

Nabtesco Value Report 2018

Integrated Report
FY Ended December 31, 2018



Dialogue



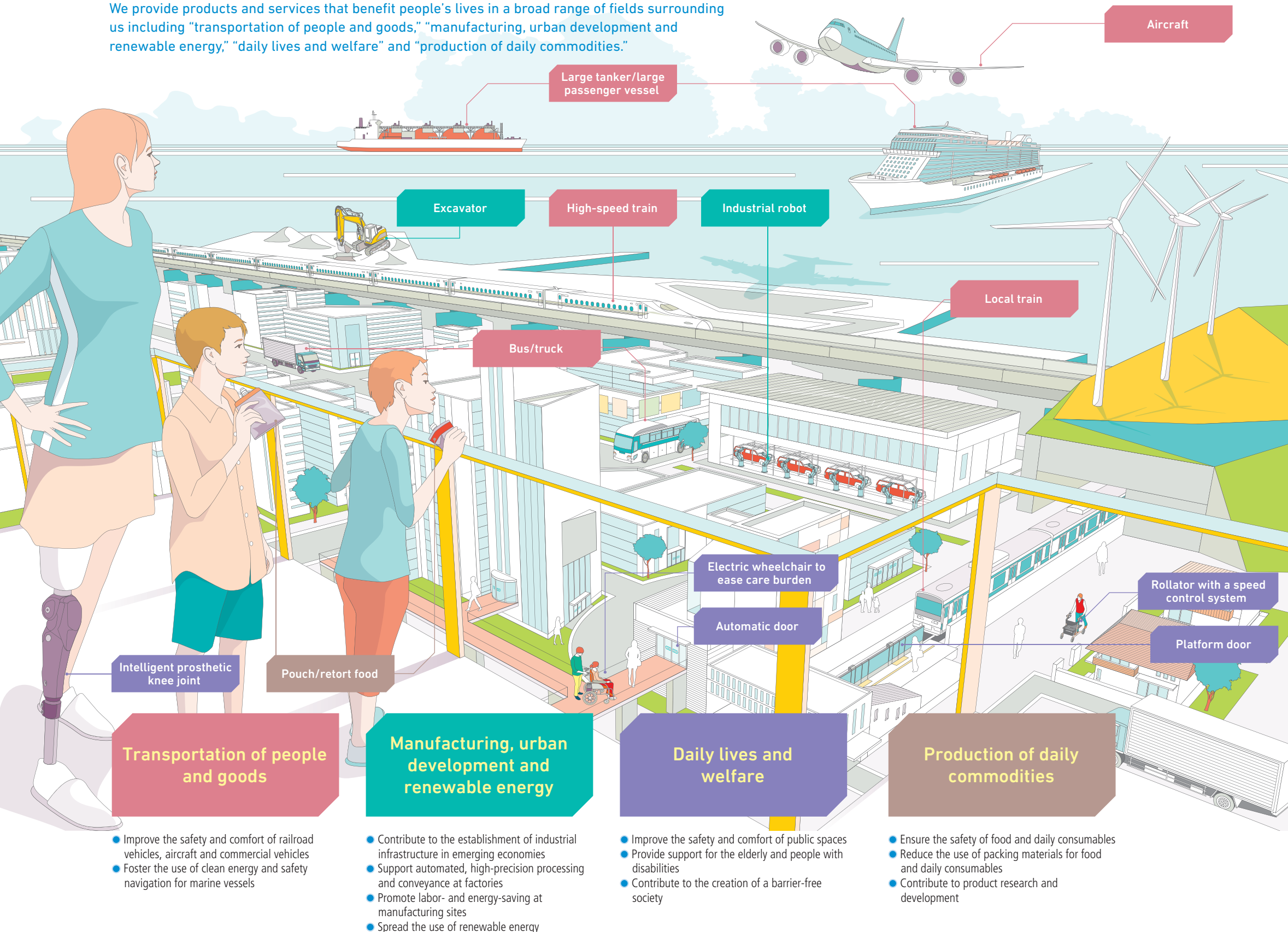
Nabtesco
moving it. stopping it.

Nabtesco
moving it. stopping it.

With its motion control technology based “Moving it. Stopping it.”, the Nabtesco Group safety, comfort and a sense of security in

on the key concept of strives to provide daily lives.

We provide products and services that benefit people’s lives in a broad range of fields surrounding us including “transportation of people and goods,” “manufacturing, urban development and renewable energy,” “daily lives and welfare” and “production of daily commodities.”



2018

Nabtesco Value Report

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Editorial Policy

We endeavor to enhance our integrated report based on dialogues with stakeholders

The Nabtesco Group believes that it is important to establish trust with its stakeholders through dialogue in order to ensure management transparency and realize sustainable growth.

In this 2018 version of the Nabtesco Integrated Report, we strived to deepen the understanding of our attitude and thoughts toward the enhancement of corporate value as well as our medium- to long-term strategies by publishing dialogues with various stakeholders while presenting the overall picture of our value creation path from the past, present and future timeframes.

In the “Dialogue with Investors,” we invited an investor and an analyst who have an in-depth knowledge of the Nabtesco Group to seek candid opinions for the enhancement of corporate value and to engage in active discussions (pages 29 to 32). In the “Dialogues with Society,” we had a dialogue with external members of the Compliance Committee and exchanged opinions on how we can leverage the lessons from scandals of other companies for the enhancement of effectiveness of the Group’s compliance (pages 65 to 68). In addition, we had a discussion on the success factors for open innovation with a strategic partner in CVC (Corporate Venture Capital) (pages 81 to 84).

In preparing this report, the Integrated Reporting Framework, the Intangible Reporting Framework and various other guidelines on sustainability were used as references to ensure objectivity and transparency.

We will continue to aim for the enhancement of our integrated report through candid dialogues with our stakeholders in the future.

Questionnaire

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

URL : https://questant.jp/q/NVR2018_en



To Our Stakeholders

We will accelerate sustainable growth based on dialogue.

Since its establishment in 2003, Nabtesco has continued to grow by carrying forward the business bases of Teijin Seiki Co., Ltd. and NABCO Ltd., the merger between which created Nabtesco, and by developing its value creation process. In order to accelerate growth, we are currently pushing forward with the medium-term management plan for the period ending FY2020. In the medium-term management plan, we have a commitment toward achieving an ROE of 15% and a consolidated payout ratio of 35% or more in addition to placing a focus on solving ESG issues. In order to realize these commitments, we have been strengthening our business activities and pushing forward with integrated management both from financial and non-financial perspectives.

In FY2018, while achieving record-high net sales, we posted a decrease in profit, which forced us to revise our financial forecasts. The posting of the impairment loss on goodwill from OVALO GmbH

in Germany, which joined the Nabtesco Group as a result of acquisition, turned out to be a significant factor behind the decline in profit, albeit temporary. We understand that we caused concerns among our stakeholders since we could not fully disclose the factors behind the impairment loss and financial forecasts on a timely basis due to certain restrictions including confidential agreements with customers.

In FY2019, we aim to achieve record-high sales and profit. In addition, we will strive to generate value exceeding the cost of capital in a sustainable way by proactively investing resources in growth drivers based on the usage of the return on invested capital (ROIC) tree.

Meanwhile, shifting an eye to the future 10-20 years ahead, we believe it is necessary for us to develop new business pillars in order to continue to grow over the long term. Amid changes in customer needs and the competitive landscape, including the

arrival of the Internet of Things (IoT) society and the advance of artificial intelligence (AI), it is essential to execute initiatives in a steady and speedy manner looking ahead to the future. For that purpose, we will promote open innovation through not only M&A but also CVC (Corporate Venture Capital), which was established last year. However, since the usage of external resources entails uncertainty, bilateral communication will become more important in order to ensure that our intentions and aims behind decision-making will be adequately understood by our stakeholders.

From such a perspective, we chose "dialogues" as the theme of this integrated report. We published three dialogues in this report to help the understanding of our attitude and thoughts toward the enhancement of corporate value. The first is a dialogue with an investor and an analyst who have an in-depth knowledge of the Nabtesco Group. We sought candid opinions on the enhancement of corporate value and engaged in active

discussion. The second is a dialogue with external members of the Compliance Committee. We exchanged opinions on how we can leverage the lessons from the scandals of other companies for improving the effectiveness of the Group's compliance. The third is a dialogue with a strategic partner in CVC. By setting the solution for the "dilemma of innovation" as the theme, we discussed success factors for open innovation.

As the Action Guideline, "Be open, fair and honest" is prescribed in "The Nabtesco Way." This is exactly the attitude that I value the most. Our challenge is how to expand our value in a sustainable way through candid dialogue with our stakeholders. I sincerely hope that this report will pave the way for dialogue with everyone.

May 2019

Katsuhiro Teramoto

Representative Director,
President and CEO

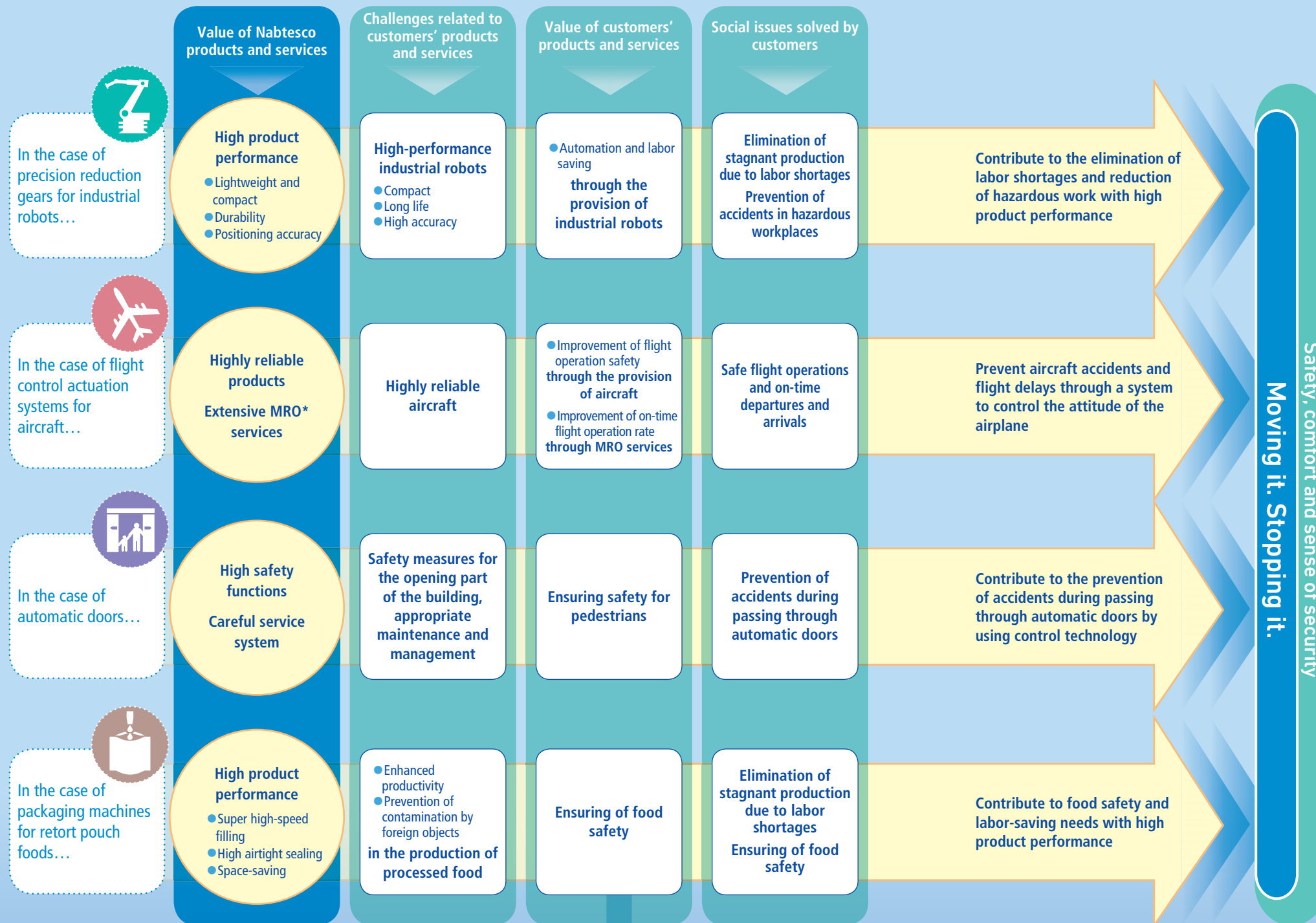
The Nabtesco Way



Value of the Nabtesco Group

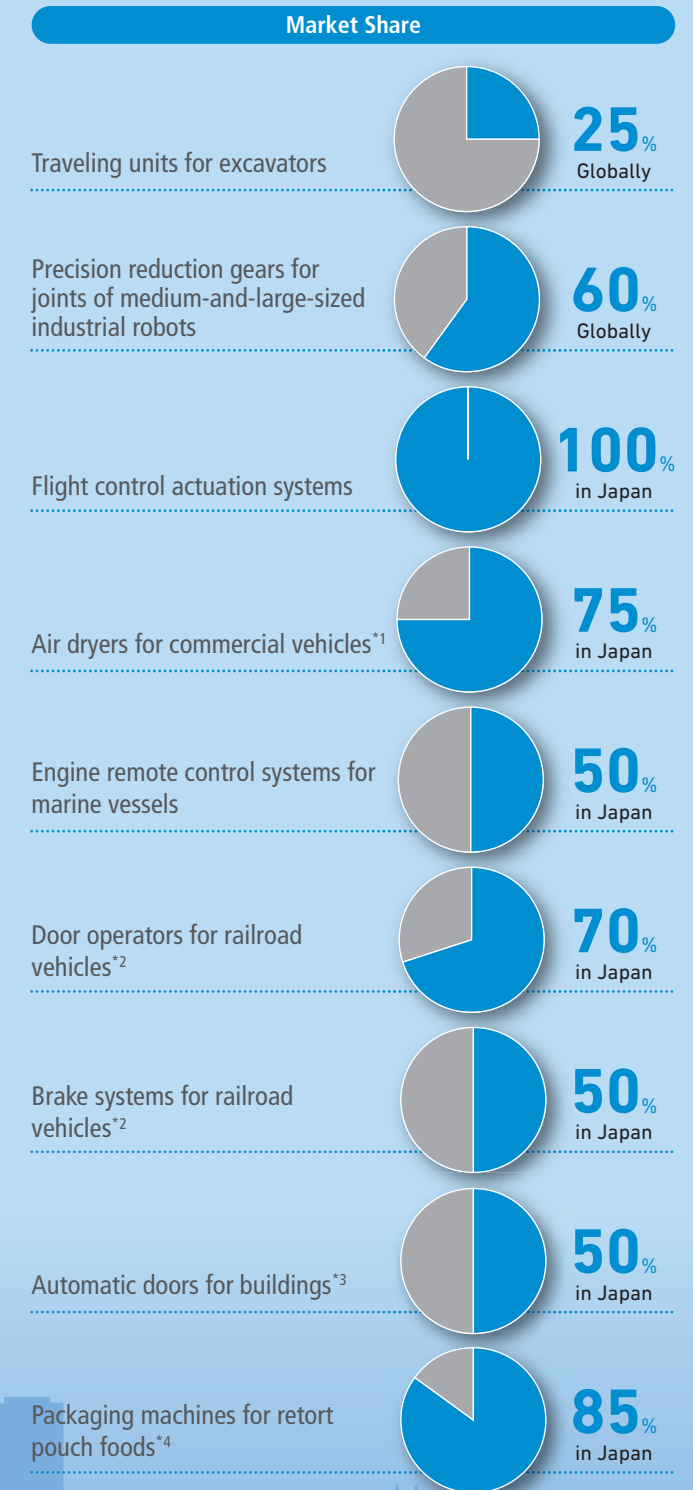
Nabtesco will continue to act as an unsung hero in solving social challenges.

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



*MRO (Maintenance, Repair, Overhaul): After-sales service

We create economic value by fulfilling our responsibilities for ensuring stable supply in each market.



^{*1} Nabtesco's estimate based on "Large and Medium-Sized Freight Vehicle Unit Sales (2016)," Japan Automobile Dealers Association
^{*2} Nabtesco's estimate based on "Statistics Data of Production (2016)," Japan Association of Rolling Stock Industries
^{*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.

Growth History

Accumulating managerial resources business foundations laid by our two

Nabtesco Corporation was formed in 2003 through the merger of Teijin Seiki Co., Ltd. and NABCO Ltd. The company has expanded the technology base and businesses inherited from the two companies, while enhancing the

for growth by building upon the predecessors

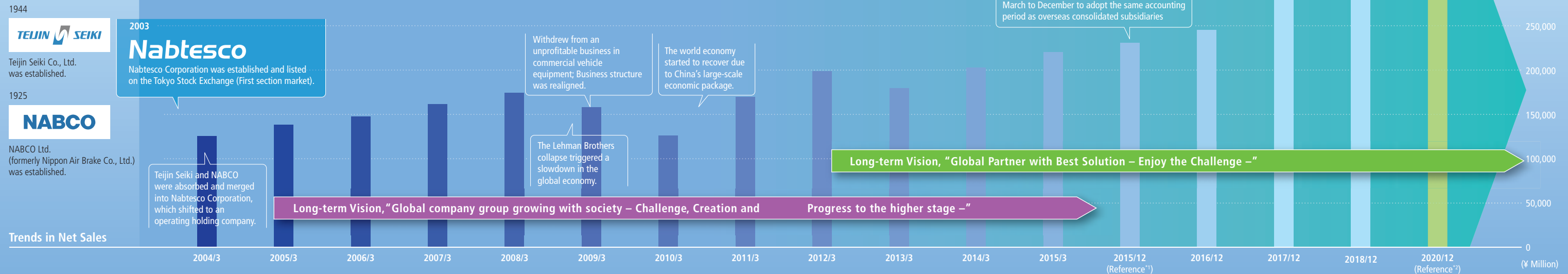
management foundation and expanding its overseas bases. Since FY2017, it has been implementing the current medium-term management plan to accelerate business growth in global markets.

Disciplined portfolio management for growth

● Technology base: Unique motion control technology

Technologies developed by the two companies		Technologies developed/enhanced after the integration		
Teijin Seiki	NABCO	Leading-edge element technologies	Advanced development methods	Innovative production technologies
<ul style="list-style-type: none"> Cutting technology Assembly technology 	<ul style="list-style-type: none"> Fluid control technology Pneumatic control technology 	<ul style="list-style-type: none"> Surface treatment and heat treatment technologies 	<ul style="list-style-type: none"> CAE analysis technique, additive manufacturing (AM) technology and model base development 	<ul style="list-style-type: none"> Advanced automation and smart production management
Businesses inherited from the integration		Businesses discontinued/restructured after the integration		
Teijin Seiki	NABCO	Discontinued businesses	Restructuring	
<ul style="list-style-type: none"> Precision reduction gear business Hydraulic equipment business Aircraft equipment business Packaging machine business 	<ul style="list-style-type: none"> Railroad vehicle equipment business Marine vessel equipment business Commercial vehicle equipment business Hydraulic equipment business Automatic door business 	<ul style="list-style-type: none"> IT-related product business Automobile and motorcycle component business Textile machine maintenance business Vacuum equipment business etc 	<ul style="list-style-type: none"> Divestiture of commercial vehicle equipment business (Nabtesco Automotive Co., Ltd. established) Restructuring of production bases in the hydraulic equipment business in China New Energy Business Development Division was abolished 	

Companies that joined the Group through M&A				
Automatic doors	Railroad vehicle equipment	Hydraulic equipment	Commercial vehicle equipment	(Head office) Technology and R&D Division
<ul style="list-style-type: none"> Gilgen Door Systems AG (Switzerland) NABCO DOOR Ltd. NABCO SYSTEMS Co., Ltd. 	<ul style="list-style-type: none"> OCLAP S.R.L. (Italy) 	<ul style="list-style-type: none"> Hyst Corporation 	<ul style="list-style-type: none"> ITG Serienfertigung Fahrzeugteile GmbH and ITG Kompressoren GmbH (Germany) 	<ul style="list-style-type: none"> OVALO GmbH, adcos GmbH (Germany)
Current portfolio (main businesses)				
Component Solutions (CMP)	Transport Solutions (TRS)	Accessibility Solutions (ACB)	Manufacturing Solutions (MFR)	
<ul style="list-style-type: none"> Precision reduction gears Hydraulic equipment New energy equipment 	<ul style="list-style-type: none"> Railroad vehicle equipment Aircraft equipment 	<ul style="list-style-type: none"> Commercial vehicle equipment Marine vessel equipment 	<ul style="list-style-type: none"> Automatic doors 	<ul style="list-style-type: none"> Packaging machines



Period of the Medium-term Management Plan	Reinforcement of the management base
2004/3 - 2006/3	<ul style="list-style-type: none"> 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)
2007/3 - 2009/3	<ul style="list-style-type: none"> Formulated the Corporate Philosophy and the Long-term Vision
2010/3 - 2012/3	<ul style="list-style-type: none"> Established the Quality & PL Committee
2013/3 - 2015/3	<ul style="list-style-type: none"> 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
2016/12 - 2018/12	<ul style="list-style-type: none"> Compliance Committee, CSR Committee and Risk Management Committee were established CSR Basic Policy was formulated Nabtesco Group Code of Ethics was established
2019/3 - 2020/12	<ul style="list-style-type: none"> 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 Establishment of a corporate venture capital (CVC) fund

*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

Value Creation Process of the Nabtesco Group

Our unique "Stopping it. Moving it." technology

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
- Emerging markets: Increase orders

Technological trends

- Engineering innovation in the manufacturing industry
- Increased needs for mechatronics and systemization technologies

Opportunities to contribute to the solution of social challenges through businesses

- Demand for automation and labor saving at manufacturing sites
- 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 environment

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 etc

Growth opportunities provided by global social challenge

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

Management Strategy 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

keeps driving our business globally.

Long-Term Vision Status in FY2020
VISION Global Partner with Best Solutions

Created Value
OUTCOME

	Value for the Nabtesco Group	Value for external stakeholders
Relationship capital	<ul style="list-style-type: none"> Relations of trust with customers Relations of trust with shareholders Relations of trust with suppliers Relations of trust with local communities 	<ul style="list-style-type: none"> Customer bases founded on top-class market shares Trust in the management team and high-scoring ESG evaluation Responsible supply chain management Improvement of the brand image through community investment
Financial capital	<ul style="list-style-type: none"> Robust balance sheet that supports steady growth investments Equity ratio of 58% on average for the past five years 	<ul style="list-style-type: none"> Capital efficiency and stable return of profit that meet shareholders' expectations ROE for FY2018/12: 12.1% Payout ratio for FY2018/12: 43.0%
Technology and manufacturing capital	<ul style="list-style-type: none"> Creation of new products and a highly competitive production system 	<ul style="list-style-type: none"> Provision of safety, comfort and a sense of security and contribution to climate change mitigation
Human capital	<ul style="list-style-type: none"> Securing of human resources who implement The Nabtesco Way 	<ul style="list-style-type: none"> Provision of safe and comfortable workplaces
Organizational capital	<ul style="list-style-type: none"> Highly ethical corporate culture based on a global compliance system 	<ul style="list-style-type: none"> Management transparency based on the autonomous improvement of its functions by the Board of Directors

QCD stands for quality, cost and delivery.

Business Model → **Managerial Resources That Support Value Creation** (INPUT)

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

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

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

Financial capital

- Capability to generate stable cash flow

Relationship capital

- Major customers
- Industrial robot manufacturers and construction machinery manufacturers
- Manufacturers and companies engaged in railroad, marine and air transportation businesses
- Major construction companies and others engaged in the construction business
- Food manufacturers

Technology and manufacturing capital

- 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

Activities for Sustainable Growth (BUSINESS ACTIVITIES)

Major businesses		OUTPUT	
Business segment	Characteristics	Main products and services	Relationship with society
Component Solutions (CMP)	Significant impact of changes in production/sales volume on profitability	<ul style="list-style-type: none"> Precision reduction gears Hydraulic equipment New energy equipment 	<ul style="list-style-type: none"> Manufacturing Urban development Renewable energy
Transport Solutions (TRS)	After-sale services (MRO ^{*1}) that mitigate impacts from changes in OEM ^{*2} production volume	<ul style="list-style-type: none"> Aircraft equipment Railroad vehicle equipment Commercial vehicle equipment Marine vessel equipment 	<ul style="list-style-type: none"> Transportation of people and goods
Accessibility Solutions (ACB)		<ul style="list-style-type: none"> Automatic doors Platform doors Welfare equipment 	<ul style="list-style-type: none"> Daily lives and welfare
Manufacturing Solutions (MFR)		<ul style="list-style-type: none"> Packaging machines 	<ul style="list-style-type: none"> Production of daily commodities

^{*1} MRO: Maintenance/Repair/Overhaul
^{*2} OEM: Original Equipment Manufacturer

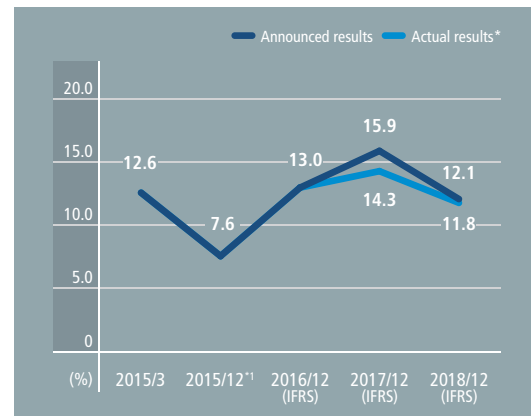
Measures for Operational Excellence

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"

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

Financial/Non-Financial Highlights

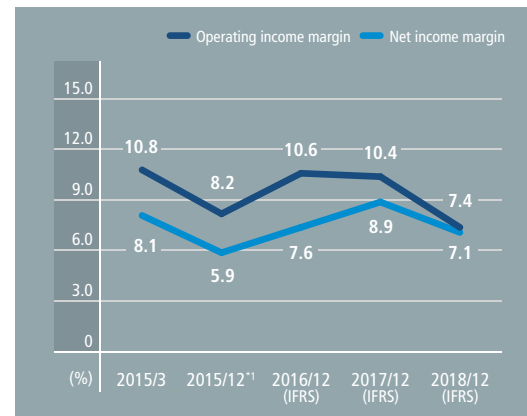
ROE



Nabtesco is focused on continuously securing a capital efficiency level that can meet the expectations of its shareholders and investors and has made a commitment of "ROE: 15%" in the Medium-Term Management Plan. In FY2017, we started to use the "improvement rate of return on invested capital (ROIC)" as a new internal management indicator. While paying attention to cost of capital, we will work to increase the absolute amount of profit and improve the operating income margin and total assets turnover, which are ROE elements. We will also consider using financial leverage as necessary. In FY2018, our ROE was 12.1% and below the committed level. We will strive to raise it to 15% as soon as possible and maintain the level toward the future.

*For In FY2017, and In FY2018, the graph shows the actual results excluding the equity method-based profit gained through the overseas subsidiary acquisition by Harmonic Drive Systems Inc.

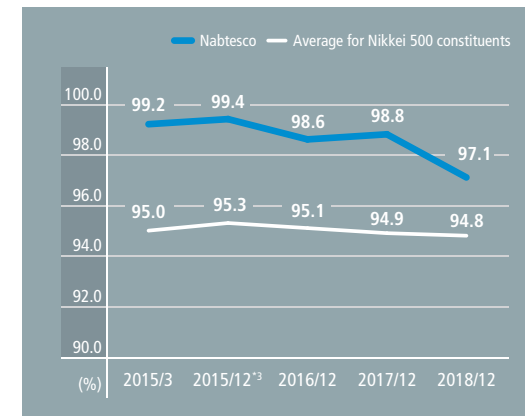
Operating Income Margin/Net Income Margin²



For FY2018, the operating income margin decreased due to the posting of impairment loss and others. However, being freed from the influence of these losses, profitability will improve in FY2019. Nabtesco deems it critical to secure a sound level of profitability as a prerequisite for business growth, and endeavors to improve the operating income margin. To improve the net income margin through an increase in the operating income margin, 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.

*MRO : Maintenance, repair and overhaul (after-sales service)

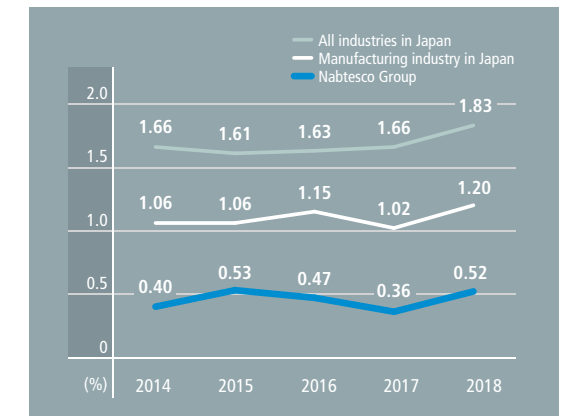
Affirmative Vote Rate of Selected Directors



Nabtesco values relations of trust with our shareholders to enhance our 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 2019, Nabtesco received a 97.1% rate. 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.

