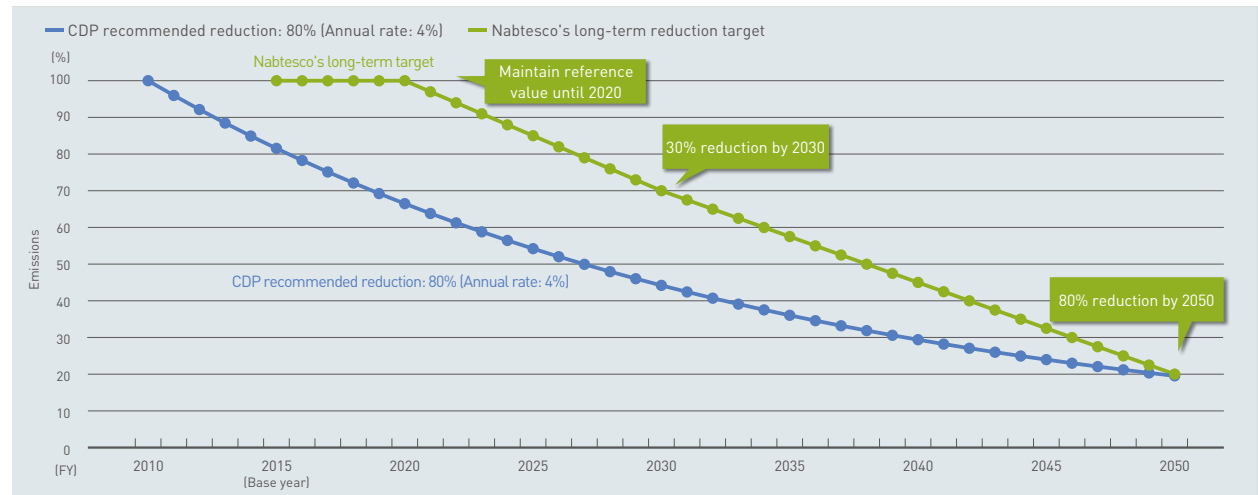
Going forward, we will further foster energy conservation by updating our equipment and rebuilding our plants while promoting the use of renewable energy and introducing private hybrid power generation equipment using hydrogen. We will thus gain speed in the implementation of measures with an eye to promoting energy creation and to attaining our long-term target.

In addition to reducing our own emissions, we have begun to expand activities to our suppliers. Of the greenhouse gas emissions from our entire supply chain, the percentage of emissions from purchased goods and services is high, making it essential for our suppliers to take initiatives to reduce their greenhouse gas emissions. In response, we began a survey of our main suppliers (top suppliers who

constitute 70% of the annual amount of purchases) to see whether they have set voluntary targets to reduce their greenhouse gas emissions. As of FY2017, 45.2% of our main suppliers have set voluntary targets to reduce their greenhouse gas emissions and begun to take initiatives to achieve the targets. We will provide support so that all of our main suppliers will set voluntary reduction targets by 2025.

\*1 The 2 degrees Celsius target is an international target set in the Paris Agreement to keep the average rise in global temperature to below 2 degrees Celsius.  
 \*2 The Paris Agreement is a multilateral international agreement to curb climate change in and after 2020 and was adopted on December 12, 2015 at the 21st Conference of the Parties to the UN Framework Convention on Climate Change (COP21).  
 \*3 The SBTs are intended to urge companies to set their medium- to long-term targets (for the period from five to 15 years from now) in a manner that allows the international community to achieve the 2°C target. Companies are certified if they pass the SBT Initiative's examination.

### Nabtesco's SBT



### Emissions from the entire supply chain

(Unit: t-CO<sub>2</sub>)

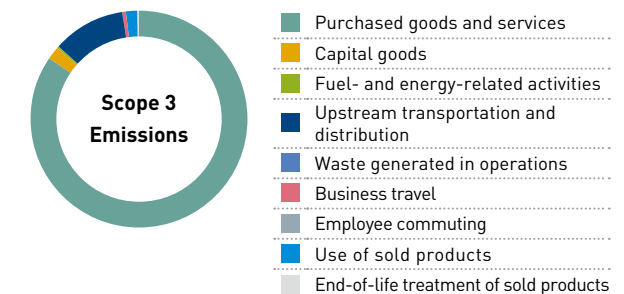
| Classification  | FY2015  | FY2016  | FY2017  |
|---|---------|---------|---------|
| <b>Direct emissions (Scope 1)<sup>*1,*2</sup></b>   | 7,074   | 7,259   | 8,686   |
| <b>Indirect emissions through the use of electricity and others (Scope 2)<sup>*1,*2</sup></b> | 47,729  | 50,865  | 61,538  |
| <b>Emissions from the supply chain (Scope 3)<sup>*3</sup></b>                                 | 826,842 | 885,494 | 871,463 |

(Note) The figure for the Nabtesco Group in FY2015 was calculated with the scope of the survey being the 12 months from January to December 2015.