(Note) Nabtesco's affirmative vote rate of selected directors is the average rate calculated based on the affirmative vote rates recorded for each of the selected directors at the ordinary general meeting of shareholders for the fiscal period. For Nikkei 500 constituents' affirmative vote rates of selected directors, the average rate was calculated for companies that submitted temporary reports on their general meetings of shareholders held in June by early July. (Surveyed by Sumitomo Mitsui Trust Bank)

Lost Time Injury Frequency Rate⁴

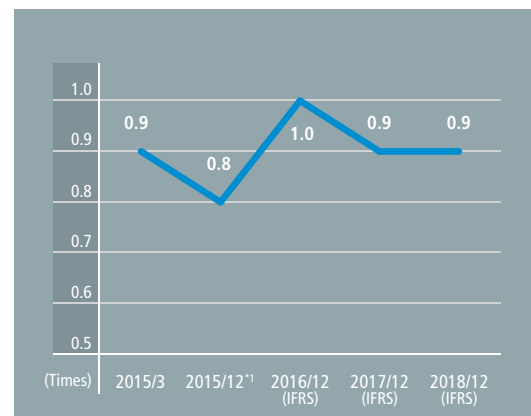


Nabtesco gives first priority to safety, deeming safety as a basic requirement to be met in all its business activities. We are making efforts to eliminate workplace accidents as the basis for protecting the day-to-day safety of employees and for sustainable value creation.

Although Nabtesco's lost time injury 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.

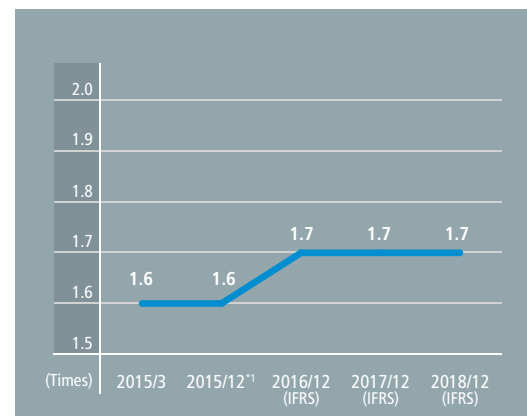
(Note) Data for the all-industries average and the manufacturing industry average in Japan are from the 2018 Survey on Industrial Accidents, Ministry of Health, Labour and Welfare.

Total Assets Turnover



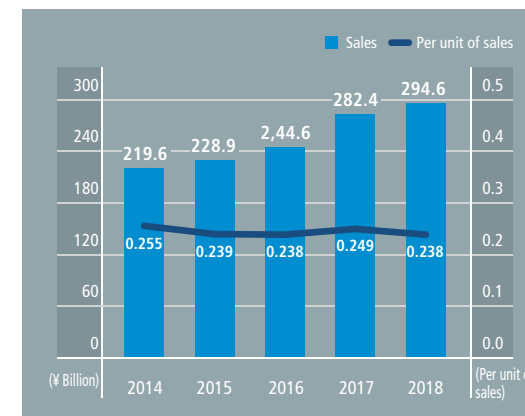
It is indispensable to efficiently use management resources in order to improve total assets turnover. At present, the Nabtesco Group is fostering group-wide manufacturing innovation to enhance our production technologies, production management ability and procurement ability. We are also promoting the 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.

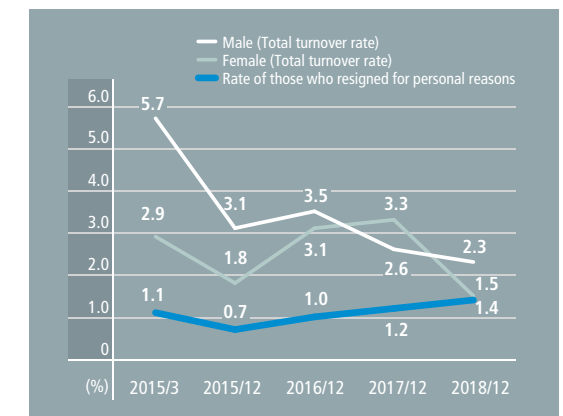
CO₂ Emissions per Unit of Sales [Global]



To combat climate change as one of our material CSR issues, Nabtesco is working to reduce greenhouse gas emissions and to conserve energy. As a result, our CO₂ emissions per unit of sales have been decreasing globally. In order to achieve business growth while reducing CO₂ 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 CO₂ 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.

(Note) The medium- and long-term targets are expressed as percentages of reduction from actual CO₂ emissions in FY2015.

Rate of Those who Resigned for Personal Reasons⁵



Nabtesco sees our 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 our employees with a good work environment. We have been promoting measures for work style reform, while 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.

*1 Due to the change of the accounting closing date of fiscal year since FY2015/12, 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.

*2 Net income attributable to owners of the parent

*3 Period covered for Non-financial data: January 1, 2015 to December 31, 2015

*4 The calculation scope includes Nabtesco Corporation and domestic Group Companies.

*5 The calculation scope covers only Nabtesco Corporation.

Nabtesco Group's Materiality

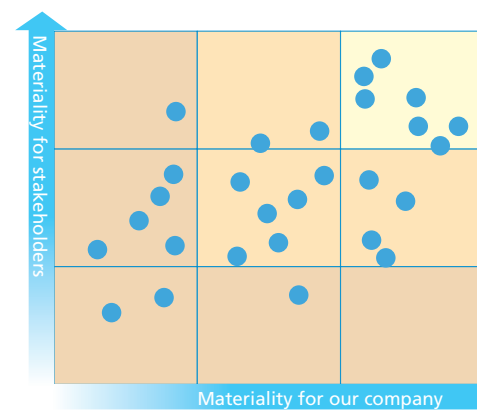
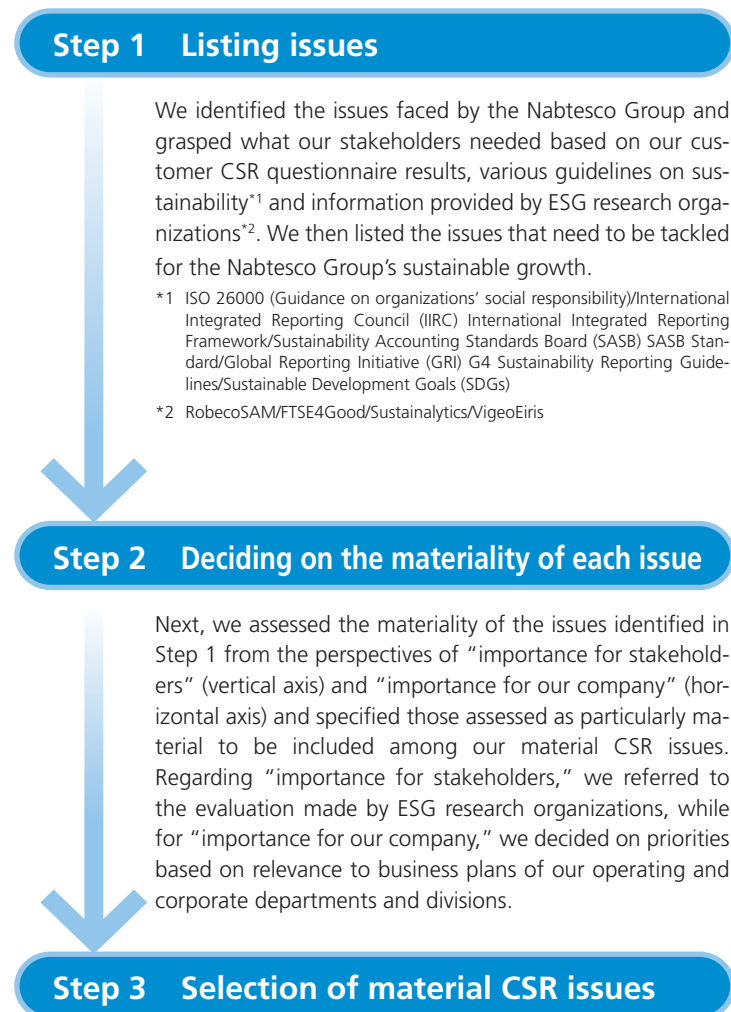
We strive to ensure management transparency and to provide safety, comfort and a sense of security.

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.

Process of Materiality Reexamination

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.



parency and to provide safety,














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 our corporate social responsibilities, thereby meeting the expectations and requests of our 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 our 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	  
		Develop human capital and promote workplace diversity	
		Provide safe and comfortable workplaces	
		Respect human rights	
	Prevent corruption	 	
	Fair, proper and transparent procurement activities		
Local community development	 		
Environment (E)	Environment (E)	Countermeasures for climate change	 
		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 above. 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.

Steps toward the Future

The biggest driving force that underpins Nabtesco's growth is "people."

By leveraging human assets as its growth driver, the Nabtesco Group will realize "All Stakeholders' Dreams."

We endeavor to develop human resources for next-generation growth by understanding and implementing the values described in The Nabtesco Way through Way meetings* while promoting teamwork in order to respond to the demands of our customers based on cooperation among all departments.

*Meetings aimed at raising employees' awareness of the values and encouraging them to share the values at their workplaces

The Nabtesco Way



One of the comments that were raised the most at Way meetings was on the importance of maintaining a positive attitude toward challenges. "A challenging spirit gives us a chance to grow ourselves while it may increase the potential for failure." "To continue to challenge without giving up when faced with difficulties will result in great achievements in gaining the trust of customers and developing new products." "The younger generation should proactively take on difficult tasks, and their superiors should delegate jobs and watch over and support their subordinates." Many participants deeply agreed with these comments. The importance of teamwork was another point that was emphasized by a large number of participants.

In order to make "relentless progress," I believe it is important to constantly look ahead into the future and pursue challenges and innovation while continuing to make improvement by focusing on sites, products and reality.

In any business environment, Nabtesco's strength is based on the accumulation of trust and we should give the utmost priority to ensure, maintain and improve such trust. Our promise in The Nabtesco Way, "Continue to reinforce our sense of ethics and highly transparent business activities," is our eternal theme.

I totally agree with one of our promises described in The Nabtesco Way, "Value each individual's spirit of challenge and innovation." The strong will to improve ourselves from the current level and ingenuity are strengths that differentiate human beings from AI and robots. I believe that personal communication and mutual help are key elements of such will and ingenuity.

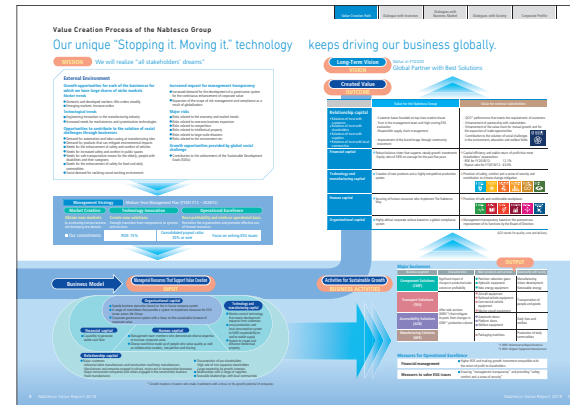
The law of 2:6:2 applies to organizations. Twenty percent of the constituents are those who drive innovation, 60% are those who realize innovation, and the remaining 20% are those who keep the balance by proposing different views. All of them are invaluable constituents. Each of us should raise challenging targets which are difficult to attain and learn and involve others in order to achieve such targets. We should start with changing the landscape of our daily workplace. This will result in changing the landscape of the outside world.

Voices of employees who implement The Nabtesco Way



Value Creation Process of the Nabtesco Group (Explanation)

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. To this end, the Nabtesco Group is focused on sharing the overall picture of its value creation process with stakeholders. In this section, we will make detailed explanations about the Group's value creation, which is represented in the tables and figures shown on pages 9 and 10.



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

◆ **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.

The Nabtesco Group will proactively disclose how it is striving to achieve sustainable growth and to ensure management transparency, thereby continuing to win the trust of stakeholders.

◆ 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 FY2018.

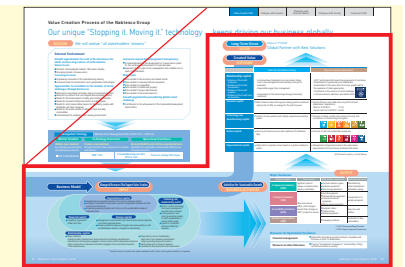
1. Risks related to the economy and market trends
2. Risks related to overseas business development
3. Risks related to large-scale disasters
4. Risks related to changes in the foreign exchange market
5. Risks related to procurement
6. Risks related to product quality
7. Risks related to competition
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
14. Risks related to the securing of human resources

◆ Growth opportunities provided by global social challenges

As a global business entity, the Nabtesco Group deems it essential to contribute to the United Nations' Sustainable Development Goals (SDGs). We are committed to fulfilling our corporate social responsibility as a precondition to achieve the sustainable growth of the Group.

Business Model

In our business activities, the Nabtesco Group inputs a range of managerial resources to supply products and services. We also work to provide our own Group and stakeholders with more value by implementing measures for financial management and the solution of ESG issues. In the following, we detail our business model for value creation with a focus on the flow from the input of major managerial resources to the output of major products and services and the outcome (created value).



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 external stakeholders. Relationship capital and the 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 trust of customers provides us with the basis for our business operations. 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 survive in the market. 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 nearly 50% of Nabtesco's shareholders (48.0% as of the end of December 2018). Moreover, the Group gets a high rating for our 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

◆ 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 has a sustainable supply chain, for which it is working closely with its 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 14 subsidiaries in Japan and 46 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 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 we boast 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 our 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 established stable supply systems for these businesses, and these systems make it difficult for new companies to enter the market.

Moreover, the Nabtesco Group identifies the core values that give us our competitive edge ("core competences"), such as the technologies and ideas incorporated into our products as well as our 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 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, compliance education and awareness-raising activities, which also provides the basis for the Group to develop human resources who can conduct business with a high sense of ethics and transparency as well as to create value for customers.

As of the end of December 2018, Nabtesco has 7,713 employees on a consolidated basis and 2,296 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, its 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 in-house company pursues profits by making decisions independently and attributing importance to capital efficiency and sustainable growth and has a prompt business execution system suitable for its business environment. For the management of the entire Group, the

Activities for Sustainable Growth

In a wide range of B-to-B businesses that support people's daily lives and social infrastructure, 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

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.

In the Component Solutions Segment, which comprises the precision reduction gear business and the hydraulic equipment business, we focus on OEM* production. These businesses provide social value by contributing to automation, labor saving and infrastructure improvement 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 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, contributes to higher safety and greater comfort in the domain of "Transportation of people and goods." We provide the maintenance, repair and overhaul (MRO) after-sales 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, contributes to higher safety and greater comfort in public spaces and to the creation of a barrier-free 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

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. The Nomination Committee, Remuneration Committee and Compliance Committee serve as advisory organizations to the Board of Directors.

In addition, we have the 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

(manufacture, sales, installation, maintenance and after-sales service) to integrate the production and marketing processes to generate more profit.

In the Manufacturing Solutions Segment, we mainly operate the packaging machine business, which contributes to food safety and labor saving at production facilities for food and others.

*OEM: Original Equipment Manufacturer

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 our 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.

OUTCOME

Created Value

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>Relations of trust with customers Customer bases founded on top-class market shares 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. The Nabtesco Group boasts top-class shares and adequate profitability in both 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>QCD performance that meets the requirements of customers 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>
<p>Relations of trust with shareholders Trust in the management team and high-scoring ESG evaluation 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 97% or higher, exceeding the average rate among listed companies in Japan, and thus proving strong trust in our management team. 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>	<p>Enhancement of partnership with stakeholders Ensuring management transparency and building a sustainable value creation process helps increase the opportunities for shareholders and investors to make investments on a long-term basis. 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>Relations of trust with suppliers Responsible supply chain management The Nabtesco Group is committed to fulfilling our corporate social responsibility across our supply chain based on fair, proper and transparent transactions with suppliers. Based on the relations of trust with our suppliers, whose understanding 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.</p>	<p>Enhancement of the value chain for mutual growth 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, the Group is working to increase our QCD performance across our supply chain. The enhancement of the value chain based on collaboration with suppliers will result in mutual growth and the expansion of trade opportunities.</p>
<p>Relations of trust with local communities Improvement of the brand image through community investment 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>Contribution in the fields of the environment, education and welfare 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. As a global corporate citizen, the Group will contribute to the solution of social challenges faced by local communities and to their long-term prosperity.</p>

Value for the Nabtesco Group

Value for external stakeholders

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>Strong balance sheet that supports growth investments Strong balance sheets support growth investments and the stable return of profit to employees and shareholders. The Nabtesco Group is fostering the improvement of capital efficiency and disciplined financial management, being rated A by the credit 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>Improvement of capital efficiency and stable return of profit The Nabtesco Group is committed to "ROE: 15%" in its medium-term management plan. For the fiscal year ended December 31, 2018, our actual ROE is 12.1% 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. 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 a payout ratio of 35% or over.</p>

Technology and Manufacturing Capital

Value for the Nabtesco Group	Value for external stakeholders
<p>Creation of new products and a highly competitive production system 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&A projects toward the creation of a new business foundation. 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 prevail in global competition.</p>	<p>Provision of safety, comfort and a sense of security For the Nabtesco Group, which is engaged in the manufacturing industry, safety means to manufacture products safely; manufacture safe products; and 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. The Nabtesco Group is also advanced particularly for climate change issues, which are global challenges. We are speeding up measures by setting long-term CO₂ emission reduction targets.</p>
<p>Related SDGs 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

Value for the Nabtesco Group	Value for external stakeholders
<p>Securing of human resources who implement The Nabtesco Way</p> <p>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.</p>	<p>Provision of safe and comfortable workplaces</p> <p>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 the Group is working to provide employees with safe and comfortable workplaces, which will in turn lead to the creation of sound and sustainable employment opportunities.</p>
<p>Related SDGs</p> <p>By enhancing its human capital, the Nabtesco Group can contribute to the attainment of the SDGs shown on the right.</p>	
	

Organizational capital

<p>Highly ethical corporate culture based on a global compliance system</p> <p>The Nabtesco Group conducts business globally, and compliance provides the basis for the Group to implement our 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.</p>	<p>Management transparency based on the autonomous improvement of its functions by the Board of Directors</p> <p>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 FY2018, 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.</p> <p>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.</p> <p>However, with respect to the composition of the Board of Directors, issues including the following were identified as challenges to be met on a medium- to long-term basis: the need to increase the rate of independent outside directors to at least one-third of the total number of directors and to increase the number of female directors. Also, concerning discussions at the Board of Directors, it is still necessary to secure enough time for the deliberation of important management issues such as growth strategies.</p> <p>Nabtesco will further enhance its corporate governance system and increase its corporate value by continuously enhancing the functionality of the Board of Directors based on the effectiveness evaluation results.</p>
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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 business as well as the opportunities for us to contribute to the solution of social challenges.

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 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

* ESG: Environmental, social and governance 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 toward the final year of the medium-term management plan (FY2020).

–Status in FY2020–

Global Partner with Best Solutions

In order to respond flexibly to changes in the business environment after the collapse of Lehman Brothers and to achieve further growth, in 2012 the Nabtesco Group formulated a long-term vision for FY2020.

We formulated this vision based on the belief that we could not achieve sustainable growth unless we enhanced our ability to make proposals to customers and continue providing society with new solutions (products, services and business models). In this long-term vision, we clearly state that we will create value for customers as their "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."

Message from the CEO

I will further exercise consistent leadership toward the fulfillment of our commitments.

Outlook for business performance: Aiming for record-high sales and profit

First, let me report on our business performance.

In FY2018, we increased sales in all business segments, with net sales amounting to ¥294.6 billion, up 4.3% year on year. We thereby set an all-time high for the second year in a row. As for profit, operating income decreased to ¥21.9 billion, down 25.7% year on year, due to factors including the impairment loss posted for the goodwill of OVALO, an overseas subsidiary.

For FY2019, we aim to achieve record sales

and profit, with net sales amounting to ¥313 billion (up 6.2% year on year) and operating income amounting to ¥30 billion (up 37.1% year on year).

As for the business outlook, while sales of precision reduction gears in the Component Solutions segment will be on par with FY2018, both sales and profit will increase in the hydraulic equipment business thanks to brisk demand for construction machinery in China, Southeast Asia and North America.

In the Transport Solutions segment, sales of railroad vehicle equipment are expected to drop due to decreased

demand in the Chinese high-speed railway sector.

However, for aircraft equipment, commercial vehicle equipment and marine vessel equipment, sales are anticipated to expand, and profit is also projected to increase because the impairment loss posted for FY2018 will exert no influence over our business performance.

In the Accessibility Solutions segment, sales will steadily increase in the building automatic door and platform door business in Japan, and profit will also increase due to the temporary expenses not incurred in FY2018.

Progress with management strategies: Successfully building a foundation for growth

We have steadily made progress and achievements in meeting the targets of the management strategies outlined in the medium-term management plan that got underway in FY2017. Let's take a look at key progress to date.

For "Market Creation," we established a regional headquarters in Europe to optimize resource distribution to local subsidiaries and improve their management efficiency. We have thus improved the system to expand our business in the European market. In China, we enhanced the local production system for precision reduction gears and hydraulic equipment in order to meet the rapidly

expanding local demand for these products.

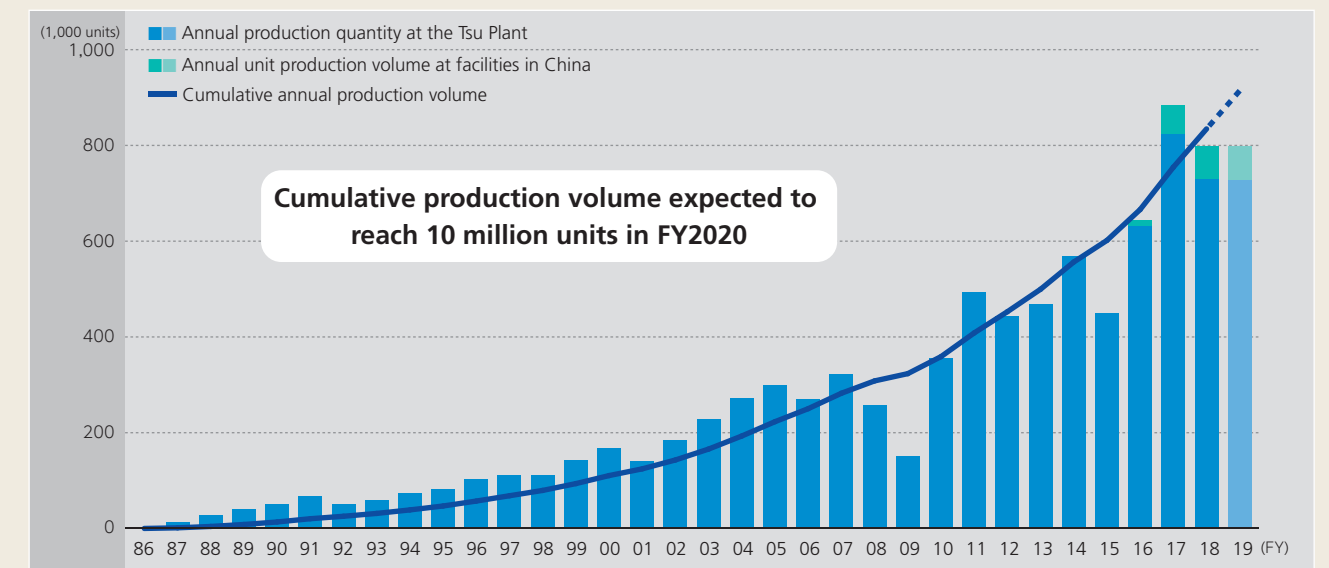
For "Technology Innovation," we launched next-generation products for precision reduction gears and automatic doors in FY2018. In the aircraft equipment business, we increased the shipment of FCASs* for new models, with new products thus accounting for a greater portion of total sales annually. We have also been developing new technologies for hydraulic equipment and packaging machines. In FY2018 we established a corporate venture capital (CVC) fund to collaborate with start-up companies, thereby speeding up our open innovation measures.

Furthermore, for "Operational Excellence," we are implementing measures including company-wide production reforms and the improvement of inventory operations. As for work style reform, we established the Business Transformation Division in FY2017, which has been taking the main lead in the identification and analysis of business processes. We also introduced systems for employees to work at a satellite office and at home.

FY2019 is a turning point for the four-year medium-term management plan and an important year in making certain that everything is in place toward the completion of the plan in FY2020. We will build a foundation for making even greater strides to ensure that we



Annual production of precision reduction gears



Message from the CEO

will reap the benefits in the final year of the plan.

* FCAS: Flight control actuation systems

Growth drivers: As the world's top supplier of precision reduction gears

We have received many questions when holding dialogues with investors regarding the growth drivers of the Nabtesco Group and outlook for precision reduction gears.

We have steadily increased the production volume of precision reduction gears. However, looking at the last three years (see graph on page 26), the quantity did not increase substantially in 2018 and 2019. Some might think, "Precision reduction gears might have levelled off in terms of the growth of demand." Nonetheless, precision reduction gears are still a growth driver for us as indicated in the the graph from a long-term viewpoint, focusing on a cycle of about 10 years.

Demand for precision reduction gears is linked with the needs for automated production equipment, such as industrial robots for labor saving. Sales of precision reduction gears have historically repeated a cycle of "jumping up" years followed by two- to three-year "stagnant growth" periods. For the period after 2009, when the collapse of Lehman Brothers had a great impact on our business, the production volume increased substantially in 2011, 2014 and 2017.

In FY2018, although production volume dropped year on year due to the U.S.-China trade friction and other factors, there are structural needs for automated production equipment for labor saving. We therefore expect that investment in automation, which has been restrained, will recover in and after the latter half of 2019.

Nabtesco is the world's top player in the precision reduction gear business and has made capital investment for the stable supply in anticipation of expanded demand. In 2017, when demand rapidly increased due to the collaborative efforts of employees and suppliers, we raised the operating rate of our production facilities to 140% relative to annual production capacity, thereby delivering products to customers on time. In 2018, we made investments in automation and the expansion of our production capacity on a continual basis, and as a result, we did not have to increase the operating rate beyond a reasonable level. We will continue to enhance our production capacity

while closely monitoring demand, along with launching new products on the market to remain competitive. Capital investment will cause an increase in depreciation and amortization costs, but we will be able to ensure sound profitability and realize increased profit by increasing production volume.

Red Queen's hypothesis: Accelerating evolution

In businesses other than the precision reduction gear business, we can also achieve growth although the timing and growth speed will differ by business and depend on market conditions for trends of final products. In business segments other than the Component Solutions segment, we are operating the maintenance, repair and overhaul (MRO) business, which we expect to expand. We have a medium-term competitive edge in our existing business portfolio, but to ensure growth on a long-term basis, we need to devise new measures.

I am engaged in the management of the company as CEO and sometimes think about the Red Queen's hypothesis, which is discussed in biology and other fields. It specifically means that only those that continue evolving can survive and those that stop evolving will become extinct. In fact, our customers and competitors in emerging economies are evolving on a daily basis. We also need to move forward and accelerate our evolution, for which we must increase the speed of our business.

To this end, it is essential to make effective use of external resources in addition to making organic progress by using internal resources. M&A and CVC entail some uncertainties, but we will continue to combine external resources into various new forms based on due diligence, thereby making innovations. In this process we need to disclose information to the public. In the CEO Dialogue, following this message, lessons learned from posting an impairment loss for OVALO were discussed. I would like to engage in more dialogue with stakeholders, keeping in mind the expression, "I know that I know nothing"

Commitments made in the medium-term management plan: Promoting business with a focus on the cost of capital

Now let me report the situation about the three commitments made in the medium-term management plan.

Regarding "Focus on solving Environmental, Social

Commitments

1) ROE: 15%

2) Consolidated payout ratio: 35% or over

3) Focus on solving ESG issues *ESG: Environmental, Social and Governance issues

and Governance (ESG) issues," the Nabtesco Group has been highly evaluated by external evaluators for its ESG measures. Recently, we have been included in the DJSI World Index for three consecutive years and have received the highest rating for our environmental measures from CDP in the three fields of climate change, water and supplier engagement. Moreover, the Government Pension Investment Fund (GPIF) has included Nabtesco in all the ESG indexes it adopted. We are thus highly evaluated externally.

For "E (Environmental)" aspects, we established a response team in line with the recommendations made by the TCFD*1 and are working to identify the financial influences given by climate change related risks and opportunities. As for "S (Social)," we are fostering work style reforms and enhancing human rights management. We have also formulated the Nabtesco Group Community Investment Policy and are implementing a range of measures to make more effective use of human resources.

For "G (Governance)", which drives E (Environmental) and S (Social) elements, we revised the Nabtesco Corporate Governance Basic Policy in 2018 and made a clear statement about autonomous efforts being undertaken.

One of the parts revised is the part on "cost of capital conscious business management." In FY2017, we adopted return on invested capital (ROIC) as a performance indicator with a focus on the cost of capital, along with the launch of the current medium-term management plan. We introduced the indicator to make efficient use of our business assets and advance appropriate financial strategies to build a system to continue recording ROIC that exceeds the weighted average cost of capital (WACC). For FY2018, ROIC was 8.0%, exceeding WACC, which is calculated to be around 6% under certain conditions.

WACC is used to calculate the recovery of capital investment and serves as a hurdle rate. For ROIC, we basically evaluate the performance of each business division in reference to the year-on-year ROIC improvement rate. We also use other indicators, such as R&D and environmental indicators to foster the creation of intellectual property and reduce CO₂ emissions, and by using these in combination with the ROIC indicator, we encourage each division to achieve growth in an autonomous manner. At the same time, we use ROIC as a

KPI*2 for performance-linked compensation to be paid to inside directors. We will continue to promote "cost of capital conscious business management" at the Board of Directors level.

In terms of achieving "ROE: 15%," the actual ROE dropped to 12.1% for FY2018. For FY2019, although we expect it to improve to 12.3%, this is still below the commitment level. Accordingly, we will continue making efficient use of our business assets by the expanded use of the ROIC tree and will pursue an increase in profit, while undertaking comprehensive management of our balance sheet to raise capital efficiency. By these measures we aim to achieve an ROE of 15% by the end of FY2020.

We are in a growth phase. We will maintain the soundness of our balance sheet while making investments steadily in projects that will help ensure the sustainability of our value creation. Moreover, in order to return profit to our shareholders, we are constantly working to increase the amount of dividends paid in proportion to the level of our growth. For 2018, the annual dividend per share totaled ¥73, up one yen year on year and the consolidated payout ratio came to 43%. Also for FY2019, we plan to pay the same amount of dividends per share to continue fulfilling the third commitment, "Consolidated payout ratio: 35% or over."

*1 TCFD: Task Force on Climate-Related Financial Disclosures

*2 KPI: Key performance indicator

My own commitment: Passing on the baton

In my opinion, members of an organization have their respective roles to play for the organization, and by doing so in a sincere manner, they can help the organization create value. My role is to lead the Board of Directors as its chairperson so that the Board can make optimal decisions for stakeholders as a whole and continue to provide them with value. I must also demonstrate leadership as the Chief Executive Officer of the company to help it fulfill its three commitments.

Former CEOs of the Nabtesco Group received the "baton" from their predecessors to help the Group achieve steady growth. As a "runner" who received the baton from the previous CEO, I will do my best to fulfill my role and meet the expectations of our stakeholders, for which I ask for your continued support.

CEO Dialogue



Representative Director,
President & CEO
Nabtesco Corporation

Katsuhiro
Teramoto

Chief Analyst
Asset Management Division
Mitsubishi UFJ Trust and Banking Corporation

Shinichiro
Hyogo

Director
Fundamental Analysis Citi Research
Citigroup Global Markets Japan Inc.

Graeme
McDonald

Outside Director
Nabtesco Corporation

Yutaka
Fujiwara

Honorific titles omitted in the following dialogue.

Fostering Dialogue to Increase Corporate Value

FY2019 is a turnaround point for Nabtesco's medium-term management plan for FY2020. CEO Katsuhiro Teramoto and Outside Director Yutaka Fujiwara met with two representatives of institutional investors to discuss the means to continuously enhance corporate value. (Meeting held in a conference room of Nabtesco at the end of March 2019)

We must be even more accountable for negative factors.

Teramoto: In the fiscal year ended December 31, 2018, we posted record high sales, but unfortunately experienced a decrease in profit. In each business segment we achieved our sales targets, while operating income came to ¥21.9 billion, down ¥7.6 billion or 25.7% year on year. This is mainly because of the impairment loss posted for the goodwill of OVALO of Germany, which we have acquired, and temporary expenses incurred in the automatic door business.

Hyogo: I can understand the reason for the increase in sales and decrease in profit, but I am unsatisfied with Nabtesco's level of accountability for this outcome.

McDonald: I, too, was honestly surprised at the posting of the impairment loss, which was revealed in the financial results disclosed for the second quarter at the end of July 2018. Although the Company made supplementary explanations about the loss at the briefing on the financial results held in August and in the press release dated

September 4, I cannot evaluate the explanations positively.

Teramoto: As a representative of Nabtesco, I take your criticism very seriously. Moreover, I would like to give more detailed explanations about the background for the impairment loss and about our future growth drivers.

Lessons learned from posting the impairment loss for OVALO's goodwill

Hyogo: I think Nabtesco will continue to implement M&A projects from time to time in order to foster swift management on a long-term basis. To do this, you need to fulfill your accountability obligations. As for the impairment loss, there is a gap between Nabtesco and investors in the evaluation of OVALO's growth potential. This gap is raising concerns among investors, who think "Nabtesco would invest in a company with impaired value."

McDonald: Can OVALO really achieve growth? Due to the lack of sufficient information, we cannot envision a success scenario for the company.

Teramoto: As for OVALO, we have little information that we



(Teramoto) Engaging in dialogue provides me with opportunities to recognize my own lack of knowledge and is indispensable to correct erroneous ideas and view myself and the company in an objective manner.

can publicly disclose at this moment, and I can understand that investors are doubtful about its potential. However, we have high expectations for OVALO, which provides us with a means to foster our business in the European market.

Fujiwara: Let me describe the background for the posting of the impairment loss in my capacity as an outside director. Initially, at the stage of due diligence for the acquisition, we were unable to fully understand the risk posed by the postponement of the project, which has resulted in the delayed posting of sales for the company. There are specifically two factors that have caused the impairment loss. Nabtesco checks for the impairment loss of its goodwill assets at the end of each fiscal term in line with the International Financial Reporting Standards (IFRS), which the Company adopted in fiscal 2017. In the process, we calculate return on investment based on the sales and profit plan made for each investment. In the case of OVALO, we revised the plan following the postponement of the project and made calculations conservatively, without thinking that we might be able to make up for the delay during the five-year calculation period. This is the first factor. Second, we set the pretax weighted average cost of capital (WACC) to be applied to the calculation of the return on investment at as high as 17.7%. OVALO has increased its creditworthiness by joining the Nabtesco Group, but the WACC is still high because of its large "size risk." I think we have set an appropriate rate for the WACC in the current situation in which auditing firms tend to be very conservative.

Teramoto: If we can disclose a bit more detailed information in our M&A process, we will be able to mitigate the concerns of investors. However, it is very difficult for us to disclose everything regarding M&A negotiations, which always entail uncertainties. Some question the appropriateness of the price calculation, but the initial acquisition price proposed by OVALO was much higher than expected and the company really did make a tremendous compromise for us.

Fujiwara: We could independently forge our own path to do business in Europe, which is an important market, but can we really get fast results if we do it from scratch? OVALO has been dealing directly with leading automakers such as Audi and has a clear plan for future projects. We therefore decided to acquire the company despite some lingering

(Fujiwara) I think it is important for us to patiently continue to engage in dialogue with our stakeholders in order to build mutual trust.

uncertainties.

Hyogo: I would never tell you, "Do not take any risks." However, the lack of sufficient information forces us as external evaluators of your company to take downside risks into consideration. In your future M&A projects, I would like you to consider how to ensure a sufficient level of information disclosure while maintaining confidentiality for your customers.

McDonald: The OVALO issue had a substantial impact on your stock price because investors were doubtful about the pricing process. The same thing applies to the corporate venture capital (CVC) that you established last year. Investors tend to think that you have a higher growth possibility in existing businesses.

Teramoto: I would like to make satisfactory reports to investors for OVALO and the CVC as soon as possible. We learned a lot of lessons. We will have more opportunities to engage in dialogue with investors to provide them with more information. In this integrated report, we will present a dialogue meeting with Emerald, with which we have concluded a strategic partnership agreement for the operation of the CVC. Accordingly, I would like to introduce how the Nabtesco Group will operate the CVC for creative "self-destruction."

Business portfolio with a focus on capital efficiency

Teramoto: Of the four existing business segments, we expect that the Component Solutions (CMP) segment will provide us with the greatest growth driver. The precision reduction gear business, in which we are continuing to see high growth, will slow down in this term, but still has high potential for medium- to long-term growth. Also, in the hydraulic equipment business, we expect a continued increase in sales.

Fujiwara: In other segments as well, we have products with high capital efficiency, such as marine vessel equipment. In the Transport Solutions and Accessibility Solutions segments, the maintenance, repair and overhaul (MRO) business contributes to higher profitability.

McDonald: You depend a great deal on the Chinese market in the CMP segment, which provides you with a long-term growth driver according to President Teramoto. The Chinese construction machinery market is at its peak now.





(Hyogo) We sometimes have to say harsh things, but it is essential for investors to have a dialogue with companies in order to understand their approach sincerely taken in terms of corporate value.

Could this market really serve as a long-term growth driver?

Hyogo: Furthermore, the size of your precision reduction gear business is large enough to produce substantial profit but might also be large enough to unbalance your business portfolio on a medium- to long-term basis. When making long-term investments, it is necessary to think about the risk that growth potential and profitability might be diminished by the maturing of the business and participation of more competitors. You need to foster your "metabolism" by expanding profit in other businesses and creating new businesses.

Fujiwara: We are strongly aware of the need as directors of the company. I have been in the position for six years, during which the composition of the business portfolio has greatly changed because the speed of growth differs by business. We do need to create new businesses and also foster M&A to keep a well-balanced portfolio.

McDonald: From the viewpoint of investors, you need to consider selling any businesses that are not relatively profitable. For example, the profitability of the automatic door business is rather low.

Teramoto: Let me talk about the issues one by one. First, in the hydraulic equipment business we acquired Hyst Corporation in 2015. Thanks to this, we were able to expand the lineup of our products in the business and are enhancing measures for hydraulic systems. Due to successful product bundling and cross-selling, we are also expanding deals with new customers. On the other hand, in the precision reduction gear business, we have some new competitors for smaller precision reduction gears, but we pay more attention to Chinese manufacturers of medium- to large-sized precision reduction gears. The manufacturers are striving to catch up with us, but there are still gaps between us and these competitors in terms of the precision and durability of products, and we will widen the gaps even further while steadily enhancing our productivity based on in-depth research on market demand.

As for the automatic door business, we experienced a great change following the acquisition of Gilgen in 2011. I believe we are going in the right direction by expanding and enhancing our sales networks in Japan and abroad. However, we have posted temporary expenses for the integration of business operations for the recent two to three years. The expenses are only temporary, and I believe we will soon be able to improve our profitability in the automatic door business.

Fujiwara: In order to create value that exceeds the capital cost, we have introduced "return on invested capital (ROIC)" as a new performance indicator under the current medium-term management plan. We have also included

ROIC in the criteria to identify the "challenging projects" for which we should strengthen monitoring.

Teramoto: We focus on ROIC while constantly working to increase the capital efficiency of our business portfolio as a matter of course. For example, in the mature market of marine vessel equipment, we are aiming to achieve growth in the fields with high capital efficiency and in the MRO business.

McDonald: How will you grow the MRO business?

Teramoto: The MRO business has a cycle, which differs by business segment. We need to make MRO-related proposals to customers in a timely manner for the products that we supplied to the customers in the past. We have promoted the MRO business for marine vessel equipment ahead of other products and will expand the business scope by fostering the "visualization" of the items that we supplied to customers and proactively making proposals for preventive maintenance based on the use of the Internet of Things (IoT). We need to pursue organic growth in existing business fields while creating added value. It is, however, difficult to configure components into systems independently. We therefore pay attention to the acquisition of companies that have technologies and human resources that we do not have and to the establishment of CVC funds.

Nabtesco's financial management

Fujiwara: What do you think about Nabtesco's financial management? I am also interested in investor considerations in terms of the time frame.

Hyogo: We often ask companies what they want to be in 10 years' time regardless of the industry to which they belong, because 10 years is the longest possible period for formulating their management vision in consideration of possible economic changes and innovations. With regard to financial management, 10 years is too long, and so we evaluate free cash flow and return to shareholders for a shorter period of about three to five years.

Fujiwara: What should we focus on when talking about our company in 10 years' time?

Hyogo: You need to set key performance indicators (KPIs) according to the primary factors that will increase your corporate value. Nabtesco could achieve sustainable growth and justify the selection and consolidation of its businesses based on return on investment (ROE) of 15% or higher. In the funds I manage, many of the stocks are held for seven years or longer, and to do this with confidence, we need to understand the business philosophy of the companies. I therefore want to continue to sincerely engage in dialogue with companies to share future visions with them.

McDonald: In Japan's machinery sector, we can easily spot conglomerates that are facing difficulties in terms of cash flow. In that sector, Nabtesco engages in many businesses with short cycles and has a high cash turnover ratio. It thus has a robust financial system with a high ROE, and so investors have great expectations for the company.

(McDonald) Foreign investors attribute special importance to engagement or commitment, which should be fulfilled.



Hyogo: Despite its large market shares and high profitability, the stock price shows volatility, which might be because of a temporary rise in the capital cost. If investors strongly recognize the feasibility and sustainability of the ROE target, I think that the stock valuation will further rise.

McDonald: I would like you to clarify your policies about Harmonic Drive Systems, in which you have a roughly 20% stake. Many foreign investors pay a great deal attention to such policies.

Fujiwara: With the company we established a joint venture in the United States, and I believe that continuing the partnership will help Nabtesco increase our corporate value. As for so-called cross-shareholdings, we have been confirming the benefits and capital cost at a Board of Directors meeting annually. If we find that this is not reasonable, we will make appropriate responses, including selling the stock.

Solution of ESG issues and dialogue with investors

Teramoto: What is your evaluation of our environmental, social and governance (ESG) efforts?

Hyogo: Inside directors serve as the chairpersons of the nomination and remuneration committees of Nabtesco, and I think it might be better for the sound management of the committees if you have a standard that outside directors should assume the positions. What do you think about the effectiveness of the committees?

Teramoto: I can understand the importance of establishing such a standard, but the majority of the members of each of the two committees are outside directors and so there are actually no issues. Structured as a "Company with Board of Auditors," Nabtesco has six independent members including outside Audit & Supervisory Board Member. What do you think about this?

Hyogo: The difference between a "Company with Audit and Supervisory Committee" and a "Company with Board of Auditors" lies in the granting/non-granting of voting rights to auditors at Board of Directors meetings. A "Company with Board of Auditors" is unique to Japan and is more "defense-oriented," which might be a good point.

Fujiwara: The CEO asked you the question also because both outside directors and outside auditors proactively express their opinions at Nabtesco's Board of Directors meetings. I believe this helps to increase the effectiveness of the Board, while it is also important to have a standard to ensure transparency.

Hyogo: Nabtesco really excels in the environmental field as well as financial structure. You have received the highest evaluation from CDP in three fields, which is no doubt owing to your concerted efforts. High evaluation in the field of ESG could help you differentiate your company from competitors and raise customer awareness, which will also bring more business opportunities to the company. To this end I would like you to incorporate the viewpoint of ESG into overall business management.

McDonald: Incorporating ESG factors will help the com-

pany reduce risks and find more opportunities, which I hope will lead to business performance.

Teramoto: In the future, ESG-related evaluation will be reflected in the basic evaluation to be made for the determination of business terms and conditions, and then we will be able to link ESG issues more easily with our business performance. Toward this, we must make sufficient efforts now.

Fujiwara: Nabtesco incorporates environmental contribution ("E") into set KPIs for remuneration of senior management and directors. If we also incorporate the viewpoint of "S" into the KPIs, what specific indicators are considered?

Hyogo: How about using the results of employee satisfaction surveys as an indicator when making incentive plans for senior management and directors?

Teramoto: Well, we have already incorporated the viewpoint of ESG into the Action Guidelines, which comprise "The Nabtesco Way" along with the Corporate Philosophy. We are now fostering work style reforms and introducing a system to pay "smart bonuses" to employees by using the money saved by increasing productivity and reducing overtime work. We are aiming to launch a system that makes all employees happy.

Hyogo: You can implement new initiatives more effectively by fostering them while checking the level of employees' satisfaction. This will also help you understand the ideas of employees, which differ by generation.

Fujiwara: Now, finally, please share your ideas about "engaging in dialogue." I think it is important for us to patiently continue to have a dialogue with our stakeholders in order to build mutual trust.

McDonald: Foreign investors attribute special importance to engagement or commitment, which should be fulfilled, including commitment regarding the outlook for performance.

Hyogo: It is essential for investors to engage in dialogue with companies in order to understand their approach sincerely taken in terms of corporate value. Because we are investing money on behalf of our clients, we sometimes have to say harsh things, but we would like to continue having a dialogue with your company so that we can expect mutual growth based on respect for each other's standpoint.

Teramoto: I appreciate this, as engaging in dialogue provides me with opportunities to recognize my own lack of knowledge and is indispensable to correct erroneous ideas and view myself and the company in an objective manner. By continuing dialogue, I believe we can deepen mutual understanding and I look forward to receiving your valued advice on an ongoing basis.

Financial Information

Operating Results

◆ Operating Results for the Fiscal Year Ended December 31, 2018

During the fiscal year ended December 31, 2018, the global economy was on a mild recovery trend as in the previous term. However, concerns about the future economy arose toward the end of the term due to expanding trade frictions between the United States and China. Despite some tendency toward stagnation, the Japanese economy witnessed a mild recovery as a whole, as personal consumption recovered with steadily improving employment. Accordingly, companies were making robust earnings and maintained a high level of capital expenditure.

Under these circumstances, the consolidated operating results of the Group for the period under review recorded net sales of ¥294.6 billion, up 4.3% year on year, reflecting the robust demand for construction machinery in China and emerging countries, strong demand for products for the subway in China and the favorable automatic door business mainly in Japan. Operating income decreased 25.7% year on year to ¥21.9 billion as a result of posting impairment loss on goodwill related to a consolidated subsidiary, OVALO GmbH. Income before tax was ¥30.0 billion, down 14.2% year on year, due to an increase in equity in earnings of affiliates. Net income attributable to owners of the parent amounted to ¥21.0 billion, down 16.4% year on year.

The Group has applied voluntarily International

Financial Reporting Standards (IFRS) since the fiscal year ended December 31, 2017 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.

◆ Analysis of Factors Behind Year-on-Year Changes in Operating Income (Actual Results) for the Fiscal Year Ended December 31, 2018

Operating income for the fiscal year ended December 31, 2018 decreased ¥7.6 billion from the previous fiscal year to ¥21.9 billion. Key contributing positive factors included a ¥2.2 billion increase due to an increase in sales and a ¥0.4 billion increase due to improvement of productivity, etc. However, operating income decreased as a whole due to negative factors including a ¥1.0 billion increase in depreciation and amortization, a ¥2.5 billion increase in selling, general and administrative expenses, etc., and impairment loss, etc., of ¥6.7 billion posted for OVALO in the Transport Solutions (TRS) segment.

Higher profits due to an increase in sales were primarily attributable to expanded sales of hydraulic equipment in the Component Solutions (CMP) segment, which was driven by the continued strong demand for construction machinery in the Chinese and emerging markets, while sales of precision reduction gears decreased in the segment due in part to the postponement of capital investment for automobiles.

Sales increased in the Transport Solutions (TRS) segment, being driven by brisk sales in the major four sectors (railroad vehicle equipment, aircraft equipment, commercial vehicle equipment and marine vessel equipment), while operating income decreased due to an operating loss and impairment loss posted for OVALO. Also, sales increased in the Accessibility Solutions (ACB) segment, reflecting strong sales of platform doors, but operating income decreased due to the delayed installation of building doors in Japan and temporary expenses incurred for the improvement of sales bases.

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

Meanwhile, primary contributing negative factors behind a decrease in operating income include an increase in depreciation and amortization and an increase in selling, general and administrative expenses. These factors are caused by capital expenditure made in response to the expansion of demand.

◆ Projections for the Consolidated Fiscal Year Ending December 31, 2019

With the world economy forecast to remain on a recovery trend during the fiscal year ending December 31, 2019 despite a range of concerns, the Group expects demand for construction machinery and the automatic door business to continue to be favorable. The Group also expects

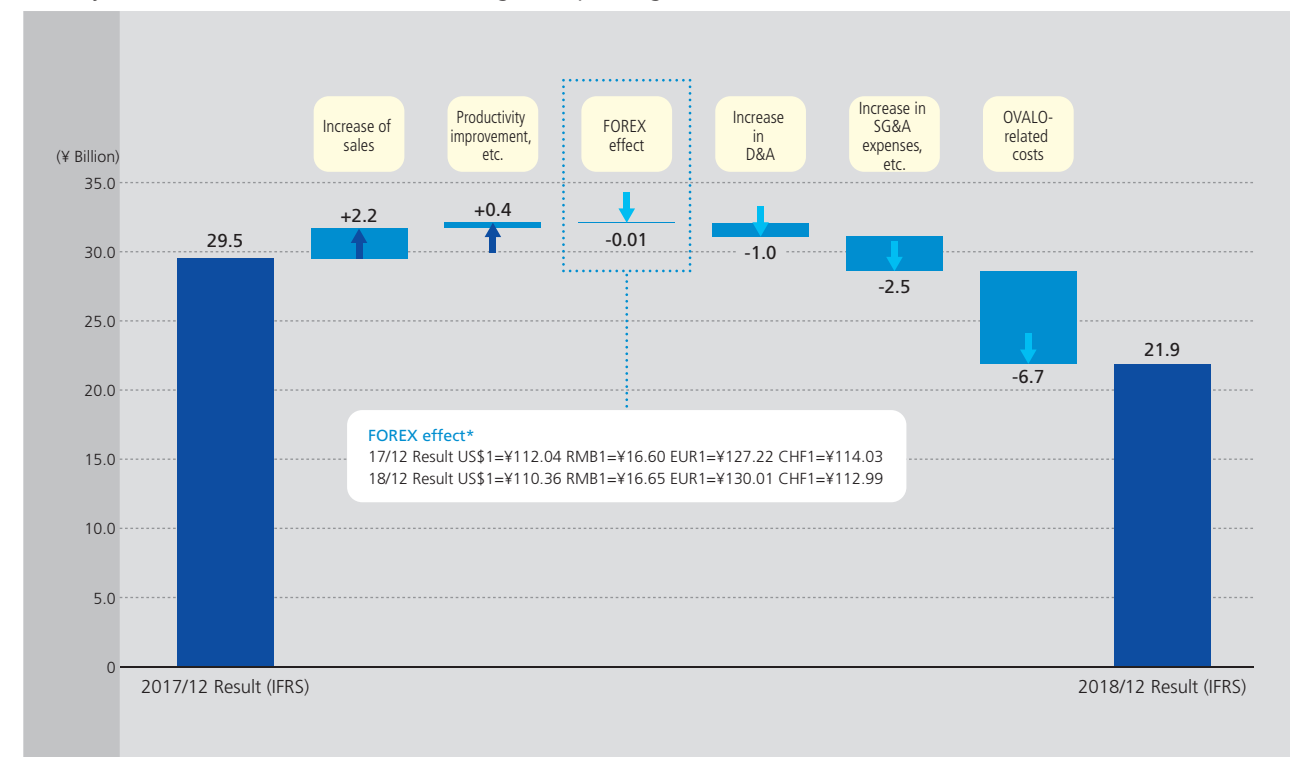
demand for civil aircraft to remain strong, and forecasts net sales and operating income to reach ¥313.0 billion (up 6.2% year on year) and ¥30.0 billion (up 37.1% year on year), respectively, for the consolidated fiscal year ending December 31, 2019.

◆ Analysis for Factors behind Year-on-Year Changes in Operating Income (Plan) for the Fiscal Year Ending December 31, 2019

The Group expects operating income for the fiscal year ending December 31, 2019 to reach ¥30.0 billion, an increase of ¥8.1 billion year on year. The Group forecasts key contributing positive factors including a ¥6.2 billion increase due to an increase in sales, a ¥1.0 billion increase due to improvement of productivity, etc., and a ¥5.2 billion increase resulting from the elimination of the influence caused by the impairment loss posted for OVALO.

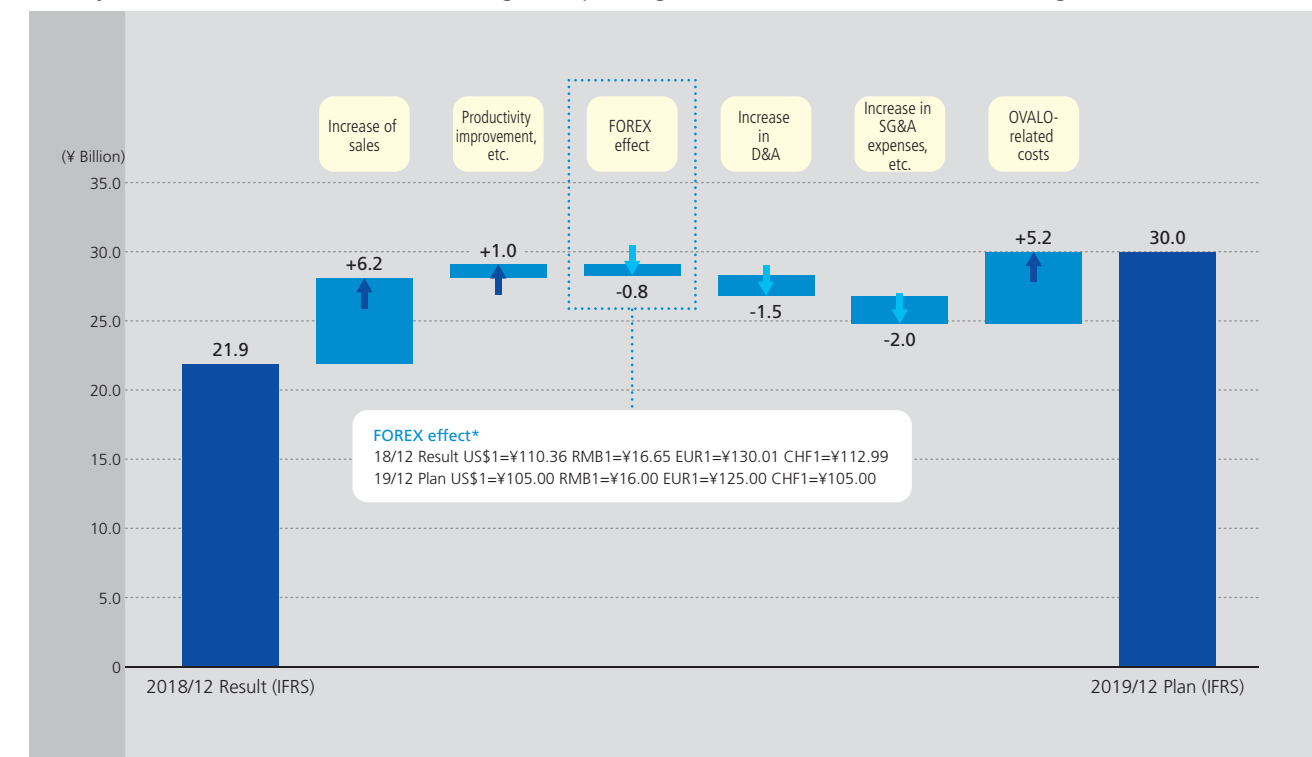
In terms of drivers for higher profits due to an increase in sales, the Group expects growth in each segment. In the Component Solutions (CMP) segment, sales of hydraulic equipment are expected to increase, being backed by brisk demand for construction machinery, while in the Transport Solutions (TRS) segment, sales will increase for aircraft equipment, commercial vehicle equipment and marine vessel equipment. In the Accessibility Solutions (ACB) segment, the automatic door market is expected to remain robust both in Japan and overseas. Furthermore, the Group expects an increase in demand for packaging machines for

● Analysis of Factors behind Year-on-Year Changes in Operating Income for the Fiscal Year Ended 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\$): ¥47 million, (RMB): ¥812 million, (EUR): minimal, (CHF): minimal

● Analysis of Factors behind Year-on-Year Changes in Operating Income (Plan) for the Fiscal Year Ending December 31, 2019



* FOREX sensitivity in O.P. (This represents the effect to be expected on operating profit if the exchange rate fluctuates by one yen): (US\$): ¥48 million, (RMB): ¥863 million, (EUR): minimal, (CHF): minimal

Financial Information

the food industry globally in the Manufacturing Solutions (MFR) segment.