\*1 The calculation scope includes only domestic operations: Nabtesco Corporation and Group companies (9 companies and 25 sites), which are listed at "Scope of Environment and Other Data."

\*2 The calculation policy and standards comply with the Act on the Regional Use of Energy and the Act on the Promotion of Global Warming Countermeasures, and are aligned with the internal Guidelines on the Management of Environmental Information.

\*3 The calculation scope includes Nabtesco Corporation only.



The Scope 3 calculations for FY2017 were made by the following method and for the following period and scope.

● Calculation method: As shown in the basic guidelines on the calculation of greenhouse gas emissions from supply chains set by the Ministry of the Environment and the Ministry of Economy, Trade and Industry

### Earning More Trust from Stakeholders through Environmental Management

Being internationally recognized for these environmental measures and information disclosure, Nabtesco was included in CDP's Climate A List and Supplier Climate A List for two consecutive years, receiving the highest-level rating from the organization.

The CDP, through cooperation among institutional investors, urges the world's leading companies in terms of market capitalization to disclose information about their climate change combat strategies and CO<sub>2</sub> emissions, and annually selects companies that demonstrate excellence in relevant measures based on evaluation scores, which are publicly disclosed.

We will continue to make steady and strenuous efforts to achieve our medium- to long-term targets, thereby meeting the expectations of our customers and investors.

### Waste Reduction

The Nabtesco Group is fostering the activities to reduce landfill waste to zero based on the approach of 3Rs (reduce, reuse, recycle)—the basic practice for establishing a resource-circulating society—for all types of emissions generated in the course of our business.

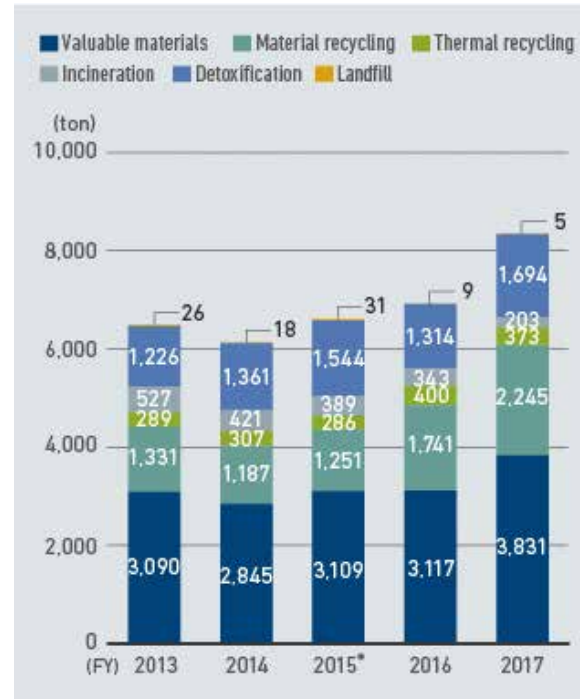
In FY2017 we continued to implement the separation of waste bound for landfill and enhanced waste heat recovery processes, thus achieving a 44% reduction from the previous fiscal year. The Zero Emission rate was 0.06%, exceeding the FY2017 target rate of 0.1% or below. This year we will continue to promote the 3Rs in order to achieve the Zero Emissions goal of 0%\* by FY2020.

The Nabtesco Group landfills metals, waste plastics, and waste glass that do not contain hazardous substances.