Meanwhile, primary contributing negative factors behind a decrease in operating income will be a ¥0.8 billion decrease due to foreign exchange fluctuations, a ¥1.5 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, etc.

As for foreign exchange fluctuations, the yen is expected to rise due to trade frictions between the United States and China.

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 line with the growth of demand for industrial robots in the precision reduction gear business.

Selling, general and administrative expenses, etc., 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 (Fiscal year ended December 31, 2018)

◆ Assets

Total assets as of December 31, 2018 were ¥328.6 billion, an increase of ¥27.0 billion from December 31, 2017, consisting of ¥179.1 billion in current assets and ¥149.4 billion in non-current assets.

Key contributing positive factors included increases of ¥9.9 billion in cash and cash equivalents, ¥3.3 billion in inventories, ¥9.9 billion in property, plant and equipment and ¥9.5 billion in investments accounted for by the equity method. The key contributing negative factor was a decrease of ¥5.8 billion in goodwill.

◆ Liabilities

Total liabilities as of December 31, 2018 were ¥139.3 billion, an increase of ¥14.8 billion from December 31, 2017, reflecting ¥112.6 billion in current liabilities and ¥26.8 billion in non-current liabilities. The main contributing positive factors were a rise of ¥17.6 billion in bonds and borrowings. The main contributing negative factor was a decrease of ¥1.1 billion in income taxes payable.

◆ Equity

Total equity as of December 31, 2018 stood at ¥189.3 billion. Equity attributable to owners of the parent was ¥178.7 billion, an increase of ¥11.2 billion from December 31, 2017. The key contributing positive factor was the increase in retained earnings due to net income attributable to owners of the parent of ¥21.0 billion, while the main contributing negative factor was the decrease of ¥9.2 billion in retained earnings due to dividends paid.

As a result, the ratio of equity attributable to owners of the parent was 54.4%, and equity attributable to owners of

the parent per share was ¥1,438.64.

Status of Cash Flows (Fiscal year ended December 31, 2018)

Cash and cash equivalents (hereinafter, "capital") as of December 31, 2018 stood at ¥54.0 billion, an increase of ¥9.9 billion from December 31, 2017, reflecting ¥24.2 billion in capital generated from operating activities, which was mainly used for capital expenditure and dividend payments.

◆ Cash flows from operating activities

Net cash generated from operating activities for the fiscal year ended December 31, 2018 totaled ¥24.2 billion. Principal positive factors included increases in net income and depreciation and amortization. Meanwhile, the main negative factors included an increase in inventories and the payment of income taxes.

◆ Cash flows from investing activities

Net cash used in investing activities for the fiscal year ended December 31, 2018 amounted to ¥21.8 billion, mainly due to the purchase of property, plant and equipment.

◆ Cash flows from financing activities

Net cash provided by financing activities for the fiscal year ended December 31, 2018 totaled ¥8.4 billion. The main positive factor was proceeds from borrowings, while the main negative factor was dividends paid.

Status of Capital Expenditure, R&D and Depreciation and Amortization (Results for the fiscal year ended December 31, 2018 and plan for the fiscal year ending December 31, 2019)

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 a 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, 2018 was ¥20.3 billion. The main purposes of capital expenditure were for increased production 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, 2019 will be ¥30.6 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 that can respond to changes in demand while making aggressive investments aimed at enhancing the productivity. Moreover, we will invest in production equipment for mass production at OVALO's facilities.

R&D costs for the fiscal year ended December 31, 2018 amounted to ¥10.2 billion. The Group mainly developed and launched energy-saving and environment-related products in the Component Solutions (CMP) and Transport Solutions (TRS) segments. The Group will continue to focus on the development of system 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 ended December 31, 2018 stood at ¥10.0 billion. Depreciation and amortization increased by ¥1.0 billion from the fiscal year ended December 31, 2017.

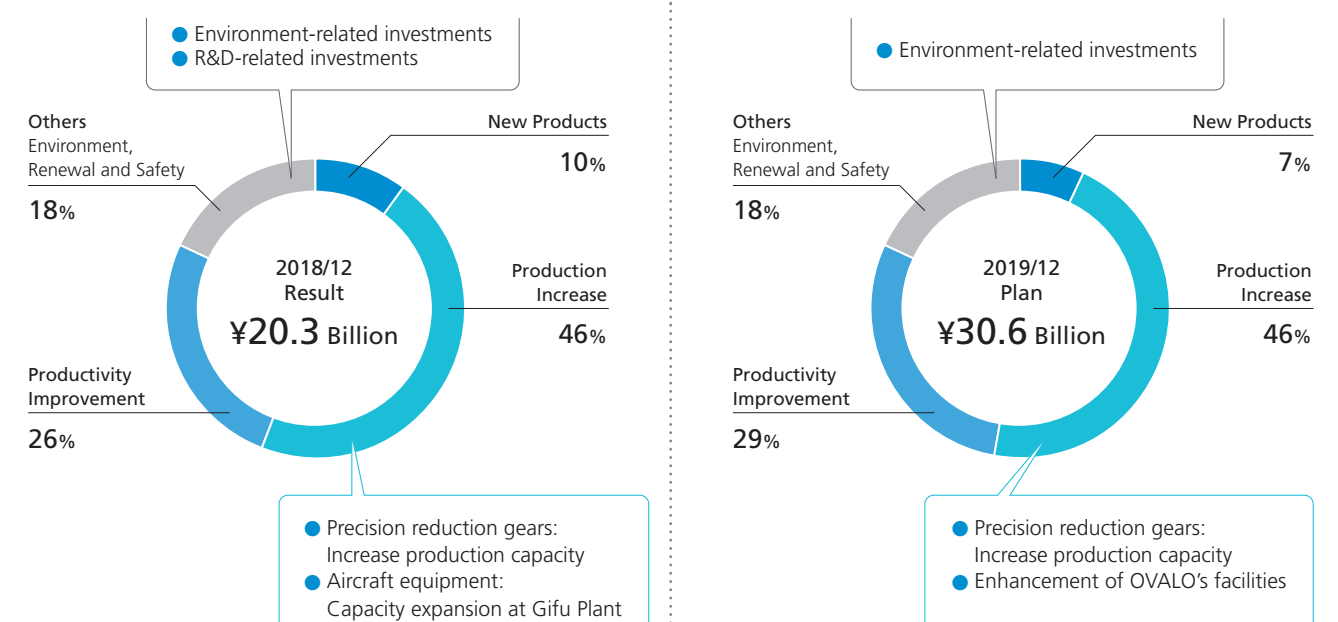
● Status of Capital Expenditure, R&D Costs and Depreciation and Amortization

(¥ Billion)

	2017/12 Result	2018/12 Result	2019/12 Plan	Medium-term plan for 2017 to 2020
Capital Expenditure	15.2	20.3	30.6	77.0
R&D Costs	8.7	10.2	10.6	40.0
Depreciation and Amortization	9.0	10.0	13.4*	—

*Includes the right-of-use assets. (IFRS 16 Leases is applied.)

● Breakdown in Capital Expenditure (By Usage)



Financial Information

Operating Results by Business Segment

(Forecasts for operating results for the fiscal year ending December 31, 2019)

Component Solutions (CMP)

Net sales and operating income in this segment for the fiscal year ending December 31, 2019 are expected to amount to ¥125.8 billion (up 5.5 % year on year) and ¥21.6 billion (up 6.9 % year on year), respectively.

Sales of precision reduction gears are expected to be sluggish during the first half of 2019 reflecting the downturn in the investment mindset for automobiles and semi-conductors on the back of U.S.-China trade tensions. On the other hand, in the second half of the year we expect, although there are many uncertainties, demand for products for robots and manufacturing equipment to recover as automobiles and semiconductors pick up, and we expect full-year sales to reach the same level as the previous year.

We expect sales of hydraulic equipment to increase, driven by robust demand for construction machinery due to investment in infrastructure in different countries, although there is uncertainty in the outlook of the global economy.

Transport Solutions (TRS)

Net sales and operating income in this segment for the year ending December 31, 2019 are expected to reach ¥89.6 billion (up 9.5% year on year) and ¥8.1 billion (up 303.5% year on year), respectively.

Sales of railroad vehicle equipment are expected to see a slight decrease as the domestic market enters an off-season in vehicle production, although sales of products for the subway in China are expected to increase.

Sales of aircraft equipment are expected to increase following the start of mass production of B777X for civil aircraft. Sales of commercial vehicle equipment are also expected to increase owing to robust demand in the Japanese market as well as strong sales in Southeast Asia. Marine vessel equipment is expected to see an increase in sales due to a mild recovery in the marine transport and shipbuilding markets.

Accessibility Solutions (ACB)

Net sales and operating income in this segment for the fiscal year ending December 31, 2019 are expected to amount to ¥77.4 billion (up 1.9% year on year) and ¥6.5 billion (up 40.5% year on year), respectively.

Sales of automatic doors for buildings for the Japanese market and platform doors are expected to increase.

Manufacturing Solutions (MFR)

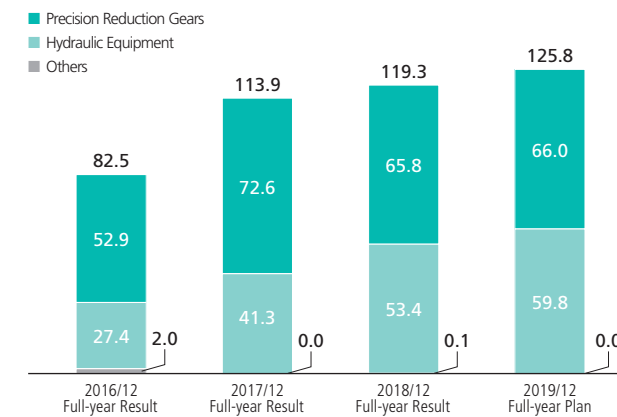
Net sales and operating income in this segment for the fiscal year ending December 31, 2019 are expected to reach ¥20.2 billion (up 15.3% year on year) and ¥2.7 billion (up 9.8% year on year), respectively.

Packaging machines are expected to see an increase in sales due to continued strong demand in Japan.

Sales by Business Segment (IFRS)

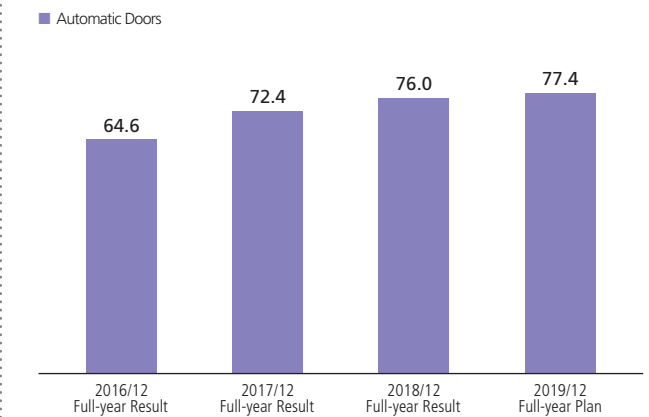
Component Solutions (CMP)

(¥ Billion)



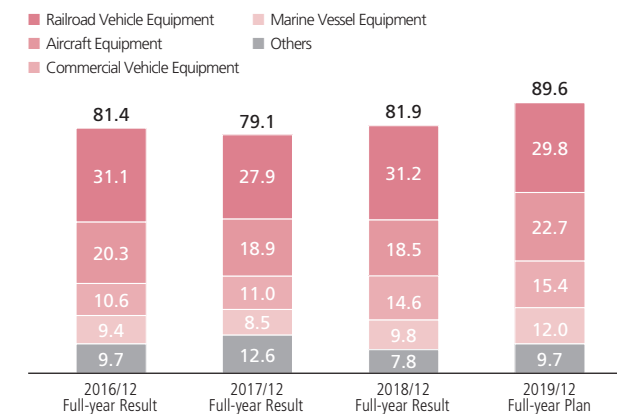
Accessibility Solutions (ACB)

(¥ Billion)



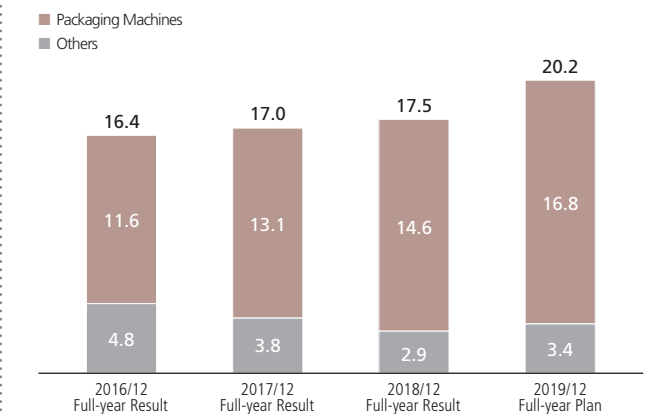
Transport Solutions (TRS)

(¥ Billion)

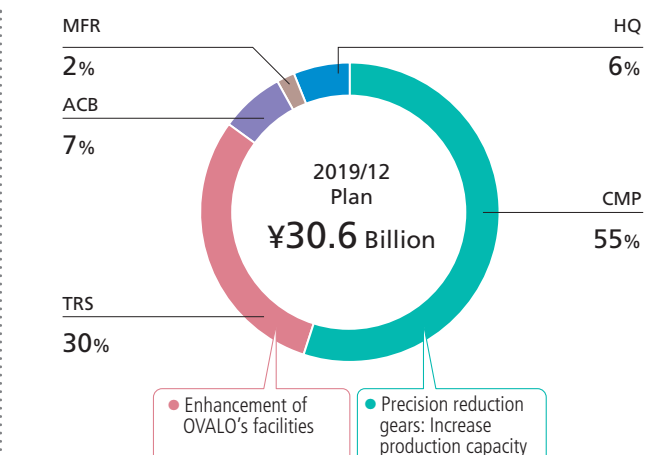
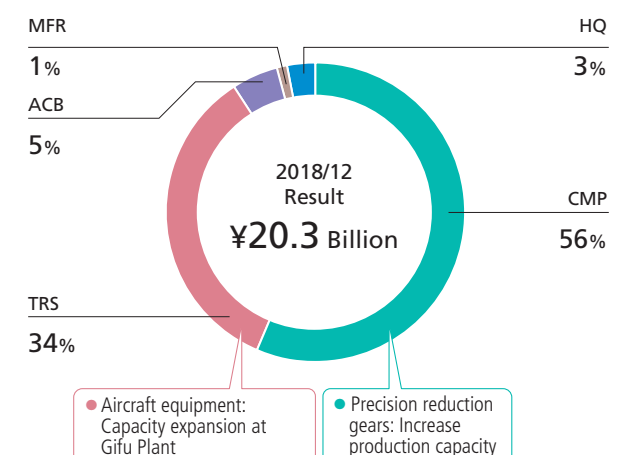


Manufacturing Solutions (MFR)

(¥ Billion)



Breakdown in Capital Expenditure (By Business Segment)



Financial Information

Measures Taken under the Medium-Term Management Plan

Commitments: Results in FY2018

- **ROE 15% or over** → 12.1%
Bring ROE to 15% level in 2020
- **Consolidated payout ratio: 35% or over** → 43.0%
Continue to maintain the level of 35% or over
- **Focus on solving ESG issues**
 - Sustainable enhancement of environmental management
 - Acceleration of initiatives for human resources management
 - Revision of the Nabtesco Corporate Governance Basic Policy

◆ 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, 2018, our ROE came to 12.1% 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 (CMP) segment, we will work to improve profitability by making more efficient use of 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 been enjoyed 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* business, which helps us mitigate the influence exerted by changes in the business environment. In the Transport Solutions (TRS) segment, we are receiving new orders for railroad vehicle equipment to be used in subway cars, while 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 the 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 we are making necessary preparations. 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 return on invested capital (ROIC) as an integral management indicator with broader awareness on cost of capital to improve profitability and raise capital efficiency across the Group. By adding the "ROIC improvement ratio" as a performance evaluation incentive for each business segment and combining it with other indicators such as the "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.

* MRO: Maintenance, repair and overhaul (after-sales service)

◆ Promoting ROIC improvement in manufacturing bases

As a measure to improve ROIC, we will use the "ROIC tree" and foster 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 commitment, 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, 2018 came to ¥73 per share, a year-on-year increase of ¥1, and the consolidated payout ratio was 43.0%. Also for the fiscal year ending December 31, 2019, we plan to pay a dividend of ¥73 per share.

Nabtesco has generated stable operating cash flows (exceeding about ¥20 billion per year on average for the past five years), utilizing them for growth investment and shareholder returns. As for the balance sheet, we will keep the equity ratio at around 50% to continue receiving a credit rating of A while having enough ability to procure debt. 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 launched new facilities for actuators in 2018. As

for 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.

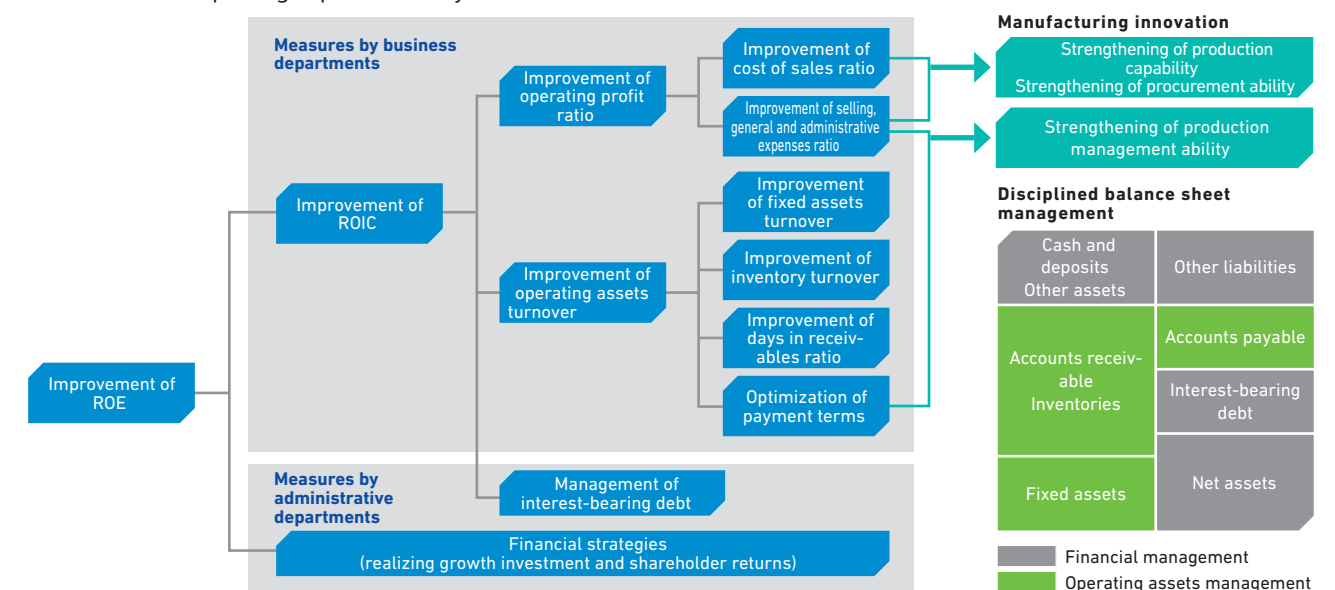
For return of profit to shareholders, we have gradually increased cash dividends in line with profit growth. During the fiscal year ended December 31, 2015, we repurchased treasury stock amounting to about ¥10.0 billion and subsequently cancelled all of the acquired shares. We will continue to pursue 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.

For the solution of ESG issues, we are likewise spending steadily to implement necessary measures. For the environment, we invested in environment-friendly equipment as in the previous term. We will increase the FY2019 budget for investments in environment-friendly equipment to about 1.7 times that of the previous fiscal year to continue introducing solar power generation systems. Moreover, we are working to identify the financial influence of climate change-related risks and opportunities based on the recommendations made by the TCFD*. For society, we established the Nabtesco Group Community Investment Policy in addition to promoting work style reforms and enhancing the management of human rights. We are thus implementing a range of measures for the empowerment of our workforce. For governance, we revised the Nabtesco Corporate Governance Basic Policy for higher management transparency.

* TCFD: Task Force on Climate-related Financial Disclosures

For details about "solving ESG issues," please see page 69 and subsequent pages.

● Measures for Improving Capital Efficiency



Financial Information

(¥ Million)

Major Financial Indicators	2009/3	2010/3	2011/3	2012/3	2013/3	2014/3	2015/3	2015/12*5	2016/12*6	2017/12	2018/12
Net sales	158,171	126,249	169,304	198,527	179,543	202,292	219,657	187,000	244,968	282,422	294,626
Cost of sales	124,041	97,817	127,712	148,184	134,859	148,321	158,693	136,576	175,508	201,982	215,043
Selling, general and administrative expenses (SG&A)	22,118	20,467	21,380	27,484	29,670	33,877	37,347	35,129	44,294	51,285	53,184
Operating profit	12,012	7,965	20,212	22,859	15,013	20,092	23,615	15,294	25,982	29,468	21,889
Profit before tax	7,932	8,012	21,954	24,848	18,997	23,522	27,026	15,358	26,779	34,907	29,962
Income taxes expense	2,778	3,272	7,485	8,874	5,598	8,140	9,254	5,731	7,843	8,338	6,997
Non-controlling interests*1	728	723	1,081	1,217	129	404	25	(1,432)	330	1,423	1,935
Net income*2	4,426	4,017	13,388	14,757	13,269	14,978	17,746	11,059	18,606	25,146	21,029
At year-end											
Current assets	84,306	89,893	119,003	123,929	112,048	134,159	139,321	128,575	143,792	165,695	179,124
Property, plant and equipment	45,207	44,102	44,442	51,509	54,475	55,225	56,877	55,916	63,155	70,700	80,573
Total assets	144,685	149,481	180,729	208,093	203,056	233,984	245,992	233,381	256,973	301,557	328,568
Current liabilities	41,209	43,611	74,892	70,897	52,322	73,161	64,830	73,000	74,876	96,934	112,558
Interest-bearing debt	19,160	19,920	20,158	31,695	26,389	26,203	16,659	15,332	16,949	27,720	45,310
Equity	81,716	85,168	96,531	107,467	120,857	139,471	158,664	148,924	155,904	177,002	189,255
Equity capital*3	76,476	79,404	90,241	99,092	114,038	131,043	149,862	142,068	147,929	167,537	178,702
At year-end											
Cash flows from operating activities	14,055	14,892	27,997	15,104	12,952	27,597	19,949	8,746	27,730	23,071	24,165
Cash flows from investing activities	(9,329)	(6,156)	(4,420)	(27,464)	(13,693)	(8,064)	(7,880)	(4,886)	(14,989)	(20,186)	(21,823)
Cash flows from financing activities	(6,189)	(684)	(1,850)	6,036	(10,090)	(8,175)	(15,888)	(19,090)	(4,808)	(950)	8,396
Per share of common stock (¥)											
Net income per share*4	34.82	31.70	105.91	116.74	104.57	117.95	140.24	88.85	150.64	203.85	169.65
Net assets per share	601.75	628.29	713.77	784.12	894.86	1,035.68	1,184.17	1,150.41	1,193.79	1,355.72	1,438.68
Cash dividends per share	13.00	9.00	25.00	34.00	34.00	38.00	44.00	44.00	50.00	72.00	73.00
Major management indicators (%)											
Operating income margin	7.6	6.3	11.9	11.5	8.4	9.9	10.8	8.2	10.6	10.4	7.4
Return on assets (ROA)	2.9	2.7	8.1	7.6	6.5	6.9	7.4	4.6	7.6	9.0	6.7
Return on equity (ROE)	5.8	5.2	15.8	15.6	12.5	12.2	12.6	7.6	13.0	15.9	12.1
Payout ratio	37.3	28.4	23.6	29.1	32.5	32.2	31.4	49.5	35.1	35.3	43.0
Equity ratio	52.9	53.1	49.9	47.6	56.2	56.0	60.9	60.9	57.6	55.6	54.4

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

*2 Net income attributable to shareholders of the parent company

*3 Equity attributable to owners of the parent

*4 Total basic earnings per share

*5 Due to the change of the accounting closing date of fiscal year since FY2015/12, the results for FY2015/12 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.

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

Financial Information

	(¥ Million)	
	As of December 31, 2017	As of December 31, 2018
Consolidated Balance Sheets		
Assets		
Current assets		
Cash and cash equivalents	44,121	54,039
Trade receivables	76,874	74,952
Contract assets	—	1,650
Other receivables	1,216	1,643
Inventories	40,298	43,592
Other financial assets	190	280
Other current assets	2,996	2,969
Total current assets	165,695	179,124
Non-current assets		
Property, plant and equipment	70,700	80,573
Intangible assets	5,850	5,076
Goodwill	21,310	15,512
Investment property	5,404	5,382
Investments accounted for using the equity method	20,184	29,641
Other financial assets	8,547	9,558
Deferred tax assets	1,633	2,012
Other non-current assets	2,236	1,690
Total non-current assets	135,863	149,443
Total assets	301,557	328,568
Liabilities and equity		
Liabilities		
Current liabilities		
Trade payables	57,148	50,297
Contract liabilities	—	5,232
Bonds and borrowings	16,365	34,067
Other payables	12,492	11,809
Income taxes payable	4,550	3,479
Provisions	732	1,625
Other financial liabilities	7	—
Other current liabilities	5,641	6,048
Total current liabilities	96,934	112,558
Non-current liabilities		
Bonds and borrowings	11,355	11,243
Net defined benefit liability	9,339	9,142
Deferred tax liabilities	4,801	4,881
Other non-current liabilities	2,127	1,490
Total non-current liabilities	27,621	26,755
Total liabilities	124,556	139,313
Equity		
Share capital	10,000	10,000
Share premium	14,956	15,096
Retained earnings	143,349	155,133
Treasury shares	(3,600)	(2,903)
Other components of equity	2,831	1,377
Equity attributable to owners of the parent	167,537	178,702
Non-controlling interests	9,465	10,553
Total equity	177,002	189,255
Total liabilities and equity	301,557	328,568

* Adopted IFRS from the fiscal year ended December 31, 2017

	(¥ Million)	
	FY2017	FY2018
Consolidated Statements of Profit or Loss		
Net sales	282,422	294,626
Cost of sales	(201,982)	(215,043)
Gross profit	80,440	79,583
Other income	1,351	1,582
Selling, general and administrative expenses	(51,285)	(53,184)
Other expenses	(1,038)	(6,093)
Operating profit	29,468	21,889
Finance income	632	366
Finance costs	(109)	(1,473)
Share of profit of investments accounted for using the equity method	4,915	9,181
Profit before tax	34,907	29,962
Income tax expense	(8,338)	(6,997)
Profit for the year	26,569	22,965
Profit for the year attributable to		
Owners of the parent	25,146	21,029
Non-controlling interests	1,423	1,935
Profit for the year	26,569	22,965
Earnings per share		
Basic earnings per share (¥)	203.85	169.65
Diluted earnings per share (¥)	203.48	169.42

* Adopted IFRS from the fiscal year ended December 31, 2017

Financial Information

(¥ Million)

Consolidated Statements of Comprehensive Income

	FY2017	FY2018
Profit for the year	26,569	22,965
Other comprehensive income for the year		
Items that will not be reclassified to profit or loss		
Remeasurement of net defined benefit liabilities (assets)	180	(18)
Net changes in financial assets measured at fair value through other comprehensive income	419	(16)
Share of other comprehensive income of investments accounted for using the equity method	19	677
Total items that will not be reclassified to profit or loss	618	643
Items that may be reclassified subsequently to profit or loss		
Exchange differences on foreign operations	2,278	(2,628)
Total items that may be reclassified subsequently to profit or loss	2,278	(2,628)
Total other comprehensive income after taxes	2,896	(1,984)
Total comprehensive income for the year	29,464	20,980
Comprehensive income attributable to		
Owners of the parent	27,761	19,552
Non-controlling interests	1,704	1,428
Total comprehensive income for the year	29,464	20,980

* Adopted IFRS from the fiscal year ended December 31, 2017

(¥ Million)

Consolidated Statements of Cash Flows

	FY2017	FY2018
Cash flows from operating activities		
Profit for the year	26,569	22,965
Depreciation and amortization	8,974	10,011
Impairment losses	192	5,223
Increase (decrease) in net defined benefit assets and liabilities	336	180
Interest and dividends income	(185)	(259)
Interest expenses	109	124
Share of (profit) loss of investments accounted for using the equity method	(4,915)	(9,181)
Loss (gain) on sale and disposal of property, plant and equipment	294	185
Income tax expense	8,338	6,997
Decrease (increase) in trade receivables	(9,681)	(1,496)
Decrease (increase) in inventories	(5,735)	(4,454)
Increase (decrease) in trade payables	7,904	22
Others	(60)	104
Sub-total	32,140	30,421
Interest and dividends received	888	1,190
Interest paid	(171)	(112)
Income tax paid	(9,786)	(7,335)
Net cash provided by operating activities	23,071	24,165
Cash flows from investing activities		
Decrease (increase) in time deposits	(0)	(73)
Purchase of property, plant and equipment	(11,375)	(20,650)
Proceeds from sales of property, plant and equipment	193	168
Purchase of intangible assets	(818)	(840)
Purchase of investments in subsidiaries resulting in change in scope of consolidation	(8,203)	—
Purchase of share options	—	(626)
Others	17	198
Net cash used in investing activities	(20,186)	(21,823)
Cash flows from financing activities		
Net increase (decrease) in short-term borrowings	7,474	18,023
Proceeds from long-term borrowings	471	130
Repayment of long-term borrowings	(198)	(249)
Net decrease (increase) in treasury stock	(987)	17
Dividends paid	(7,447)	(9,184)
Dividends paid to non-controlling interests	(264)	(340)
Net cash used in financing activities	(950)	8,396
Net increase in cash and cash equivalents	1,934	10,739
Cash and cash equivalents at the beginning of the year	41,780	44,121
Effect of exchange rate changes on cash and cash equivalents	407	(821)
Cash and cash equivalents at the end of the year	44,121	54,039

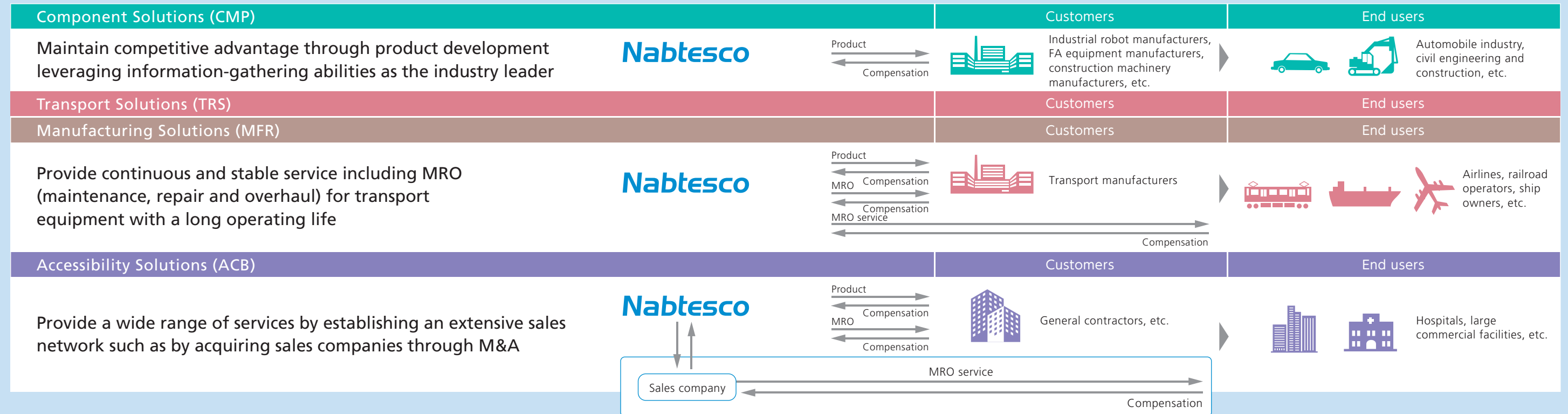
* Adopted IFRS from the fiscal year ended December 31, 2017

Business Overview

We will provide high value-added services through motion control technology.

The Nabtesco Group continues to achieve profitable growth with a portfolio of multiple mutually complementary businesses in different categories.

Main business models

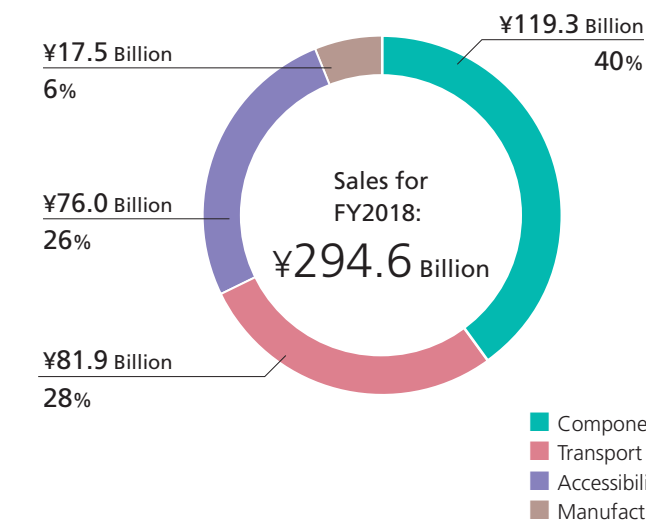


Differentiation strategy by business segment

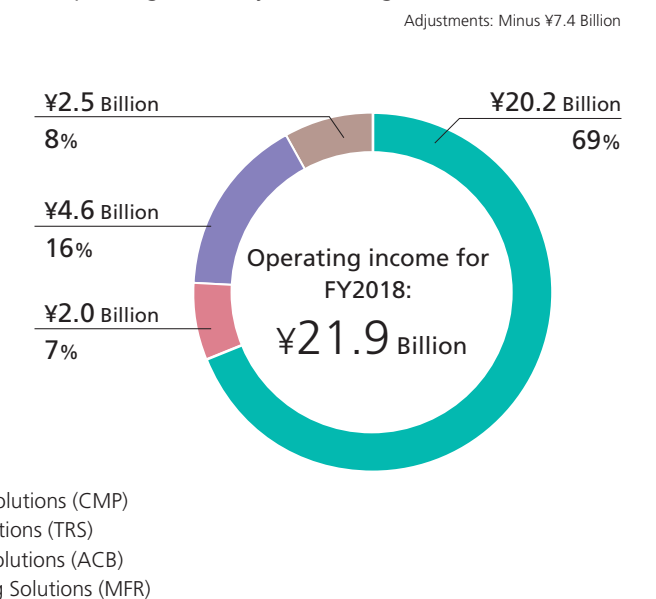
Business segment	Characteristics	Growth based on each market-oriented strategy			
		Technological advantage strategy	Expansion of regional market shares	Capturing shares in new markets	Expansion of sales products
Component Solutions (CMP)	Significant impact of changes in production/sales volume on profitability	● Precision reduction gears	● Maintaining competitive advantage of products and technologies		● Hydraulic equipment
Transport Solutions (TRS)		● Aircraft equipment		● Railroad vehicle equipment	● Commercial vehicle equipment ● Marine vessel equipment
Accessibility Solutions (ACB)	After-sales services (MRO ^{*1}) that mitigate impacts from changes in OEM ^{*2} production volume		● Automatic doors	● Capturing shares in overseas market	● Expansion of product lineup ● Systematization/modularization
Manufacturing Solutions (MFR)		● Acquisition of sales companies ● Enhancement of value chain model		● Packaging machines	

*1 MRO: Maintenance, Repair, Overhaul
*2 OEM: Original Equipment Manufacturer

Sales by business segment



Operating income by business segment





PRECISION REDUCTION GEAR BUSINESS

Managing Executive Officer, President, Precision Equipment Company Atsushi Habe

“ Demand for automation is sure to expand across the world. In this growth industry, we will unfailingly identify the needs of customers and continue technological innovation and service enhancement with unbeatable productivity. We will thereby build an unshakeable position in the market to be the first choice of customers as a supplier of precision reduction gears. ”

REFERENCE p37

Operating Results by Business Segment Component Solutions segment (CMP)

Web

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

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

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

Since Nabtesco launched its first precision reduction gears on the market in 1986, its global market share of precision reduction gears for medium and large industrial robots has grown to about 60%.

After 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 two production sites, one each in Japan and China, to ensure the stability of our 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.

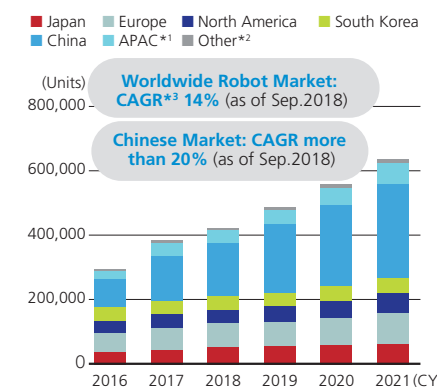
Business Environment (Opportunities and Risks)

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 14%. In light of the fact that the growth rate of the market for small robots is relatively high, the annual growth rate of the market for medium and large robots is expected to be around 10%. By region, the growth rate will exceed 20% in China, where the need for unmanned, automated operations has seen a remarkable increase. In fields other than industrial robots, we are globally promoting sales of precision reduction gears for general industries, new-type actuators that integrate precision reduction gears and servomotors, and AGV* driving units.

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.

*AGV: Automated guided vehicle

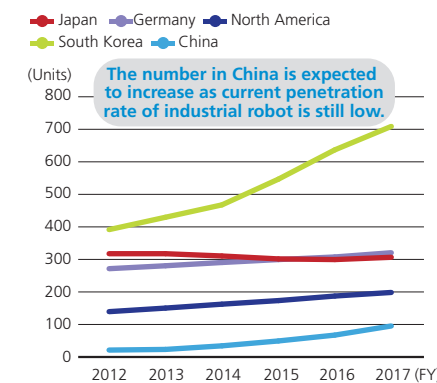
Worldwide Annual Shipment of Industrial Robots



Note: Above IFR data includes the number of small and medium-large and large size robots
Source: International Federation of Robotics (IFR) 2018

*1 APAC=Asia /Australia (Total)-China-Japan-Korea
*2 Other=Total-North America-Asia/Australia (Total)-Europe (Total)
*3 2019-2021

Number of Multipurpose Industrial Robots per 10,000 Persons Employed in Manufacturing Industry



Source: International Federation of Robotics (IFR) 2018

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 develop new products, 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, we are enhancing our production capacity and increasing our productivity with automation and labor saving at our manufacturing facilities in Japan while enhancing the capacity of the new 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.

MAIN PRODUCTS



"Precision Reduction Gear RV" Component Type

Compact and lightweight with outstanding rigidity and shock resistance. Provides excellent accelerating capabilities, smooth motion, low backlash and high positioning precision, thereby helping enhance robot controllability to a substantial degree.



AGV* Driving Unit

Integrated in-wheel design incorporating "Precision Reduction Gear RV" inside of a Mecanum Wheel. Compact but provides high resistance to load, which is a feature required for large AGVs. Also grease sealed.



Gear Head Type (Table Type) "RS Series"

As a successor to the Precision Reduction Gear RV, this new product is flat and compact. The low-profile product is used for index tables. It adopts a hollow structure for easy cabling and piping.



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.

*AGV: Automated guided vehicle

FACT SHEET

Major customers

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

Production bases (as of the end of December 2018)

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 machinery. 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. The company now has a 60% share of the world market for precision reduction gears used in the joints of medium- to large-sized industrial robots. In 2015, the company commenced building a new production base for precision reduction gears in China, which now offers the world's largest industrial robot market.

1986 Commenced launch of the "Precision Reduction Gear RV"

1991 Built the Tsu Plant for the manufacture of precision reduction gears.

2015 Began the construction of a production base in China (start of production in early 2016).

2018 Total cumulative production of precision reduction gears reached 8 million units.



HYDRAULIC EQUIPMENT BUSINESS

Executive Officer, President, Power Control Company Shinji Juman

“

We supply hydraulic equipment that is compact but powerful. We will contribute to society by providing highly efficient equipment for use in construction machinery, which supports the improvement of infrastructure.

”

REFERENCE P37

Operating Results by Business Segment
Component Solutions segment (CMP)

Web

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

Strength

- Wide product lineup
- Highly competitive products
- Global production system

Opportunity

- More use of ICT in construction machinery

Weakness

- Ability to develop system products

Threat

- Emergence of competitors in developing countries
- Commoditization of products

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, has 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 as a mother plant.

Business Environment (Opportunities and Risks)

In China, which is the world's largest construction machinery market, brisk demand for infrastructure investments has been driving the favorable sales of products used in hydraulic excavators. In the construction machinery market, a new trend toward value creation, such as the spread of ICT, will also help us find new business growth opportunities. Nonetheless, if international demand for construction machinery drops due to a global economic downturn caused by trade frictions between the United States and China, there might be a higher chance of failing to meet our targets on time.

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 are optimizing 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 Hiest 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.

Amplification of Product Lineups for Excavators through M&A

	Traveling Units	Swing Units	Pumps	Valves
Mini Excavators	●	●	●	●
Medium- to Large-Sized Excavators	●	●		●

● Nabtesco ● Hiest

Growth Matrix of Hydraulic Equipment Business of Nabtesco

	Existing Products	New Products
New Market	[Market Development] <ul style="list-style-type: none"> • Develop new applications other than excavators for a wide range of product lines →Cranes (traveling, swing and winch units, etc.) 	[Diversification] <ul style="list-style-type: none"> • Challenge for one of the comprehensive hydraulic machinery manufacturer through further development of application and hydraulic systems
Existing Market	[Market Penetration] <ul style="list-style-type: none"> • Enhance flexible response to demand fluctuation →Lead-time reduction and automatic manufacturing • Improve cost competitiveness through maximizing utilization of overseas bases and promoting "local production for local consumption" 	[Product Development] <ul style="list-style-type: none"> • Expand product lineups for package deal and hydraulic systems →Expansion of product lineups through M&A

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 bases (as of the end of December 2018)

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 Gears 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 25%. In 2015, we acquired Hiest 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 of 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 Gears 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 Hiest Corporation, the Hydraulic Equipment Business division of TOSHIBA MACHINE CO., LTD.

2016 Fully Absorbed Hiest Corporation.

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.



Control Valve for Mini Excavators

This product is a sectional type multicontrol 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.



Swing Unit for Hydraulic Excavator

The swing unit used in hydraulic excavators consists of a high-speed 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.



RAILROAD VEHICLE EQUIPMENT BUSINESS

Managing Executive Officer, President, Railroad Products Company Shigeru Naoki

“ 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. ”

REFERENCE P37

Operating Results by Business Segment
Transport Solutions segment (TRS)

Web

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

Strength

- Ability to customize products to meet the needs of customers
- High reliability proven by past achievements in the Japanese market
- Expansion of business in the Chinese market

Opportunity

- Increase in the number of new railway line projects in emerging markets
- Demand driven by the updating of railroad vehicles in Europe
- Overseas business expansion by Japanese vehicle manufacturers

Weakness

- Delayed overseas expansion

Threat

- Shrinkage of the domestic market due to a decrease in the population
- Progress of domestic production in China
- Increased requests for conformity to European standards in projects implemented in emerging markets

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 maintenance, repair and overhaul (MRO) services.

Business Environment (Opportunities and Risks)

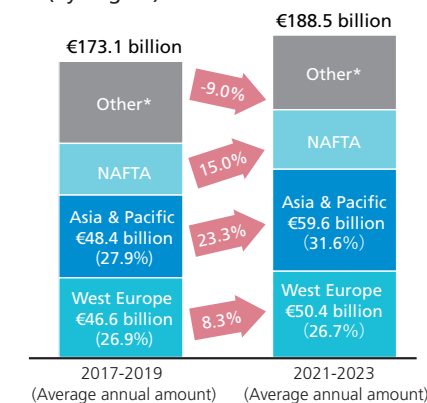
In the Japanese market, we expect that demand will continue to be stable mainly due to the need to replace old railroad vehicles with newer models. In the Chinese high-speed train market, the risk of a shift to domestic production is becoming obvious. In the Chinese subway market, however, demand for 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.

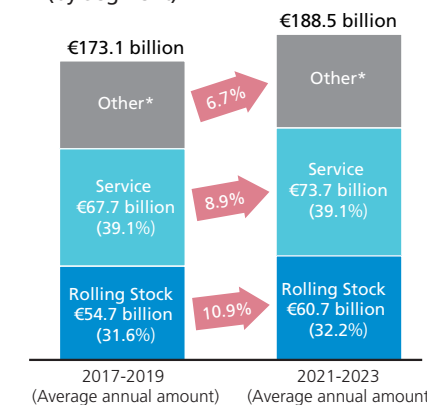
We will also promote sales of products targeting subway trains in China by making use of our local sales network as well as results and technologies accumulated in Japan. In addition we will continue focusing on increasing customer satisfaction and expand the MRO business both in Japan and China based 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 the after-sale service base in Thailand, thereby contributing to the local establishment of railroad infrastructures.

Market Size of Railroad Industry (by Region)



* Other: East Europe, CIS, Africa & Middle East and Latin America other than NAFTA

Market Size of Railroad Industry (by Segment)



* Other: Infrastructure, railroad signals and control equipment
Source: UNIE

FACT SHEET

Major customers

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

Production bases (as of the end of December 2018)

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 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.
- 2018 Received an order for automatic doors for use by the crew of London & South Eastern Railway and West Midlands Trains of the U.K. from Bombardier Transportation.
- 2019 The Kobe Plant acquired the Resilience Certification as an organization contributing to national resilience.

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.



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.



Door Operators for Railroad Vehicles

Offering a tremendous variety of door operating units, our product lineup 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).



AIRCRAFT EQUIPMENT BUSINESS

Executive Officer, President, Aerospace Company Norimasa Takagi

“ 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 expanded manufacturing facilities 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. ”

REFERENCE P37

Operating Results by Business Segment
Transport Solutions segment (TRS)

Web

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

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

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.

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.

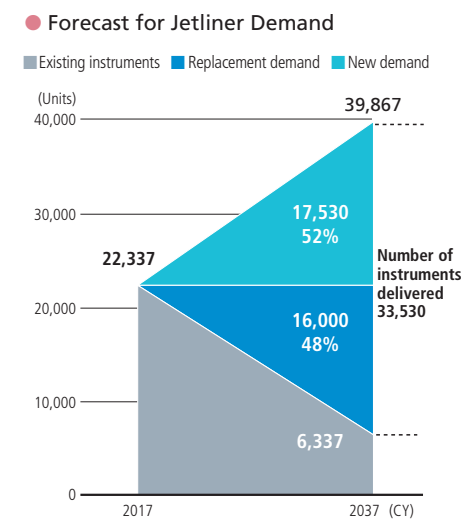
Business Environment (Opportunities and Risks)

In the private sector, the number of operating airplanes will double over the next 20 years. The budget for national defense will be at a stable level, with no major changes on a medium- to long-term basis. On the other hand, risks exist caused by deceleration of worldwide economic growth 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.

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.



Source: Japan Aircraft Development Corporation

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 bases (as of the end of December 2018)

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 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 the steadily supply of 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. Received an order for aileron actuators/spoiler actuators for the B747-8.

2008 Received an order for 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.

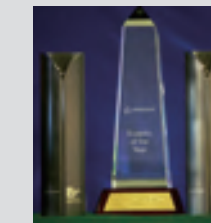
2014 Received 2013 Boeing Supplier of the Year Award.

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

2016 Received 2015 Boeing Supplier of the Year Award. Received the 2016 Boeing Performance Excellence Award. Expanded the Gifu Plant by adding the buildings for the manufacture of precision parts 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. Built a new manufacturing facility for actuators within the premises of the Gifu Plant.



Named Boeing Supplier of the Year three times since 2014.

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.



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.



COMMERCIAL VEHICLE EQUIPMENT BUSINESS

President, Nabtesco Automotive Corporation Ataru Inoue

“ As members of the company that supports truck transportation in Japan, we are working with a sense of responsibility and pride to contribute to higher road safety and environmental protection. We will also take on challenges in new fields, including developing new environmental technologies and systems. We will strive to make Nabtesco a truly global enterprise by enhancing collaboration among our production bases in Japan, Germany, Thailand and India. ”

REFERENCE P37

Operating Results by Business Segment Transport Solutions segment (TRS)

Web

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

Strength <ul style="list-style-type: none"> Ability to deal with technological changes, including electrification Know-how and technologies accumulated over 80 years 	Opportunity <ul style="list-style-type: none"> Increasing demand for advanced safety technologies Growth of emerging markets
Weakness <ul style="list-style-type: none"> Past track record regarding system products 	Threat <ul style="list-style-type: none"> Competition in the market with leading European manufacturers

Sources of Strength

Nabtesco has long improved our quality and technologies hand in hand with Japanese truck and automobile manufacturers, and this is one of the sources of our strength. In order to further enhance the brand power based on this strength, all employees are making a concerted effort. We will identify customer needs and meet more of their expectations. We will also make use of our bases outside Japan (in Germany, Thailand and India) to make Nabtesco a truly global enterprise.

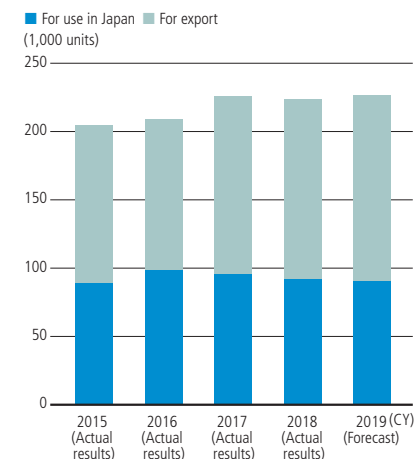
Business Environment (Opportunities and Risks)

The automobile industry is entering a period of transformation, as represented by the trend of Connected, Autonomous, Shared/Service and Electricity (CASE). Accordingly, we may face the risk of a shift from air brake control systems (one of our main product items) to electronic brake control systems. However, we are regarding this as an opportunity to develop and propose electronic brake systems optimal for buses and trucks. Moreover, in Japan, we are proactively participating in the Ministry of Economy, Trade and Industry's project for truck platooning, which is implemented for the logistics industry to deal with the crisis caused by the lack of truck drivers.

Measures for Medium- to Long-Term Growth

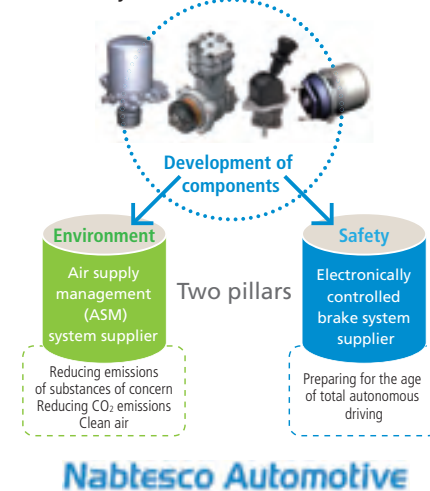
We will aggressively make investments to meet market needs for electronic products and systems so that we can continue to achieve profitable growth. As a priority measure to this end, we are working to improve the quality of air and increase fuel efficiency in a comprehensive manner for air supply management (ASM) systems. Further, we will make use of the unified strength of the Nabtesco Group and foster collaboration with the Technology and R&D Division to make Nabtesco a company that can respond to any shift to electronic brakes and systems.

Production of Large Trucks and Buses



Source: Estimated by Nabtesco based on materials provided by customer companies

Meeting More Environmental and Safety Needs



FACT SHEET

Major customers

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

Production bases (as of the end of December 2018)

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. Moreover, we acquired a German air compressor maker and founded Nabtesco ITG GmbH in 2016 and are thus further expanding our target market for this business.

- 1933 Became the first company to manufacture and sell oil brakes for 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
- 2019 The Yamagata Plant acquired the Resilience Certification as an organization contributing to national resilience.

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.



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.



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.



MARINE VESSEL EQUIPMENT BUSINESS

Managing Executive Officer, President, Marine Control Systems Company Tadashige Eto

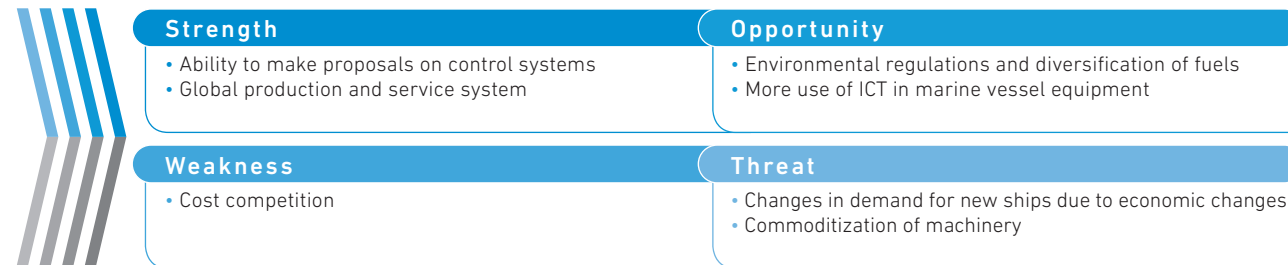
“ We are globally contributing to the safe and efficient navigation of marine vessels and the reduction of their environmental impact by providing marine engine control systems and products for electronic engines. We will continue to develop vessel products and services that meet the needs of customers and society as a whole while expanding our local production and local consumption system as well as our global service system. ”

REFERENCE p37

Operating Results by Business Segment Transport Solutions segment (TRS)

Web

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



Sources of Strength

We provide products that meet the needs of customers, including engine control equipment as well as a range of products for electronic engines developed in anticipation of the future strengthening of environmental regulations on marine vessels.

We are making use of our bases in Japan, Singapore, the Netherlands, China and South Korea to operate a global after-sales system in order to make proposals promptly to customers and provide them with around-the-clock after-sale service.

Business Environment (Opportunities and Risks)

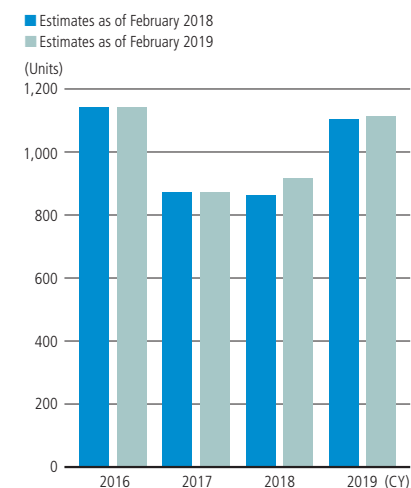
As for engines for large marine vessels, higher fuel efficiency and more fuel diversification will be pursued by customers in addition to a shift to electronic engines. Accordingly, we will be able to achieve growth by developing and marketing products that meet their needs. However, the building of new ships might be affected by economic changes and so we will expand the MRO business for existing ships in order to stabilize our marine vessel business.

Measures for Medium- to Long-Term Growth

For new ships, we will foster joint development with external research organizations to create control systems that flexibly meet market needs, devices to be used in electronic products, environment-friendly items and products for higher fuel efficiency and more fuel diversification. We will thereby provide customers with solutions that contribute to the safe navigation of their ships. Also, we will foster a local production and local consumption system and further improve our quality, cost and delivery (QCD) performance based on production at our three bases in Japan, China and South Korea.

For the MRO business, we will expand the service menu and global network to provide services of higher quality and meet social needs for safe navigation. In addition to proposing new services to check product conditions and the reduction of maintenance lead time and cost, we will enhance our global 24-hour support system for the safe navigation of customers' vessels.

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



Source: Nabtesco estimates

FACT SHEET

Major customers

Kawasaki Heavy Industries, Mitsui E&S, Japan Engine, Hitachi Zosen, The Hanshin Diesel Works, Makita, DAIHATSU DIESEL, Hyundai Heavy Industries, HSD Engine, Samsung Heavy Industries, Lv Dong Zhong Ji, CSSC-MES Diesel, Nantong COSCO KHI Ship Engineering, Shanghai Waigaoqiao Shipbuilding, MAN E&S and others

Production bases (as of the end of December 2018)

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

Market share

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

History of business development

After developing a pneumatic valve in 1943, we manufactured remote control equipment and 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.

In 1963, we developed a pneumatic remote control system for ship engines to meet the standards set by the Classification Society of each country ahead of others in Japan. Also, in response to accelerated automation of devices of marine vessels, we had dramatically boosted our market share for a pneumatic remote control system used in large marine vessel engines in Japan.

In 1983, we developed a microcomputer-based main engine remote control system, thereby meeting the needs for electronic control. In 1987, we launched a microcomputer-based electronic governor for marine vessel engines and established our position as a top engine control system manufacturer. Furthermore, in 2008 we released a product for large electronic marine vessel engines.