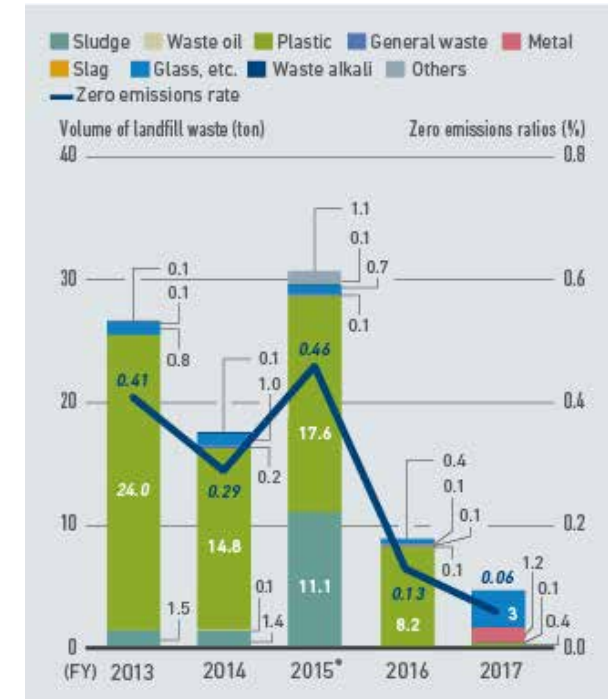
### Targets and Results of FY2017

| Targets                            | Results                    | Status   |
|------------------------------------|----------------------------|----------|
| Zero emissions rate: 0.1% or below | Zero emissions rate: 0.06% | Achieved |

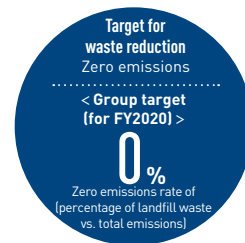
### Volume of Waste Generated



### Volume of Landfill Waste and Zero Emissions Ratios



\* The figure for the Nabtesco Group in FY2015 was calculated with the scope of the survey being the 12 months from January to December 2015.



| Breakdown of emissions                                    |  |   |
|---|--|---|
| <b>Incineration</b><br>general waste, plastic, etc.       | <b>Landfill</b><br>sludge, plastic, glass                | <b>Material recycling</b><br>oil, sludge, wood, liquid, plastic, etc. |
| <b>Detoxification</b><br>water-soluble oil, alkalis, etc. | <b>Valuable materials</b><br>metal, oil, cardboard, etc. | <b>Thermal recycling</b><br>packaging, general waste, plastic, etc.   |

## Measures to Reduce Hazardous Waste

The Nabtesco Group was landfilling 0.1 ton per year of waste alkalis, which are hazardous, until FY2014. In FY2015, however, we began to detoxify alkalis, water-soluble waste oil, and other hazardous waste prior to their disposal. Accordingly, we have not released any waste containing hazardous substances since FY2015.

## Measures to Reduce Use of Raw Materials

By reusing components and reducing the production of new ones, Nabtesco is working to minimize the use of resources. We have been fostering the MRO (maintenance, repair, and overhaul) business to optimized the use of resources and expand sales in the service field.

## Conservation of Water Resources

The Nabtesco Group does not require a large amount of water nor water of a certain quality for its business operations. However, we deem it important to manage water resources, and accordingly conduct water-related risk analyses, measure the amount of water used and discharged, monitor water quality, and implement measures to prevent the leakage of hazardous substances into water.

The amount of water used and discharged at each base are measured every month, and the Group data are accumulated through the environmental information management tool. As for bases where the amount of water per month fluctuates greatly, we conduct surveys to identify contributing factors for the increased water usage, and implement measures to reduce the water use as necessary. As for water quality control, we continuously monitor through monthly voluntary tests and regular inspections by external experts.

In 2012 the Nabtesco Group started to manage its water consumption on a global level, including the data for the overseas Group companies. The water consumption at the overseas Group companies remains relatively low, constituting a mere 10% of the Group consumption; however, in order to respond to global water risks, we continue managing the water consumption in our overseas operations.

In addition, while we used to manage the amount of water discharged only for Group companies in Japan, we commenced water discharge management on a global basis by including overseas Group companies in FY2016.

## Water Use and Water Discharge Management in Japan

The Nabtesco Group in Japan uses groundwater mainly to cool test stands and melt snow in snowy regions (Yamagata and Gifu). We discharge the used groundwater to rivers under the strict water quality control criteria set by the Group. In FY2017, there were no cases wherein used groundwater did not meet the water quality control criteria.

The total volume of water used by the Nabtesco Group in FY2017 amounted to 700,000m<sup>3</sup>, an increase of 6.7% (44,000m<sup>3</sup>) compared to the previous fiscal year. The major contributor to this increase was an expansion in production volumes at Tarui Plant (which supplies hydraulic equipment for construction machinery) on the back of the rebound of demand for construction machinery in the Chinese market. The increased production volumes resulted in longer operation hours for test stands.

Due to heavy rain falls caused by recent climate change, the risk of rainwater flooding our plants is increasing. The Nabtesco Group uses oil-based type and water-soluble type cutting fluids in its business operations and recognizes the risk of hazardous substances contained in these cutting fluids discharged to rivers if rainwater floods the manufacturing facilities. To prevent this, we have been making capital expenditure to install oil-water separation tanks and oil recovery equipment.