In the MRO business, aiming to enhance service by making proposals to customers on preventive maintenance, we established bases outside Japan, specifically in the Netherlands in 1995, in Singapore in 1997 and then in South Korea and China, to expand our service network. In addition, we established a manufacturing base in South Korea in 2000 and another one in China in 2013 to supply localized products.

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 Nabtec B.V. (presently Nabtesco Marine Europe B.V.) in the Netherlands.

1997 Established Nabtesco Marine Service Pte., Ltd. (presently Nabtesco Marine Asia Pacific 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 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.

2018 Total cumulative shipment of Electronically Controlled High-Speed Hydraulic Valves reached 15,000 units.

Participated in the Internet of Ships Open Platform Consortium established for the effective use of marine vessel navigation data.

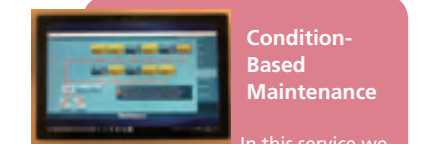
MAIN PRODUCTS



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.



Used in electronically controlled engines, the hydraulic valves precisely control fuel injection and the behavior of exhaust valves. These products are indispensable to increase fuel and driving efficiency and to implement environmental measures including those to reduce NOx emissions.



In this service we check the condition of our products to decide whether they need special maintenance, based not on the duration of use but on the condition, thereby preventing sudden product failures. The service contributes to the efficient navigation of ships and environmental protection by helping maintain the level of fuel efficiency.



AUTOMATIC DOOR BUSINESS

President, Accessibility Innovations Company Daisuke Hakoda

“

In order to provide all people with a higher level of safety, a sense of security and a comfortable transportation and living environment, under the brands of “NABCO” and “GILGEN”, all Group members in Japan, Europe, North America and China are making a concerted effort to further advance our products and services and to expand our business in the global market.

”

REFERENCE p37

Operating Results by Business Segment
Accessibility Solutions segment (ACB)

Web

Automatic Doors and Platform Doors
<https://www.nabtesco.com/en/products/automaticdoor.html>

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
- Market growth potential in North America and Southeast Asia

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 of Japan, Europe, North America and China, and are the essential sources of our strength.

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 that sells 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 a 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 cover 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. 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.

FACT SHEET

Major customers

Automatic doors for buildings: Leading construction companies, sash manufacturers, commercial facilities, hospitals, public utilities, industrial facilities (factories) and others

Platform doors: Tokyo Metro and railway companies in each country

Production bases (as of the end of December 2018)

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 (Approx. 20% 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, beginning with the export of products to Hong Kong in 1961, 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 globally. 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.

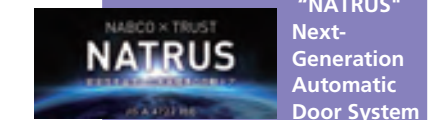
2012 Acquired full ownership of NABCO DOOR as the result of stock swap.

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.

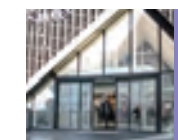
2017 Celebrated the 60th anniversary of the market release of NABCO automatic doors.

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.



Westside Shopping and Leisure Centre in Switzerland

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, public facilities and commercial facilities. We have also many past track records in the field of industrial facilities such as waste treatment plants and other plants.

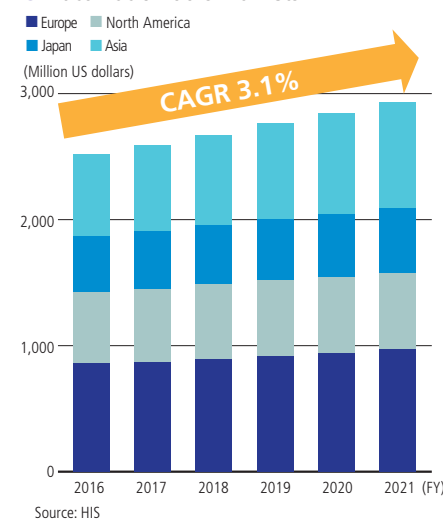


Kudanshita Station on the Tokyo Metro Tozai Line

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.

Automatic Doors Markets





PACKAGING MACHINE BUSINESS

President, Toyo Jidoki Co., Ltd. Akiyoshi Kitamura

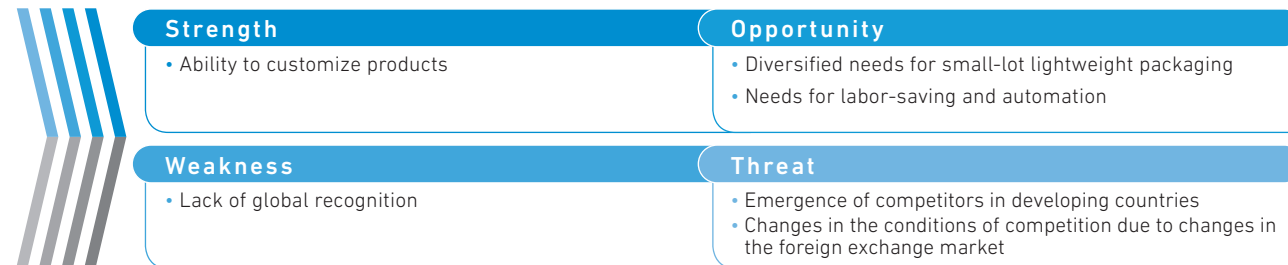
“ We will promote the development of next-generation high-speed packaging machines, the enhancement of our service system and the expansion of our business outside Japan, thereby meeting food processing company needs to save labor while ensuring food safety. We will also provide customers with a wide range of retort pouch packaging machines. Retort pouches have high transportation efficiency, which contributes to the reduction of CO₂ emissions in logistics. ”

REFERENCE p37

Operating Results by Business Segment
Manufacturing Solutions segment (MFR)

Web

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



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

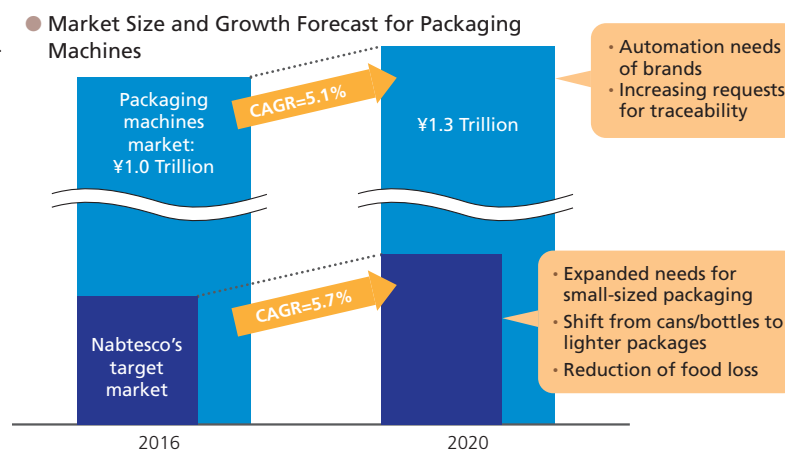
We have earned trust from food manufacturers for our compact packaging machines, which provide high performance, require only limited space and even seal packages with high air tightness to ensure the safety of food products contained therein.

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 brands 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. On the other hand, we are taking measures to deal with changes in world situations including those caused by the dispute between the United States and China and are facing more risks associated with foreign exchange rates due to an increase in the export of these machines. These factors could affect our business performance.

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.



• Automation needs of brands
• Increasing requests for traceability

• Expanded needs for small-sized packaging
• Shift from cans/bottles to lighter packages
• Reduction of food loss

FACT SHEET

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 bases (as of the end of December 2018)

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 retort pouch curry 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.

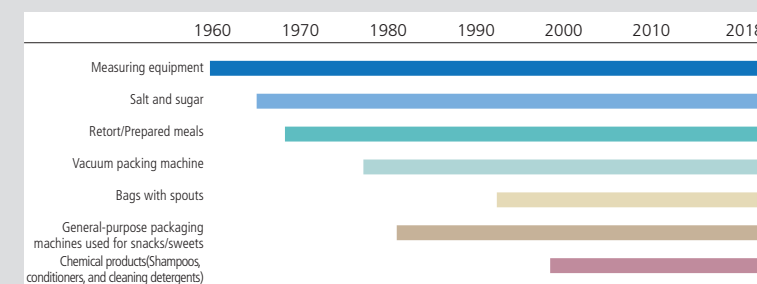
1994 Began delivering spout bag packaging machines.

2011 Established a subsidiary, DALIAN TOKYO JIDOKI CO., LTD., in Dalian, China.

2013 Established a local distribution company, TOYO JIDOKI AMERICA CORP, for packaging machines.

2018 Established a subsidiary, TOYO JIDOKI EUROPE GmbH, in Dusseldorf, Germany. The Iwakuni Plant acquired the Resilience Certification as an organization contributing to national resilience.

Expanded and More Advanced Use of Fillers and Sealers for a Wide Range of Items



Packaging machines are used for a wide range of products to meet contemporary needs

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.



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.

Dialogue on Governance



Makoto Matsuo

Partner
MOMO-O, MATSUO & NAMBA

Goro Hashimoto

Director, Managing Executive
Officer, General Administration,
Human Resources and Legal &
Compliance
Nabtesco Corporation

Zenzo Sasaki

Audit & Supervisory Board
Member (Independent)
Nabtesco Corporation

Honorific titles omitted in the following dialogue.

Enhancing the Group's Compliance

We are witnessing an increase in the number of companies that have suffered damage to their corporate value due to scandals. What can we learn from the cases of these companies to enhance the Nabtesco Group's compliance? Nabtesco Director Goro Hashimoto, who oversees compliance, and Zenzo Sasaki, who is an independent audit & supervisory board member of Nabtesco as well as an outside member of the Compliance Committee, spoke with Attorney Makoto Matsuo regarding this issue. (Meeting held in a conference room of Nabtesco in April 2019)

Common causes of corporate scandals that happen frequently

Hashimoto: We are witnessing a series of corporate scandals happen. What can Nabtesco learn from these scandals and make use of the lessons in our daily operations? I would like to discuss this frankly with you today.

Matsuo: Corporate scandals can be classified into several types, of which falsification of quality data has a serious impact on the management of a company. Moreover, falsification of financial data as well as accounting fraud by overseas subsidiaries constitute noncompliance with the Financial Instruments and Exchange Act of Japan as a "false statement," and pose serious risks. You need to maintain the quality of audits and internal control at a high enough level to ensure the appropriateness of the financial data disclosed to the public. There are also governance-related issues in which top executives are involved, as revealed in the automobile industry.

Sasaki: In fact, the falsification of quality data and accounting frauds have been widely covered by the media. There are also issues related to illegal overtime work and the

resulting deaths of employees, information leakage and insider trading, as well as issues concerning noncompliance with the laws on antimonopoly, unfair competition and subcontractors and with the trade security control rules. In addition, harassment-related issues have also been reported widely, although they do not immediately constitute legal noncompliance.

Matsuo: From a management perspective, it is necessary to prepare against so-called "black swan" risks, which are unexpected and shocking risks.

Sasaki: For a range of problems that happened at other companies, third-party committees and internal investigation teams made reports to the public. These reports list the "lack of normative consciousness" as the biggest cause of the problems, which is followed by "neglecting inconvenient truths" and "ignoring the signs of scandals and failing to take the necessary measures." As for the cause of harassment, these reports list the "lack of awareness of human rights."

As for the falsification of quality data, it is said that the immobility of human resources and strong dependence on specific individuals tend to cause problems.



(Matsuo) From a management perspective, it is necessary to prepare against so-called "black swan" risks, which are unexpected and shocking risks.

In addition, "unfunctional internal control" and "non-effective use of the internal whistleblowing system" are also said to be the causes of corporate scandals.

Nabtesco's compliance

Matsuo: As a legal advisor to Nabtesco, I am asked daily for advice about legal risks. Mr. Sasaki, you are an independent audit & supervisory board member of the company and an outside member of its Compliance Committee. Fortunately, Nabtesco has never had any scandals that posed a serious legal risk to the company. What measures is the company taking to ensure compliance?

Hashimoto: Let me take this opportunity to brief you on the measures. Nabtesco determined to "Focus on solving ESG issues" as one of the commitments that it has made in the medium-term management plan. For "G (governance)," which is a material CSR issue based on the concept of materiality, we are upholding three targets: enhancement of corporate governance, proactive dialogue with stakeholders and ensuring risk management and compliance. For "S (society)," we have included respect for human rights and anti-corruption in our targets. Also, for procurement activities, we are committed to being fair, proper and transparent, which has much to do with compliance.

Matsuo: You thus regard compliance as a core means to solve ESG issues.

Hashimoto: We have long been working to ensure compliance as a requirement for the company since before the term "ESG" began to be used widely in society. In the Action Guidelines included in "The Nabtesco Way" along with the Corporate Philosophy, we state, "Ensure Transparency: Be open, fair and honest" as one of our important values.

As an instrument to support the implementation of The Nabtesco Way, the Board of Directors also introduced the Nabtesco Group Code of Ethics in 2017. Nabtesco introduced the Nabtesco Group Code of Conduct in 2005, two years after the founding of the company in 2003. Since then, the company has expanded its business scope globally and faced the need to revise the Code so that members working outside Japan could also understand the details easily.

Matsuo: Even from outside the company, it can be clearly seen that Nabtesco expanding its business overseas as part of its growth process.

Hashimoto: That's true. As of the end of last year, Nabtesco had 46 overseas subsidiaries and about 7,700 employees on a consolidated basis, of whom about 40% are working

outside Japan.

We created an easy-to-understand handbook on the Code of Ethics in nine languages for employees and included detailed explanations about the prevention of cartels, bribery and other matters in reference to the laws and regulations enforced in each country.

Organizational system designed for compliance

Sasaki: In order to implement the Code, what kind of system did you design?

Hashimoto: In 2016, before the formulation of the Code of Ethics, we established a Compliance Committee as an advisory board for the Board of Directors. The Compliance Committee is chaired by the CEO and comprised of directors in charge of corporate departments, the head of the Technology and R&D Division and other internal members. We also asked independent Audit & Supervisory Board Member Sasaki and Attorney Matsuo to participate in the Committee as those who take the viewpoint of "outsiders." At the same time the Board of Directors set the regulation on the promotion system of the Group's compliance and designated the presidents of each in-house company and Group companies in Japan and abroad to oversee compliance of their respective organizations. We have thus established a compliance system for each Group entity and clarified who is responsible for compliance.

Sasaki: Isn't it difficult to implement the compliance system outside Japan?

Hashimoto: We are striving to make the presidents of our overseas Group companies more aware of those responsible for compliance. We hold regional compliance liaison meetings for participants to share information and receive compliance training. We have also introduced internal whistleblowing systems to the companies. We are thus promptly doing what we have done in Japan also outside the country.

Moreover, we have newly added compliance functions to our regional headquarters in China and Europe and plan to do this also in North America as soon as possible.

Making a truly effective system

Sasaki: As for the internal whistleblowing system, some other companies nominally have such a system but are not using it effectively, as I have already mentioned. What does Nabtesco think about this issue?

Hashimoto: It is essential to maintain the credibility of the internal whistleblowing system. We ensure confidentiality for whistleblowers and will never treat them unfairly because that they have made reports through the system. We are making all employees aware of this so that they can use the system with ease of mind.



(Sasaki) I share information gained through the Compliance Committee with the Audit & Supervisory Board. Also, through the "auditor hotline," we can share any problems and deal with them appropriately.

The number of reports made through the system was 50 in fiscal 2017 and 47 in fiscal 2018. Despite such variations, the number is generally on an upward trend. For about half of the reports, we took corrective actions based on the results of surveys conducted in response to the reports. The "hit rate" (rate of reports that have led to corrective actions) is nearly 50%, and so we think the reporting system is functioning effectively.

Sasaki: Our internal whistleblowing system has been steadily improved to be more effective. The number of contacts, which used to include only the internal compliance department and a law firm, has been increased to include more external contacts, and employees can now make a report in various languages as well. Because some employees might hesitate to report about an unfair act of a director/executive officer through the whistleblowing system implemented by the company, we also established an "auditor hotline" in 2017 for employees to make reports to auditors. As Mr. Hashimoto said, the "hit rate" is high because we conduct surveys with a strong commitment to never accepting unfair acts.

Matsuo: We can compare compliance to preventive medicine. In order to prevent scandals, we need to make rules first and then establish the necessary system based on the rules. You could prevent scandals by using an internal control system built by following this process; however, it is not enough. As Mr. Sasaki pointed out, you must ensure effective use of the system, for which you need to make daily checks and constantly try to improve the system in response to changes in society.

Sasaki: I think Nabtesco is establishing the necessary rules in anticipation of various compliance risks. It is also important to conduct "firefighting drills" so that we can deal with a "fire" promptly.

Matsuo: When a scandal happens, you will face a series of unexpected things. If a "fire" happens, you need to prevent it from spreading. It is of course essential to prevent it from happening in the first place, but in the event that it occurs, you should prevent it from spreading, for which you need to conduct drills as a matter of course.

Hashimoto: As for "firefighting drills" conducted as part of preventive measures, the Group's Quality & PL Committee carried out a special "quality audit" over three months last year to check for cases of quality fraud, which we had witnessed happen at many companies. The audit results were reported to the Compliance Committee and the Board of Directors. The results showed no issues, but there is no guarantee that we will never have any problems in the

future. We therefore need to conduct such audits regularly and are working to build a system that automatically prevents the falsification of data.

Compliance to deal with black swan risks

Hashimoto: The aforementioned black swan risks or irregular events that might cause scandals should be recognized as something that could happen in our daily corporate activities. It is important to identify any signs of such risks and deal with them at an early stage.

Sasaki: The Nabtesco Group has nearly 8,000 employees, and it is difficult to prevent irregular events perfectly.

Matsuo: It is therefore important for you to have an open corporate culture. Trying to hide a problem when it is discovered would be the most dangerous thing to do.

Sasaki: It is rather difficult to deal with a minor issue appropriately. This is because for a major problem we have a limited number of options but for minor problems that happen on-site, there are multiple options.

Matsuo: Paradoxically, it is also important not to be very strict. From the viewpoint of legal compliance, we have to say, "You should constantly obey the rules," but it is not that simple. There is a gray zone in which you need to make decisions within a limited time. It is therefore necessary to assign human resources who can make well-balanced decisions to the main positions.

Hashimoto: You need to develop human resources and assign them from the viewpoint of compliance. At Nabtesco, under the top executives of the in-house companies and Group companies who are serving as those responsible for compliance, departmental managers who are tasked with corporate planning take charge of practical compliance issues. These managers, who receive much information about on-site compliance issues, need to be highly aware of compliance risks and consult with us if they find any compliance problems. To this end, we place importance on the reporting and sharing of information.

Sasaki: I am a member of both the Audit & Supervisory Board and the Compliance Committee. As for information sharing, the Compliance Committee receives detailed reports and its members, including the CEO, are sharing enough information. I also share the information gained through the Compliance Committee with members of the Audit & Supervisory Board.

The Audit & Supervisory Board has detailed information about the business audits carried out within the Group and shares this information with the Compliance Committee as



(Hashimoto) To maintain an open corporate culture, we must foster the mobility of human resources. It is also important to promote diversity. Different viewpoints help us think outside the box.

necessary. Also through the "auditor hotline," we can share any problems and deal with them appropriately.

Hashimoto: There are three important elements of compliance management. They are the prevention and early detection of problems along with risk management. Among these, the prevention of problems largely depends on the corporate culture and the attitude of top executives.

It is necessary for top executives to communicate the importance of compliance in their messages and "visualize" compliance. To this end, the Compliance Committee should be headed by the CEO, unlike the cases of other in-house committees. Last October, all Group members listened to CEO Teramoto's video message. Nabtesco has designated every October as Corporate Ethics Month and in the message given for the month, the CEO said that the Nabtesco Group would never make profits at the cost of noncompliance.

Raising compliance awareness

Matsuo: It is indeed important for top executives to show their commitment to compliance. A monthly compliance newsletter also helps raise compliance awareness.

Hashimoto: For Nabtesco, last October was our eighth Corporate Ethics Month, during which we conduct a Compliance Awareness Survey to check the compliance awareness of employees. Last year we received responses from 5,360 employees. According to the results, the awareness level seems to be improving, including the level of understanding of compliance and awareness of the internal whistleblowing system.

Matsuo: In the survey, you received very positive responses concerning quality fraud.

Sasaki: Employees engaged in the technology and engineering fields are working with pride and want to prevent data falsification and other types of fraud.

Hashimoto: While the two companies that are the predecessors of Nabtesco have a long history, Nabtesco is only 16 years old. Maybe because it made a fresh start as a new company in the 21st century, it excels in transparency. The statement "Ensure Transparency: Be open, fair and honest" made in The Nabtesco Way is a concept truly ingrained among employees as part of their corporate culture. The Board of Directors is also managed with a very high level of transparency. Nabtesco has had no serious scandals, which may be attributable to its corporate DNA. I would like to make steady efforts to maintain this good corporate

culture and ensure compliance-oriented management.

Toward the further advancement of compliance

Matsuo: Although scandals should be prevented, if a scandal unfortunately happens, it is important to report and deal with it appropriately. In line with the so-called "two-hour rule," employees must report the problem to their managers within two hours from the occurrence. To this end you need to improve the reporting line and create a system under which problems are handled appropriately by the responsible personnel.

Hashimoto: That is definitely true. CEO Teramoto always says, "You must make reports promptly especially about bad news."

To maintain an open corporate culture, we must foster the mobility of human resources through human exchange and job rotation between our in-house companies. It is also important to promote diversity. Different viewpoints help us think outside the box.

Sasaki: To this end, it is essential to foster "two-way communication between the workforce and management," as stated in Principle 3 of the Principles for Preventing Corporate Scandals set for listed companies in Japan. Mid-level managers, who listen to the opinions of on-site employees and report them to management, need to be aware of the importance of this and act appropriately. Human resources development is truly important.

Hashimoto: While the focus of this integrated report is on "dialogue," we need to enhance and entrench compliance as part of Nabtesco's Corporate DNA through two-way dialogue between the workforce and management. We would like to ask for your continued advice as well.

Nabtesco Group's Approach to ESG Issues

The Nabtesco Group will systematically implement measures to solve ESG issues, which is one of the commitments made in the Medium-Term Management Plan, based on the concept of materiality (material CSR issues) established to "ensure management transparency" and "provide safety, comfort and a sense of security."

Systematically conducting activities to solve a range of ESG issues

In order to implement measures for the solution of ESG issues in a systematic manner, our CSR Committee, which directly reports to the CEO, identifies the material CSR issues (materiality). The committee also formulated the

CSR Basic Policy to summarize the selected material issues as well as to ensure management transparency and provide safety, comfort and a sense of security. The chart below summarizes the major impacts on our corporate activities from the identified issues. We are working to reduce negative impacts while increasing positive impacts














by systematically conducting activities for each of the issues. They are related to 13 of the Sustainable Development Goals (SDGs). We will make contributions to the attainment of the SDGs by inputting 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**
Nabtesco signed the United Nations Global Compact

(UNGC) in 2014 and is also a member of Global Compact Network Japan (GCNJ). We have been proactively participating in symposiums and study groups organized by the GCNJ, including the study groups on ESG, reporting, the SDGs, environmental management, supply chains, anti-corruption, disaster risk reduction (DRR), human rights due diligence and the WEPS*. Through these events, we interact with other participating companies and learn from advanced examples how to better foster CSR-oriented management at our company.

*WEPS: Women's Empowerment Principles

General Category	ESG Category	Materiality (Material CSR Issues)	Measures Implemented in FY2018 to Solve ESG Issues	Major Impacts on Our Corporate Activities		Major SDGs of Relevance
		Major Initiatives and Related Pages		Negative Impact: Trust of Stakeholders Declines	Positive Impact: Trust of Stakeholders is Gained	
Ensure management transparency	Governance (G)	Strengthen corporate governance Dialogue on Governance ▶ P.65 Corporate Governance ▶ P.71	Revised the Corporate Governance Basic Policy Stipulated the policy to reduce strategic shareholdings, management focusing on capital costs, participation of the Board of Directors in CEO succession planning, etc.	As a result of functional deficiency of corporate governance, • corporate value is damaged.	As a result of the enhancement of management supervision function, faster decision-making and ensuring of management transparency, • corporate value can be maintained or improved.	 
		Promote risk management and compliance behavior Promote Risk Management and Compliance Behavior ▶ P.79	Enhanced risk management Carried out systematic risk assessment throughout the Group, identified and implemented measures for serious company-wide risks through the Risk Management Committee	As a result of the realization of risks and breaches of compliance, • business operations are interrupted or suspended; or • financial cost increases.	As a result of appropriate risk management, • competitiveness in the product market is maintained or improved; or • business operations can be continued. As a result of the reinforcement of the global compliance system, • corporate value can be maintained or improved.	
		Ensure proactive dialogue with stakeholders	Strengthened compliance system Promoted educational activities by thoroughly communicating the Group Code of Ethics and the Global Anti-Bribery Policy	As a result of the decline in trust of stakeholders, • competitiveness decreases; or • reputation is damaged.	As a result of cooperation with stakeholders and development of relationships of trust, • business operations can be continued and business opportunities can be generated; or • talented people can be secured; or • reputation can be maintained or improved.	
Provide safety, comfort and a sense of security	Society (S)	Enhance customer satisfaction, Ensure quality and safety Business Overview ▶ P.47 Dialogue with a Strategic Partner ▶ P.81 Producing Innovations ▶ P.85 Intellectual Property Activities to Support Innovation ▶ P.86 Manufacturing Innovation ▶ P.87 Management of Quality ▶ P.89 Management of Occupational Safety ▶ P.90	Fostered open innovation Established a corporate venture capital (CVC) fund	As a result of the lack of meeting of customer and social needs, • competitiveness in the product market declines. As a result of deficiencies, accidents, etc., involving products, • business operations are interrupted/suspended or financial loss is incurred; or • financial cost increases.	As a result of the pursuit of customer needs, • in-house technologies are enhanced, or human resources are developed. As a result of the provision of products that provide safety, comfort and a sense of security, • trust of customers is gained.	      
		Develop human capital and promote workplace diversity, Provide safe and comfortable workplaces Work Style Reforms ▶ P.91 Fostering Workplace Diversity ▶ P.92 Human Capital Development ▶ P.93 Increasing Employees' Awareness of The Nabtesco Way ▶ P.93	Nurtured a quality and safety culture Began four activities to nurture a safety culture in addition to conducting conventional activities	Due to the lack of ability to develop human resources and the lack of diversity, • organizational power and loyalty of employees decrease. As a result of labor issues or labor accidents, • productivity declines.	As a result of the acquisition and development of capable and versatile human resources, • organizational capabilities and loyalty of employees improve. As a result of the realization of safe and pleasant working environments, • productivity is enhanced.	
		Respect human rights and prevent corruption Human Rights Management ▶ P.92	Enhanced risk management Carried out systematic risk assessment throughout the Group, identified and implemented measures for serious company-wide risks through the Risk Management Committee	As a result of the realization of human rights and corruption risks, reputation is damaged. As a result of the strengthening of relevant laws and regulations, • business operations are interrupted or suspended; or • financial cost increases.	As a result of preventing human rights and corruption risks, • reputation is maintained and improved.	
		Fair, proper and transparent procurement activities Nabtesco Group's Procurement Activities ▶ P.88	Built a CSR-oriented procurement system across the supply chain Asked suppliers to complete the revised SAQ and supported them in formulating BCPs	As a result of the realization of procurement risks, • supply of raw materials and components is suspended. As a result of the interruption or suspension of business operations, • financial cost increases.	As a result of controlling procurement risks, • raw materials and components are procured sustainably. As a result of securing high-quality suppliers, • competitiveness in the product market is improved.	
		Local community development Nabtesco Group's Community Investment ▶ P.94	Established the Nabtesco Group Community Investment Policy Clarified the purpose and priority areas for proactive community investment activities	As a result of sluggish local economy/society, • the product market shrinks and employment opportunities are lost.	As a result of the development of trust with local communities and contribution to local communities, • reputation is maintained and improved, or • the product market expands and employment opportunities are gained.	
		Countermeasures for climate change Environmental Management ▶ P.95	Accelerated PDCA cycle aimed at long-term targets for CO ₂ reduction Continued to conduct activities to achieve the long-term targets that were certified as SBTs	As a result of the realization of natural disaster risks and energy risks, • business operations are disrupted. As a result of the strengthening of climate change-related laws and regulations, • financial cost increases.	As a result of preventing natural disaster risks and energy risks, • business operations can be continued. As a result of contributing to mitigating climate change issues, • reputation is maintained and improved.	
		Environmentally friendly manufacturing Environmental Management ▶ P.95	Group's long-term targets < Global targets > Total CO ₂ emissions (per unit of sales) FY2030 30% reduction FY2050 80% reduction (Relative to FY2015)	As a result of the realization of environmental risks (violation of environmental laws and regulations or environmental pollution caused by business operations), • financial cost due to damages, compensation, etc., increases.	As a result of the contribution to solving environmental issues, • reputation is maintained and improved.	
Reduction of environmental impact through products and services Environmental Management ▶ P.95	Proactive implementation of environmental capital investment Solar power generation facilities High-efficiency machining equipment Early observance of the Act on Rational Use and Appropriate Management of Fluorocarbons	As a result of environmental pollution caused by the provision of products and services, • competitiveness in the product market declines.	As a result of the provision of products and services with high environmental performance, • the product market expands and competitiveness is enhanced.			
	Recycling, reuse and remanufacture of products Environmental Management ▶ P.95		As a result of a shortage of resources, • business activities become stagnant. As a result of the lack of environmental performance for products, • competitiveness in the product market declines.	As a result of the recycling of raw materials and components, • sustainability of business activities is improved. As a result of the contribution to developing a recycling-oriented society, • competitiveness in the product market increases.	   	

Ensure Management Transparency

Management transparency is one of the Nabtesco Group's material CSR issues and it is essential to maintain the trust of 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

Measures to Enhance Corporate Governance

Nabtesco is committed to enhancing its corporate governance based on the Corporate Governance Basic Policy, which indicates the Company's basic approach to, framework of and measures for corporate governance. Nabtesco will achieve sustainable growth, increase its corporate value on a medium- to long-term basis, and earn even more trust from stakeholders by fulfilling this commitment through the implementation of The Nabtesco Way.

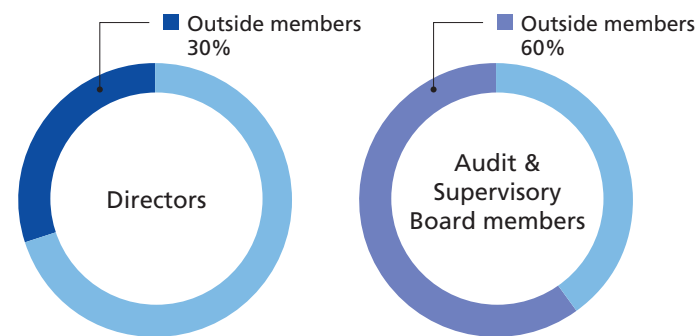
In FY2018, for further enhancement of our corporate governance, we revised the Corporate Governance Basic Policy to make clear statements stipulated the policy to reduce strategic shareholdings, management focusing on capital costs, participation of the Board of Directors in CEO succession planning.

*For Nabtesco's basic approach to and system for corporate governance, please refer to our website.

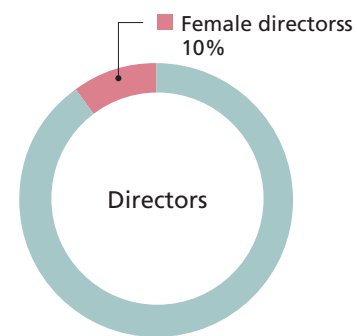
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Directors and Audit & Supervisory Board members

Proportion of outside Directors



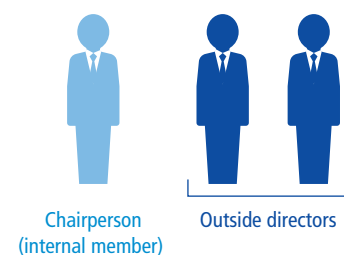
Proportion of women



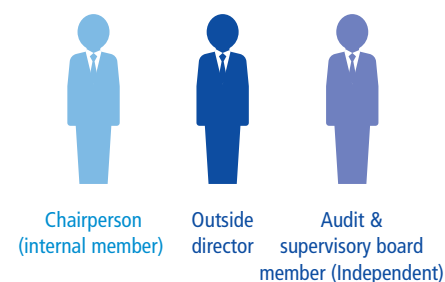
Nomination Committee and Remuneration Committee

Nabtesco is a "Company with Board of Auditors" under the Companies Act of Japan and has the Nomination Committee and Remuneration Committee as advisory organizations to the Board of Directors. The following shows the composition of the committees.

Nomination Committee 3 Members



Remuneration Committee 3 Members



Changes in the corporate governance system

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Chairman of the Board	Representation right	Shigeo Iwatate														
	No representation right		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. 2 outside directors)	10 directors (incl. 3 outside directors)	10 directors (incl. 3 outside directors)	10 directors (incl. 3 outside directors)	10 directors (incl. 3 outside directors)
Number of Audit & Supervisory Board Members	5 Audit & Supervisory Board Members (incl. 3 outside members)*1							*1				*1				
Committees	Group ESH (Environment, Safety, and Health) Committee															
	Group PL (Product Liability) Committee															
	Group Quality Committee															
	Group Quality & PL (Product Liability) Committee															
	Remuneration Committee															
	Nomination Committee															
	Compliance Committee															
Remuneration for Inside Directors*2	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*3 Board Benefit Trust*3															
Accounting Standard	Settlement of account in March (JGAAP)											Settlement of account in December (JGAAP)		Settlement of account in December (IFRS)		
Corporate Philosophy, 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 Conduct															
	Nabtesco Group Code of Ethics															
	Nabtesco Group Global 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 Human Rights Policy																
Nabtesco Group CSR Basic Policy																
Nabtesco Group Community Investment Policy																
Anti-takeover Measures	Pre-warning Anti-takeover Measures*4															

*1. 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.

*2. Outside Directors are paid on a monthly basis.

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

*4. 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.

Ensure Management Transparency

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 FY2018, the Company conducted an anonymous self-evaluation questionnaire survey of all directors and Audit & Supervisory Board members. The survey results were tabulated and analyzed by external lawyers for the evaluation of the effectiveness of the Board of Directors through discussions by members of the Board.

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 the composition of the Board of Directors, the following issues were found as challenges to be met on a medium- to long-term basis: need to increase the proportion of independent outside directors to at least one-third of the total number of directors and need to increase the number of female directors.

As for discussions by the Board of Directors, it is still necessary to secure enough time to deliberate important issues in management, including growth strategies.

Compensation System for Directors

◆ Basic policy on the compensation system

- By linking compensation more with performance and stock value, ensure that shareholders and management can share profit and risk.
- Make the system shall function as an incentive to improve the medium- to long-term performance.

◆ Method for determining compensation

For compensation for directors, the Remuneration Committee deliberates on the upper limits approved at the general meeting of shareholders and reports the results to the Board of Directors for the final decision of the amount. For compensation for Audit & Supervisory Board Members, the amount is decided through discussions with Audit & Supervisory Board Members.

◆ Structure of the compensation system

Compensation to Directors is composed of monthly compensation, comprising fixed basic compensation and short-term performance-linked compensation, and stock compensation based on the degree of achievement of the Medium-term Management Plan as well as share value.

[Basic compensation]

Basic compensation is fixed compensation according to the position of each Director and is paid as monthly compensation.

[Performance-linked compensation (Monthly compensation)]

The amount of performance-linked compensation (monthly compensation) to be paid is determined according to the following formula, based on the degree of achievement of annual results.

[Short-term performance-linked compensation]

Short-term performance-linked compensation =
Standard payment amount by position × Performance evaluation coefficient

* Performance evaluation coefficient: Determined by a matrix table using ROIC and profit (attributable to owners of the parent) for the previous fiscal year within a certain threshold as indicators (coefficient: 0.00 – 3.00)

For Directors in charge of internal companies, short-term performance-linked compensation is adjusted based on factors including the net sales growth rate, degree of improvement of operating income, degree of ROIC improvement, R&D indicators and environmental indicators of the relevant companies.

[Stock Compensation]

Stock compensation is paid using the Board Benefit Trust (BBT) mechanism, and the amount of payment is determined according to the following formula, based on the degree of achievement of the Medium-term Management Plan.

[Tenure grant-type stock compensation]

Tenure grant-type stock compensation =
Share grant points by position ×
Performance evaluation coefficient ×
Medium-term Management Plan achievement coefficient

* Performance evaluation coefficient: Determined by a matrix table using ROIC and profit (attributable to owners of the parent) for the previous fiscal year within a certain threshold as indicators (coefficient: 0.00 – 3.00)

* Medium-term Management Plan achievement coefficient: Set based on the degree of achievement of the net sales and operating income stated in the Medium-term Management Plan (0 – 0.5)

Grant points will be vested on the day of the Annual General Meeting of Shareholders relating to the final fiscal year ending within three years from the awarding of points.

[Retirement grant-type stock compensation]

Retirement grant-type stock compensation =
Share grant points by position
Grant points will be vested on the day that the Director retires.

◆ Nabtesco's approach to indicators for performance-linked compensation

The basic indicators for performance-linked compensation paid to Directors (excluding Outside Directors) are ROIC and profit (attributable to owners of the parent), which reflect the fruits of all employee activity and are principal indicators linked to the improvement of ROE.

In this way, the Company encourages all Directors to take note of capital costs and the payout ratio, and promotes management that is mindful of the sustainable growth of the Group. Furthermore, indicators for Directors in charge of businesses have the added functions of incentivizing them to improve performance in the medium to long term by including R&D indicators to encourage

the creation of intellectual property and environmental indicators showing how much CO₂ emissions were reduced, in addition to management indicators such as the degree of ROIC improvement.

Furthermore, net sales and operating income are adopted as indicators for the degree of achievement of the Medium-term Management Plan, as they reflect the business activities of all Directors and employees, with the aim of aligning all business activities in one direction.

However, in case of impacts from events not triggered by the Company's management decisions, above indicators may be adjusted.

◆ Composition of compensation

- The composition of Directors' compensation emphasizes the link with performance and shareholder value.
- Compensation, etc., for Outside Directors and Audit & Supervisory Board Members consists only of fixed compensation, with no performance-linked compensation, as

Position	Fixed compensation	Performance-linked compensation		
	Basic compensation	Short-term performance-linked compensation	Tenure grant-type stock compensation	Retirement grant-type stock compensation
Chairman of the Board/President	30%	30%	20%	20%
Director	35%	30%	20%	15%

these officers are in a position independent from business execution.

◆ Claw-back Clause

As a result of having to revise the financial results of past fiscal years due to inappropriate accounting, etc., the Company has stipulated a claw-back clause in the internal compensation regulations so as to demand the return of all or part of performance-linked compensation in the event of material revisions in the performance of past fiscal years which was the basis of the calculation of performance-linked compensation, or in the event that the Company incurs material loss due to an officer's wrongful or illegal act.

Amount of Compensation Paid to Directors (FY2018)

- Total amount of compensation by managerial position, total amount of compensation by type of compensation and number of recipients

Directors/Audit & Supervisory Board Members	Total amount of compensation (¥ Million)	Types of compensation (¥ Million)				Number of Directors and Audit & Supervisory Board Members
		Fixed compensation	Performance-linked compensation		Board Benefit Trust (BBT)	
			Monthly compensation			
Directors (Outside Directors)	424 (30)	195 (30)	106 –	35 –	87 –	12 (3)
Audit & Supervisory Board Members (Audit & Supervisory Board Members (Independent))	78 (24)	78 (24)	– –	– –	– –	5 (3)
Total	501	273	106	35	87	17

(Notes)

1. The "Number of Directors and Audit & Supervisory Board Members" for Directors includes two Directors who retired during the fiscal year under review.
2. Monthly compensation consists of basic compensation and short-term performance-linked compensation paid out in total on a monthly fixed basis.
3. The Board Benefit Trust (BBT) amount is the amount expensed during the fiscal year under review according to J-GAAP, based on the number of share grant points awarded or expected to be awarded during the fiscal year under review.
4. The upper limit on compensation as resolved at the 14th Annual General Meeting of Shareholders (March 28, 2017) is set at ¥400 million per year for Directors (of which ¥50 million is for Outside Directors), and ¥90 million for Audit & Supervisory Board Members.
5. In addition to the compensation amounts stated above, the Company has introduced a Board Benefit Trust (BBT) system for Directors (excluding Outside Directors) as resolved at the 14th Annual General Meeting of Shareholders (March 28, 2017). Based on the Regulations for Provision of Shares to Officers established under this system, the Company is making contributions to the Trust, with upper limits of ¥450 million (for three business years) for the tenure grant, and ¥420 million (for three business years) for the retirement grant, respectively. With regard to this system, upper limits for share grants were set at 56,000 points for the tenure grant (for a single fiscal year) and 51,000 points for the retirement grant (for a single fiscal year) separately from the upper limits on compensation stated in 4. above at the 14th Annual General Meeting of Shareholders (March 28, 2017).

- FY2018 actual performance of principal indicators related to performance-linked compensation

ROIC	Net sales	Operating income	Profit
12.5%	¥282,422 Million	¥29,468 Million	¥25,146 Million

Performance-linked compensation for the fiscal year under review is calculated based on the figures in the financial results as of December 31, 2017.

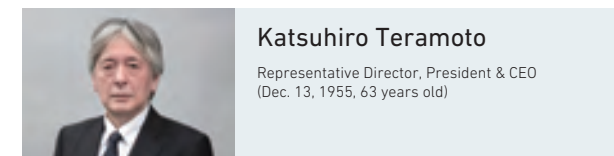
However, in the fiscal year under review, Harmonic Drive Systems Inc., an equity-method affiliate of the Group, acquired additional shares in its own equity-method affiliate, resulting in equity in earnings of affiliates. Therefore the relevant income was subtracted from the results figures stated above in the indicator adopted.

Treatment/Reduction of Cross-shareholdings

Every year the Board of Directors makes examinations based on certain criteria about the purpose, benefit and capital cost-based risk of cross-shareholdings to decide whether to continue holding each of the stocks and on the number of shares to be kept. Stocks for which the examination results indicate that it is not appropriate to keep holding them shall be sold in a timely manner in consideration of the stock price and market trends.

Management Team

Board of Directors (as of March 26, 2019)



Katsuhiko Teramoto

Representative Director, President & CEO
(Dec. 13, 1955, 63 years old)

- 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, Planning Department, Accessibility Innovations Company of Nabtesco Corporation
- Feb. 2013 Deputy Senior General Manager, Corporate Planning Division, and General Manager, Corporate Planning Department of Nabtesco Corporation
- Jun. 2015 Representative Director (to present), Managing Executive Officer and Senior General Manager of Corporate Planning Division of Nabtesco Corporation
- Mar. 2017 President and Chief Executive Officer (CEO) of Nabtesco Corporation (to present)
- Mar. 2018 President of Nabtesco Corporation (to present)

Reasons for appointment

Mr. Katsuhiko Teramoto has served as Representative Director since June 2015, and has appropriately led and supervised management. In addition, after serving as Vice President of Accessibility Innovations Company and Senior General Manager of Corporate Planning Division, he currently serves as the President, a position bearing the highest responsibilities for business execution, and 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 sustainable improvement in corporate value, and thus appointed as Director.

Number of shares of the Company held: 9,400 shares



Shinji Juman

Representative Director,
Managing Executive Officer
Component Solutions Segment
President, Power Control Company, and in charge of Production Innovation
(Aug. 28, 1957, 61 years old)

- 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 Plant 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
- Jun. 2015 Managing Executive Officer of Nabtesco Corporation (to present)
- Mar. 2017 Director of Nabtesco Corporation
- Jan. 2018 In charge of Production Innovation of Nabtesco Corporation (to present)
- Mar. 2018 Representative Director of Nabtesco Corporation (to present)
- Jan. 2019 Managing Executive Officer, Component Solutions Segment of Nabtesco Corporation (to present)
- President, Power Control Company of Nabtesco Corporation (to present)

Reasons for appointment

Mr. Shinji Juman has engaged in management of the Company as Director from March 2017, and has effectively fulfilled his roles and duties. After serving as President of Nabtesco Automotive Corporation and President of Precision Equipment Company, he currently serves as Managing Executive Officer, Component Solutions Segment, and President of Power Control Company and is in charge of Production Innovation, and has broad experience and extensive insight as a corporate manager. Due to these factors, he has been determined to be an appropriate person to realize sustainable improvement in corporate value, and thus appointed as Director.

Number of shares of the Company held: 7,300 shares



Kazumasa Kimura

Director
Executive Officer, Corporate Planning, Accounting & Finance,
Information Systems and Corporate Communication
(Aug. 17, 1961, 57 years old)

- Jun. 2011 General Manager, Manufacturing Department, Tsu Plant, Precision Equipment Company of Nabtesco Corporation
- Jun. 2012 General Manager, Manufacturing Department, Tarui Plant, Power Control Company of Nabtesco Corporation
- Apr. 2015 Representative Director and Vice President of Hyst Corporation (merged into Nabtesco Corporation in Apr. 2016)
- Mar. 2016 General Manager, Production Management Department, Power Control Company of Nabtesco Corporation
- Mar. 2017 Executive Officer (to present) and President, Power Control Company of Nabtesco Corporation
- Jan. 2019 Executive Officer, Corporate Planning, Accounting & Finance, Information Systems and Corporate Communication of Nabtesco Corporation (to present)
- Mar. 2019 Director of Nabtesco Corporation (to present)

Reasons for appointment

After serving as General Manager of Manufacturing Department, Precision Equipment Company, General Manager of Production Management Department, Power Control Company and President of Power Control Company, Mr. Kazumasa Kimura is currently in charge of Corporate Planning, Accounting & Finance, Information Systems as well as Corporate Communication, and has broad experience at the Company and extensive insight concerning production. Due to these factors, he has been determined to be an appropriate person to realize sustainable improvement in corporate value, and thus appointed as Director.

Number of shares of the Company held: 1,479 shares



Yutaka Fujiwara

Outside Director
(Apr. 20, 1951, 67 years old)

- 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. (retired in Jul. 1998)
- 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 (retired in Jun. 2011)
- Aug. 2011 President & CEO of Cross-Border Bridge Corporation
- Jun. 2013 Director of Nabtesco Corporation (to present)
- Jun. 2017 Outside Director of KITZ Corporation (to present)
- Apr. 2018 Representative of Cross-Border Bridge Corporation (to present)

Reasons for appointment

Mr. Yutaka Fujiwara has worked overseas for a number of years and has broad experience and extensive knowledge and insight on global business. He has expertise in advanced corporate strategies and financial affairs, having been in charge of the financial affairs and investor relations sectors of a listed company, and as an Outside Director of the Company from June 2013, he has appropriately supervised management. The Company, having high regard for his experience and insight, has appointed Mr. Yutaka Fujiwara as Outside Director, so that we may utilize knowledge to provide supervision and advise.

Number of shares of the Company held: 100 shares



Daisuke Hakoda

Representative Director
President, Accessibility Innovations Company
(Oct. 25, 1957, 61 years old)

- 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, Shanghai Nabtesco Hydraulic Co., Ltd.
- Jun. 2013 Executive Officer of Nabtesco Corporation
- Jun. 2015 Director and Senior General Manager, General Administration & Human Resources Division of Nabtesco Corporation
- Mar. 2017 Managing Executive Officer (to present), Senior General Manager, Corporate Planning Division and Senior General Manager, 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
- Mar. 2018 Representative Director of Nabtesco Corporation (to present)
- Jan. 2019 President, Accessibility Innovations Company of Nabtesco Corporation (to present)

Reasons for appointment

Mr. Daisuke Hakoda has engaged in management of the Company as Director since June 2015, and has effectively fulfilled his roles and duties. After being engaged mainly in the areas of corporate planning as well as accounting and finance for many years, he currently serves as President of Accessibility Innovations Company, and has broad experience and extensive insight as a corporate manager. Due to these factors, he has been determined to be an appropriate person to realize sustainable improvement in corporate value, and thus appointed as Director.

Number of shares of the Company held: 16,921 shares



Goro Hashimoto

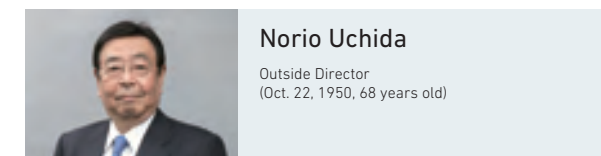
Director,
Managing Executive Officer, General Administration,
Human Resources and Legal & Compliance
(Feb. 7, 1957, 62 years old)

- Jan. 2009 General Manager, Legal Department of Nabtesco Corporation
- Jun. 2015 Director (to present), Executive Officer and Senior General Manager, Compliance Division of Nabtesco Corporation
- Jan. 2018 Executive Officer, General Administration, Legal & Compliance of Nabtesco Corporation (to present)
- Jan. 2019 Managing Executive Officer (to present), Human Resources (to present) of Nabtesco Corporation

Reasons for appointment

Mr. Goro Hashimoto has engaged in management of the Company as Director since June 2015, and has effectively fulfilled his roles and duties. After serving as General Manager of Legal Department, he is currently in charge of General Administration, Human Resources and Legal & Compliance, and has broad experience and extensive insight concerning general administration, legal matters, compliance, and risk management. Due to these factors, he has been determined to be an appropriate person to realize sustainable improvement in corporate value, and thus appointed as Director.

Number of shares of the Company held: 1,800 shares



Norio Uchida

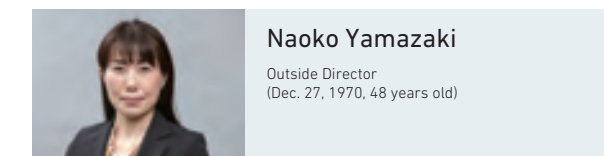
Outside Director
(Oct. 22, 1950, 68 years old)

- 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. (current Topcon Sokkia Positioning Japan 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 (retired in June 2015)
- Jun. 2015 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 manager, and as an Outside Director of the Company from June 2015, he has appropriately supervised management. 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 of the Company held: 0 shares



Naoko Yamazaki

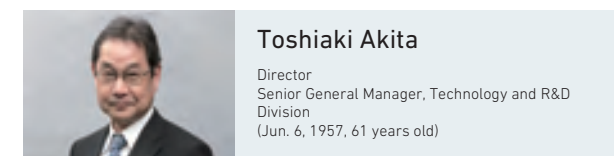
Outside Director
(Dec. 27, 1970, 48 years old)

- Apr. 1996 Joined the National Space Development Agency of Japan (currently Japan Aerospace Exploration Agency (JAXA)) (retired in Aug. 2011)
- 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
- 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)
- Mar. 2016 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 Ambassador of WINDS (Women's Initiative in Developing STEM Career), Ministry of Foreign Affairs of Japan
- Sep. 2017 External Director of Optron Co., Ltd. (to present)
- Jun. 2018 Outside Director of TOPCON CORPORATION (to present)
- Jul. 2018 Representative Director of Space Port Japan Association (to present)

Reasons for appointment

Ms. Naoko Yamazaki has broad insight as an engineer regarding the latest 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., has extensive skills in risk management and, as an Outside Director of the Company from March 2016, she has appropriately supervised management. The Company, having high regard for her experience and insight, requests the continued appointment of Ms. Naoko Yamazaki as Outside Director, so that we may seek her supervision and advice from decisions based on an objective and fair viewpoint.

Number of shares of the Company held: 0 shares



Toshiaki Akita

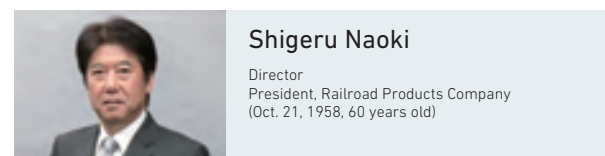
Director
Senior General Manager, Technology and R&D
Division
(Jun. 6, 1957, 61 years old)

- 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 Senior General Manager (Engineering), Technology and R&D Division of Nabtesco Corporation
- Jun. 2015 Executive Officer of Nabtesco Corporation
- Mar. 2016 President, NABTEC Co., Ltd.
- Jan. 2018 Senior General Manager, Technology and R&D Division of Nabtesco Corporation (to present)
- Mar. 2018 Director of Nabtesco Corporation (to present)
- Jan. 2019 Managing Executive Officer of Nabtesco Corporation (to present)

Reasons for appointment

Mr. Toshiaki Akita has engaged in management of the Company as Director since March 2018, and has effectively fulfilled his roles and duties. After serving as General Manager of Engineering Promotion Department, Railroad Products Company and Deputy Senior General Manager of Technology and R&D Division, etc., he currently serves as Senior General Manager of Technology and R&D Division, and has broad experience and extensive insight concerning technology overall. Additionally, he has experience as a corporate manager, including his role as President of NABTEC Co., Ltd. Due to these factors, he has been determined to be an appropriate person to realize sustainable improvement in corporate value, and thus appointed as Director.

Number of shares of the Company held: 2,593 shares



Shigeru Naoki

Director
President, Railroad Products Company
(Oct. 21, 1958, 60 years old)

- Jul. 2013 Plant Manager, Tsu Plant, Precision Equipment Company of Nabtesco Corporation
- Jun. 2014 Executive Officer of Nabtesco Corporation
- Mar. 2017 Vice President, Railroad Products Company of Nabtesco Corporation
- Aug. 2017 President, Railroad Products Company of Nabtesco Corporation (to present)
- Mar. 2018 Managing Executive Officer of Nabtesco Corporation (to present)
- Mar. 2019 Director of Nabtesco Corporation (to present)

Reasons for appointment

After serving as Plant Manager of Tsu Plant of Precision Equipment Company, Mr. Shigeru Naoki currently serves as President of Railroad Products Company, and has experience and extensive insight as the manager of a broad range of business areas at the Company. Due to these factors, he has been determined to be an appropriate person to realize sustainable improvement in corporate value, and thus appointed as Director.

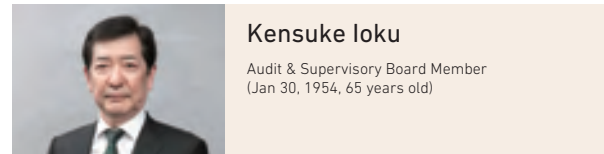
Number of shares of the Company held: 3,400 shares

* The average term of office of outside directors was 2.7 years as of March 26, 2019.