In FY2017, we spent around 0.5 million yen to enhance the rainwater discharging function, install drainage pipes, and make our facilities more water-resistant.

### Target of Water Use Activities and FY2017 Results

| Item                         | Targets  | FY2017 results       | Status   |
|------------------------------|--|----------------------|----------|
| Global water use             | Year-on-year change rate at 10%:<br>0.785Mm <sup>3</sup> or less | 0.780Mm <sup>3</sup> | Achieved |
| Global water quality control | In-house management criteria*<br>Excessive number: zero          | 0                    | Achieved |

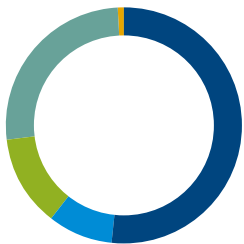
\* Set criteria that are stricter than local standards, and monitor and manage the discharge of water.

## Corporate Profile

### Corporate Profile (as of December 31, 2017)

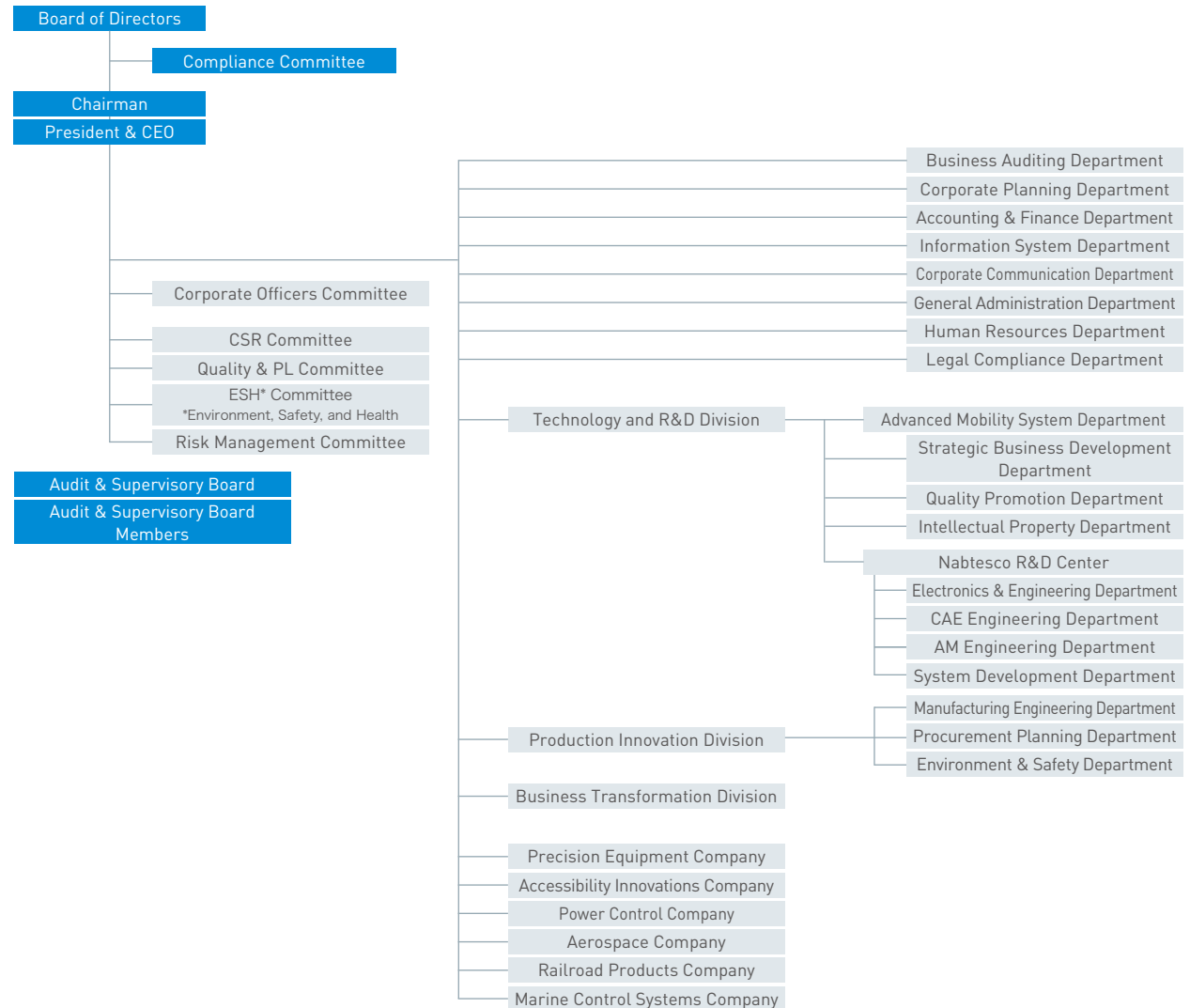
|                                |   |
|--------------------------------|---|
| <b>Company Name</b>            | Nabtesco Corporation  |
| <b>Established</b>             | September 29, 2003  |
| <b>Address</b>                 | 7-9, Hirakawa-cho 2-chome,<br>Chiyoda-ku, Tokyo 102-0093,<br>Japan  |
| <b>TEL</b>                     | +81-3-5213-1133   |
| <b>FAX</b>                     | +81-3-5213-1171   |
| <b>Capital</b>                 | 10 billion yen  |
| <b>Number of issued shares</b> | 125,133,799   |
| <b>Minimum Trading Unit</b>    | 100<br>All of our issued shares are<br>common stock with a minimum<br>trading unit of 100 shares. We<br>have not issued class shares. |
| <b>Employees</b>               | Non-consolidated 2,256<br>Consolidated 7,591  |
| <b>Consolidated companies</b>  | <b>In Japan</b> 15 (excl. 4 equity method affiliates)<br><b>Overseas</b> 44 (excl. 4 equity method affiliates)                        |

### Breakdown of Shareholding by Investor Type



|                        |        |
|------------------------|--------|
| Overseas investors     | 51.83% |
| Individuals, etc.      | 8.80%  |
| Other corporations     | 12.56% |
| Financial institutions | 26.06% |
| Treasury stock         | 0.75%  |

### Management Structure



## Disclosure Policy

### Boundary of the Report

Nabtesco Corporation and its consolidated subsidiaries  
This report covers activities conducted by Nabtesco Corporation and its consolidated subsidiaries. However, a portion of the nonfinancial data pertains to only Nabtesco Corporation.

### Period Covered

January 1, 2017 to December 31, 2017

In light of the importance of providing up-to-date information, some activities conducted after the period are also reported.

### Date of Publication

Published in July 2018 (Published annually)

### Performance Data

Nabtesco has changed the accounting closing date of fiscal year from March 31 to December 31 since FY2015. In this report, the results for FY2015 are calculated on a basis of 9 months for Nabtesco Corporation and the other consolidated subsidiaries in Japan, and 12 months for the overseas consolidated subsidiaries.

Nabtesco has also applied the International Financial Reporting Standards (IFRS) to its accounting since FY2017. For comparison with the results for FY2017, the results for FY2016 were also recalculated in line with the IFRS.

### Note about the Forecasts

Forecasts made in this report about numerical figures and measures for the future are based on currently available information and on certain judgments and assumptions that Nabtesco considers reasonable. Actual results may vary significantly from such forecasts due to a variety of important factors, including the economic situations of the company's major markets in and outside Japan and changes in the foreign exchange market.

### Third-Party Assurance

Our environmental and social data is examined by Lloyd's Register Quality Assurance Limited with a view to ensuring the reliability of the calculated data.

### Guidelines Referenced

- International Integrated Reporting Framework published by the International Integrated Reporting Council (IIRC)
- WICI Intangible Reporting Framework published by the World Intellectual Capital/Assets Initiative (WICI)
- G4 Sustainability Reporting Guidelines published by the Global Reporting Initiative (GRI)
- ISO26000 (International standard on the social responsibilities of organizations)
- Guidance for Integrated Corporate Disclosure and Company-Investor Dialogues for Collaborative Value Creation, Ministry of Economy, Trade and Industry of Japan

### Participation in External Initiatives and External Evaluation

The Nabtesco Group announced our support for and signed the United Nations Global Compact in April 2014, thereby further fostering its CSR-oriented management. Our long-term greenhouse gas emission targets have been officially approved by the Science Based Targets (SBT) Initiative.



The Nabtesco Group's CSR initiatives are highly appreciated on an international level, which is proven by the fact that Nabtesco is included in the Dow Jones Sustainability World Index, FTSE4Good, FTSE Blossom Japan Index, MSCI ESG Leader Indexes, MSCI Japan ESG Select Leaders Index, STOXX Global ESG Leaders Index, and JPX-Nikkei Index 400. The Group has also been included in the Climate A List and the Supplier Climate A List of the CDP, which evaluates corporate anti-climate change measures and strategies, for two years in a row.

MEMBER OF  
**Dow Jones Sustainability Indices**  
In Collaboration with RobecoSAM



**Nabtesco**  
moving it. stopping it.