* Number of shares held as of December 31, 2018

Management Team

Audit & Supervisory Board Members (as of March 26, 2019)



Kensuke Ioku

Audit & Supervisory Board Member
(Jan 30, 1954, 65 years old)

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 of the Company held: 9,800 shares



Kenichi Kikuchi

Audit & Supervisory Board Member
(Dec. 18, 1959, 59 years old)

Apr. 2015 Senior Manager, Accounting & Finance Department of Nabtesco Corporation
Jul. 2017 General Manager, Business Auditing Department of Nabtesco Corporation (to present)
Mar. 2019 Audit & Supervisory Board Member of Nabtesco Corporation

Number of shares of the Company held: 0 shares



Zenzo Sasaki

Audit & Supervisory Board Member (Independent)
(Nov 1, 1952, 66 years old)

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 (retired in Nov. 2012)
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
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 of the Company held: 0 shares



Takemi Nagasaka

Audit & Supervisory Board Member (Independent)
(Jan 24, 1956, 63 years old)

Oct. 1978 Joined Musashi Audit Corporation (currently Ernst & Young ShinNihon LLC) (retired in Jul. 1981)
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 (to present) (retired in Jun. 2016)
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 of the Company held: 100 shares



Tetsuro Hirai

Audit & Supervisory Board Member (Independent)
(Dec. 19, 1955, 63 years old)

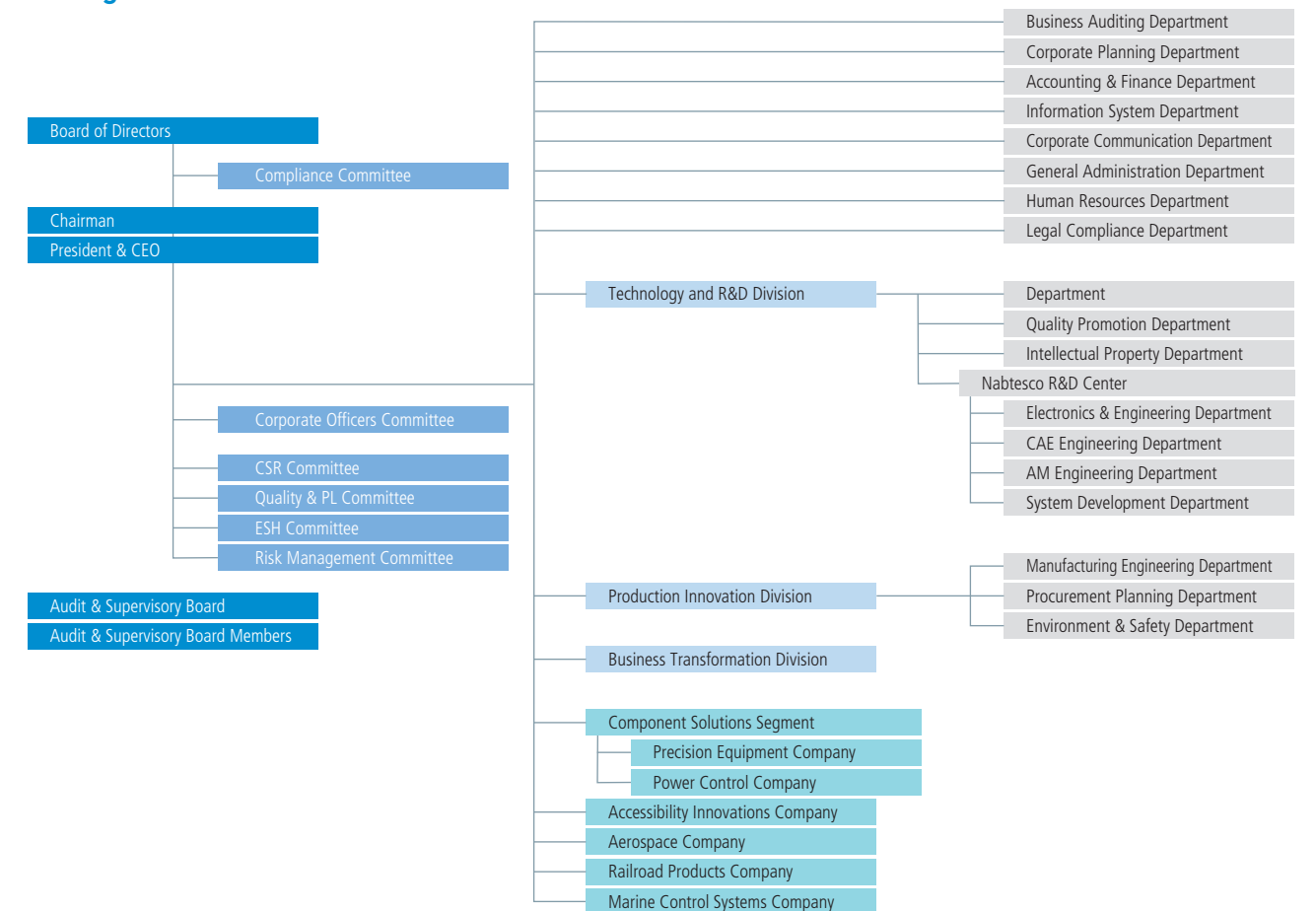
Apr. 1980 Joined Toyota Motor Co., Ltd. (current Toyota Motor Corporation)
Jan. 2006 General Manager, Vehicle Planning Department, Global Strategic Production Planning Division and Project General Manager of China Division of Toyota Motor Corporation
Jan. 2008 General Manager, Machinery Division, Motomachi Plant of Toyota Motor Corporation (retired in Jun. 2010)
Jun. 2010 Executive Officer of Toyota Tsusho Corporation
Jun. 2011 Managing Executive Officer of Toyota Tsusho Corporation
Apr. 2018 Technical Supervisor of Toyota Tsusho Corporation (to present)
Mar. 2019 Audit & Supervisory Board Member (Independent) of Nabtesco Corporation (to present)

Number of shares of the Company held: 0 shares

Executive Officers (as of May 1, 2019)

President	Katsuhiro Teramoto	Chief Executive Officer
Managing Executive Officer	Shinji Juman	Managing Executive Officer, Component Solutions Segment President, Power Control Company, and in charge of Production Innovation
Managing Executive Officer	Daisuke Hakoda	President, Accessibility Innovations Company
Managing Executive Officer	Yukihiro Imuta	General Manager, Business Transformation Division
Managing Executive Officer	Shigeru Naoki	President, Railroad Products Company
Managing Executive Officer	Goro Hashimoto	Managing Executive Officer, General Administration, Human Resources and Legal & Compliance
Managing Executive Officer	Toshiaki Akita	Senior General Manager, Technology and R&D Division
Executive Officer	Kiyoshi Ando	Deputy Senior General Manager, Technology and R&D Division, and in charge of Business Innovation
Executive Officer	Norimasa Takagi	President, Aerospace Company
Executive Officer	Shoji Ijuin	Vice President, Railroad Products Company, sales management
Executive Officer	Akiyoshi Kitamura	President of Toyo Jidoki Co., Ltd
Executive Officer	Atsushi Habe	President, Precision Equipment Company
Executive Officer	Kazumasa Kimura	Executive Officer, Corporate Planning, Accounting & Finance, Information Systems and Corporate Communication
Executive Officer	Tadashige Eto	President, Marine Control Systems Company
Executive Officer	Isao Shimizu	General Manager, Production Innovation Division
Executive Officer	Koji Nakano	President, Shanghai Nabtesco Hydraulic Co., Ltd.
Executive Officer	Ataru Inoue	President, Nabtesco Automotive Co., Ltd.
Executive Officer	Yukihiro Mizutani	Responsible for Domestic Businesses and General Manager of Product Management Department, Accessibility Innovations Company
Executive Officer	Seiji Takahashi	General Manager, Human Resources Department, Business Transformation Division and President, Nabtesco Link Co., Ltd.
Executive Officer	Toshiya Fujiwara	Plant Manager, Tsu Plant and General Manager, General Administration Department, Precision Equipment Company

Management Structure



Ensure Management Transparency

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 FY2018, to properly implement risk and crisis management at the Nabtesco Group and to maintain and improve corporate value, we conducted risk assessment on Nabtesco and the Group companies in Japan and overseas according to the risk management rules, which were overhauled in FY2016, and the detailed rules on risk management.

Also from FY2018, we have decided to conduct risk assessment annually for all Group companies across the world, whereas previously risk assessments were carried out every two years alternatively at domestic and overseas Group companies.

Moreover, given that risks faced by corporations have been multiplying and becoming increasingly diversified, we identified serious Group-wide risks based on the results of 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.

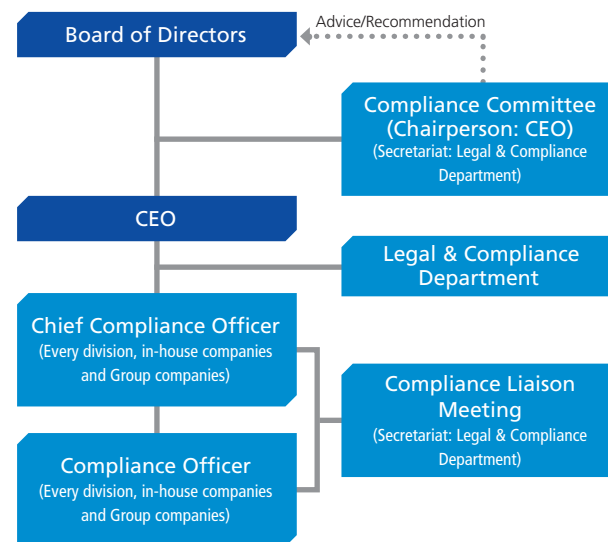
In FY2018, we managed the types of risks shown on the right and prevented losses.

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 for operational improvement based on their expertise. In

addition, in our compliance newsletter we publish risk management-related topics as part of our efforts to raise employees' awareness.

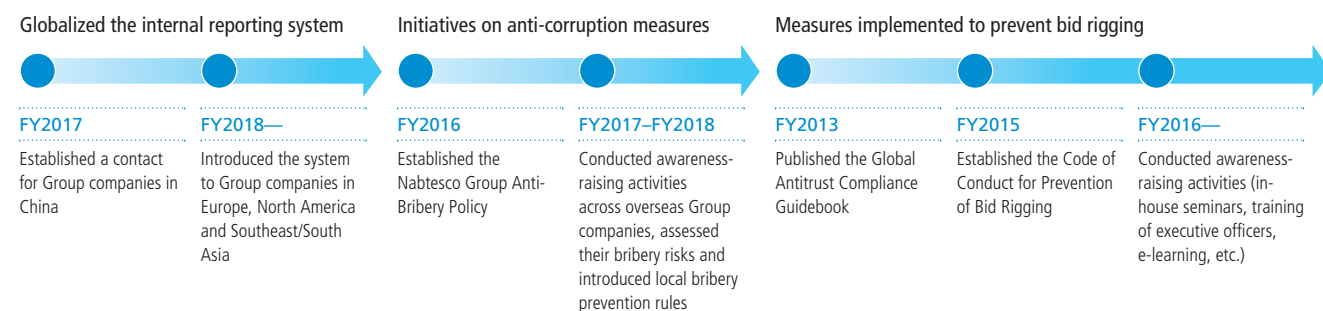
Compliance Promotion System



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

Web  Risk Factors
https://www.nabtesco.com/en/ir/policy/risk_factors.html

Established a global compliance system



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 compliance awareness among members of the Nabtesco Group 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 directors and employees of the Group for the implementation of the Corporate Philosophy in their business activities.

In order to help directors and 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 are available in nine languages (Japanese, 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.

We will continue to raise the awareness of the Code of Ethics through collective training to be provided locally in Japan and overseas as well as through e-learning.

Fostering Compliance Awareness

Since FY2011, we have designated every October as the Nabtesco Group's Corporate Ethics Month for all employees to conduct activities to raise their compliance awareness under the leadership of the management team at their workplaces.

In FY2018, we sent a video message from the CEO of Nabtesco to all Group companies in Japan and overseas and conducted a Compliance Awareness Survey targeting employees of Nabtesco and our subsidiaries in Japan. (A total of 5,360 employees responded to the survey, up 990 relative to the previous survey.)

Also in FY2018, we decided to change the frequency of the Compliance Awareness Survey from every two years to every year.

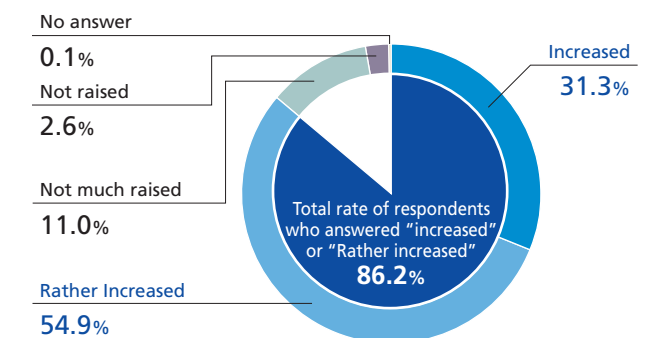
Nabtesco Group Code of Ethics

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

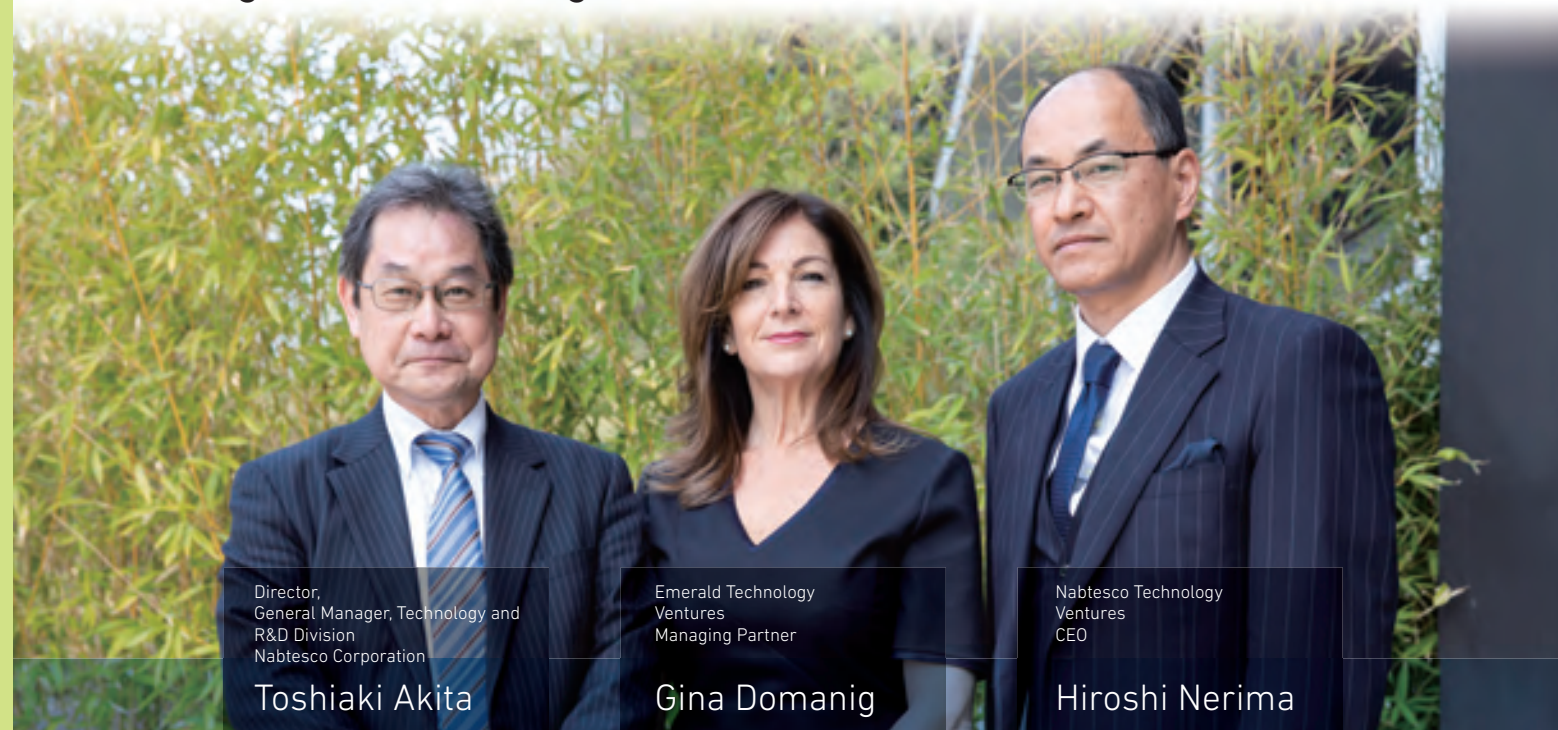
1. General Standards
2. Relationships with Company
 - (1) Respect for Human Rights
 - (2) Discrimination and Harassment
 - (3) Building Safe and Positive Workplace Environments
 - (4) Political and Religious Activities
 - (5) Conflicts of Interest
3. Fair and Honest Business Activities
 - (1) Fair Transactions
 - (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

Responses to the Compliance Awareness Survey "Was your compliance awareness raised in recent years?"



Total number of respondents: 5,360

Dialogue with a Strategic Partner



Director,
General Manager, Technology and
R&D Division
Nabtesco Corporation

Toshiaki Akita

Emerald Technology
Ventures
Managing Partner

Gina Domanig

Nabtesco Technology
Ventures
CEO

Hiroshi Nerima

Honorific titles omitted in the following dialogue.

Toward the Global Acceleration of Open Innovation

In June 2018, the Nabtesco Group founded Nabtesco Technology Ventures AG (NTV) in Zurich, Switzerland, as a company to manage the Group's corporate venture capital (CVC) fund. For the CVC activities, the Group also formed a strategic partnership with Emerald Technology Ventures AG (ETV). Toshiaki Akita, General Manager, Technology and R&D Division of Nabtesco Corporation, had a meeting with ETV Managing Partner Gina Domanig to talk about the partnership, which was designed to lead to the global acceleration of open innovation.

(Meeting held at the head office of NTV with CEO Hiroshi Nerima of NTV serving as moderator)

Will Nabtesco fall into "The Innovator's Dilemma" in the future?

Nerima: Mr. Akita, you taking responsibility as General Manager of the Technology and R&D Division. I would like to ask you about Nabtesco's technology strategies, the progress with open innovation and the CVC activities that play a core role for open innovation. I would also ask ETV Managing Partner Gina Domanig ETV for her advice on successful CVC management.

Mr. Akita, for what purpose did Nabtesco establish the CVC fund?

Akita: We established the fund to speed up the implementation of Nabtesco's technology strategies and accelerate open innovation through creative collaboration between Nabtesco and start-up companies. We want to promote creative collaboration, including joint development, with startups with motion control related technologies, for which Nabtesco has core technologies, and with those having "disruptive technology" that might pose a threat to Nabtesco in the future. Through the CVC

fund, we can make investments in two to three startups per year and a total of about 15 companies over the next five years by using roughly EUR 75 million in total.

Nerima: Specifically, in what startups do you plan to invest?

Akita: First of all, we are looking at startups that have technologies such as those related to robotics, motor drives, precision reduction gears and brakes, as well as those that have "disruptive technology" for these products. Second, we will consider startups with leading-edge production technologies for surface treatment and additive manufacturing. Third, we will examine startups with Industrie 4.0 technologies, such as those for sensors, IoT and AI.

Nerima: We associate "disruptive technology" with *The Innovator's Dilemma* written by Clayton Christensen. A large company cannot easily change itself after achieving success because it might lose a lot by doing something new. However, by undertaking newly developed technology, in that startups can make a profit, they are highly motivated to make changes.

Is Nabtesco in the "Innovator's Dilemma"?



(Akita) For Nabtesco to survive in the market, we have no choice but to continue fostering innovation for sustainable growth

Akita: Nabtesco started selling precision reduction gears more than 30 years ago, and the business has become a mainstay for the company. Since the products' launch, however, the company has not developed any new technologies or businesses along these lines. We have a concern about this and perhaps may be faced with the "Innovator's Dilemma."

Nerima: Specifically, Christensen points out the following:

- (1) Large customers place bulk orders for existing products and services.
- (2) As a result of using resources to meet the needs of these customers, the development of next-generation technologies tends to be delayed at large companies.
- (3) Over the course of time, social trends will begin to change and practical use of next-generation technologies will be expanded.
- (4) Then large customers will also want to use next-generation products.
- (5) However, large companies do not have any technologies or products to meet this new demand.
- (6) Finally, competitors and startups will dominate the market.

Christensen also points out that large companies have a tendency to protect their dominant position in the market, being afraid that they might lose a great deal if they let new competitors, which have new technologies that they do not possess, enter the market. Is this happening or will soon happen to Nabtesco?

Akita: Maybe that is true. For precision reduction gears, Nabtesco captures a 60% share of the global market. We have long been supplying our products to robotic manufacturers in Japan and abroad while developing new products to meet a wider range of customer needs. However, we do not need "disruptive technology" for progressive development. Conversely, in line with new social trends, Nabtesco's large customers are turning their sights to the development of humanoid robots, as well as industrial robots, and are making investments and forming business partnerships with startups in the AI sector toward the development of next-generation technologies and new products.

Nabtesco's creative "self-disruption"

Nerima: The elemental technologies required for such development include those for downsizing, electrification and sensor technology as well as IoT, AI and other hardware and software elements combining technologies.

Akita: These are so-called "Industrie 4.0" technologies. In

that sense, Nabtesco cannot fully handle these technologies with its past technological expertise. We have been working to catch up with competitors in the Industrie 4.0 field, especially by using external human resources, but the speed of open innovation for new technologies, which is led by startups, is too fast for us to catch up easily.

Startups have no time to spare when making decisions on market entry and the introduction of new technologies. They have no choice but to just do it. They have a clear understanding of what they need to do.

In contrast, large companies are not able to address this problem. They have core businesses, large customers and experienced employees. Even if they want to launch a new business on a full scale, they are faced with a range of constraints.

Nerima: Christensen says that leading companies need to engage in creative self-disruption in order to overcome the Innovator's Dilemma, without fearing "cannibalization" between new and existing technologies.

Ms. Domanig, I think you have closely witnessed companies being faced with the Innovator's Dilemma over the years in your capacity as Managing Partner of a unique technology-oriented venture capital company that bridges large companies and startups. Are there any "prescriptions" for established companies to accelerate innovation?

Domanig: I also think that leading companies need to engage in "creative self-disruption" to overcome the difficulties caused by disruptive technology, but doing the right thing is truly the most difficult. Specifically, there are four challenges that have to be overcome: (1) development of a new company; (2) purchase of a new company; (3) discontinuance of an existing company; and (4) understanding the differences between what is optimal for management and what is optimal for shareholders.

Nerima: Could you explain those four points in a bit more detail?

Domanig: First, Christensen proposed that a new company be established as a spinoff and be operated under the direct control of the president, somewhere far away from the head office and empowered with enough personnel, resources and money. However, it is challenging to do this due to the unavailability of highly motivated talented individuals. Executives in charge of the major businesses at the company will not let excellent human resources be transferred to the new company, and employees heading up the major businesses will be reluctant to work for a minor new business. It is also difficult to find and recruit suitable human resources.

Second, while purchasing a startup might be an easier option, it is difficult to identify the appropriate startup to purchase. Post-merger integration (PMI) is really challenging even between large companies, and its success rate is not that high. It would be even more difficult between a large company and a startup. There are uncertainties about the startup's technological uniqueness, business feasibility and profitability. Moreover, if the



(Domanig) Investing through CVC thus entails a very careful process for a large company and a startup to understand each other toward the final M&A.

management team is unexperienced, which is often the case, the possibility of successful integration will further decrease.

Further, it is truly challenging for a large company to discontinue an existing business. Directors tend to continue postponing doing so while in service, making excuses by saying: "We are paying attention to future business trends," "We are carefully measuring the potential of new technologies," "We refrain from making careless decisions quickly," "We are constantly communicating and consulting with all those concerned," and "We are actively considering creative collaboration with other companies through strategic partnerships." They can avoid incurring the enmity of those above them, colleagues and junior staff by postponing the discontinuance.

Even if a large company has met these challenges in its effort to get out of the Innovator's Dilemma, it will be faced with the fourth problem: objections from shareholders. It is unfortunate, but could happen.

In particular, for short-term shareholders it would be a waste of money if a company in which they have invested in recognition of its existing business makes a bold decision to let "cannibalization" happen between existing and new technologies. These shareholders will not care even if large companies become extinct along with their existing technologies and will choose to invest directly in new-generation startups for more efficient use of their capital.

Nerima: Does Nabtesco need to engage in "creative self-disruption"?

Akita: Nabtesco was launched as the merger of two companies 16 years ago and was in fact established through creative self-disruption. Overcoming the four problems pointed out by Ms. Domanig, Nabtesco was founded and continued to achieve sustainable growth to expand its sales and market value. However, the self-disruption process launched at the foundation of the company has come to a stop and the excitement and passion has gone. Therefore, I think we are beginning to face the challenges pointed out by Ms. Domanig.

CVC is an important strategic tool for the solution of the dilemma.

Nerima: You think Nabtesco needs to implement its second creative self-disruption, going back to the basics. What do you think the company specifically needs to do?

Akita: Nabtesco is a technology-oriented company and has motion control technology as its mainstay. For Nabtesco to

survive in the market, we have no choice but to continue fostering innovation for sustainable growth. In the current tendency toward open innovation led by startups, I think CVC provides an effective method for Nabtesco to meet the challenges pointed out by Ms. Domanig.

Domanig: Based on my experience at Emerald, CVC provides large companies with an important strategic tool for the solution of the Innovator's Dilemma.

A CVC fund helps a company to meet the challenge of implementing a project that is independent from the head office and is empowered with enough personnel, resources and money, as proposed by Christensen. CVC also provides a strategic tool for a company to meet the second challenge, which is to purchase a startup with promising technologies.

CVC-based minority investment provides the head office with a means to build an M&A pipeline. The five- to 10-year investment period could be considered a long "due diligence" period. Investing through CVC thus entails a very careful process for a large company and a startup to understand each other toward the final M&A.

Akita: CVC cannot meet the third challenge of discontinuing an existing business. However, CVC investments are made outside the decision-making scope of the head office for prompt and flexible investing within the range and amount decided by the Board of Directors and are free from the constraints found at the head office.

As for the fourth challenge, if management and shareholders can continue having a dialogue about sustainable growth and the long-term increase of corporate value without being overly influenced by short-term business performance, I think we can find the best solution for all stakeholders, including shareholders, employees and customers.

Domanig: Emerald has no obligations in relation to Nabtesco. From a neutral position and based on our experience and proven track record as well as on our unique abilities as a technology-oriented venture capital fund established in Switzerland, we can help Nabtesco carefully follow a due diligence process and make quick responses to startups.

Tips for success and traps leading to failure regarding the CVC fund

Nerima: However, there seem to be not many Japanese companies that have been successful in CVC activities. Could you give us tips for success as a person who has long been supporting Japanese companies in managing CVC funds?

Domanig: Nabtesco has just established a CVC fund, and for the company, let me introduce traps leading to failure rather than tips for success.

First, disruptive technology tends to cause resistance among your employees. They might say, "Such a

technology cannot be implemented," and "We should not invest in a startup with no established systems." They will have many reasons why they are against making investments in startups. While listening to these opinions, management must make appropriate decisions for total optimization while considering matters on a long-term basis.

Second, after making investments you might find yourself saying, "We have invested in the creative collaboration between our in-house companies and the startup but still cannot gain support from employees," and "Making investments to the monetary limit has become the very goal for the CVC fund and its secretariat." These are typical causes of failure.

Moreover, you might invest in a startup without enough knowledge of the investment conditions or without having expertise in the management of investees. For example, you might "purchase a startup at an unreasonably high price because of the lack of the ability to evaluate the business value," or "forget the fact that you are making an investment as a means to gain access to innovation." These are also frequent causes of failure.

Nerima: How could we avoid falling into such traps?

Domanig: It is important to design an organization in line with the business strategy and operate it as planned. Specifically, you need to establish a decision-making process for CVC activities apart from the existing decision-making system. The CEO, General Manager of the Technology and R&D Division or other director in charge should directly supervise the process and have direct communication with the head of the CVC fund to make decisions appropriately.

Next, you must understand that a CVC fund needs to play two different functions, and to meet this requirement, you must have the necessary human resources and

organizations. Specifically, these are: (1) a function to identify the needs of your in-house companies and foster creative collaboration with startups; and (2) a function to make investments in startups in line with the needs of the in-house companies. To do this, you need to have deep knowledge and insights regarding each business and technology as well as human resources who have strong connections with engineers.

Moreover, in order to find and adopt new technologies that might pose a threat to Nabtesco at an early stage, build a hypothesis for new technologies apart from your internal needs and make investments in the technologies by overcoming differences in opinions among members of your company.

Nerima: Hasn't Nabtesco fallen into the traps yet?

Akita: Nabtesco has designed an ideal organization for the CVC and will implement it fully toward the future. I will monitor the CVC activities as General Manager of the Technology and R&D Division to ensure truly effective use of the fund.

Nerima: Finally, what do you think is important in order to foster creative collaboration with startups?

Domanig: You might need to think how to provide a startup with the resources that it needs rather than what you can take from the startup.

Akita: To this end, it is critical for us to engage in dialogue with startups from their viewpoints. We need to deal with startups by respecting them as our business partners on an equal footing.

Domanig: I am glad that Emerald has been given an opportunity to help Nabtesco foster creative collaboration as a strategic partner of the company. I will make efforts to support NTV in getting their CVC activities on track and help Nabtesco accelerate its movement toward open innovation.



Materiality

Enhance Customer Satisfaction

The Nabtesco Group is working to enhance our competitive edge in our existing businesses while also creating new products and services in order to meet the diversified and advanced needs of customers. In particular, we endeavor to supply high value-added products and services that meet the quality, cost and delivery (QCD) needs of customers in pursuit of the enhancement of their 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) after-sale services.

Increasing R&D Efficiency and Promoting Human Capital Development through Proactive Open Innovation

Nabtesco is fostering open innovation.

Our core open innovation base is the Nabtesco R&D Center (RDC), which was 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.

We are collaborating with ETHZ of Switzerland to build a power electronics-related theory and develop a prototype along with starting a joint research project to develop a motion control system.

Furthermore, in June 2018, Nabtesco established Nabtesco Technology Ventures AG (NTV) in Zurich, Switzerland, which will lead our corporate venture capital (CVC) activities.

In addition, we have established a strategic partnership regarding the CVC activities with Emerald Technology Ventures. Through this strategic cooperation, NTV will acquire Emerald's two decades of experience in corporate venturing, its global presence across the United States and Europe, and know-how on corporate value creation.

Materiality

Enhance Customer Satisfaction

Intellectual Property Activities to Support Innovation

Intellectual Property-Backed Management Strategies

In order to help all of its stakeholders including customers and partner companies to achieve sustainable growth and business expansion, the Nabtesco Group deems the core values that serve as a source of business competitiveness as intellectual properties and makes Group-wide efforts to promote intellectual property-backed management strategies that are designed to protect and increase the competitive advantage of such intellectual properties, thus pursuing the enhancement of corporate value.

Analyzing Core Value and Implementing Measures to Enhance That Value

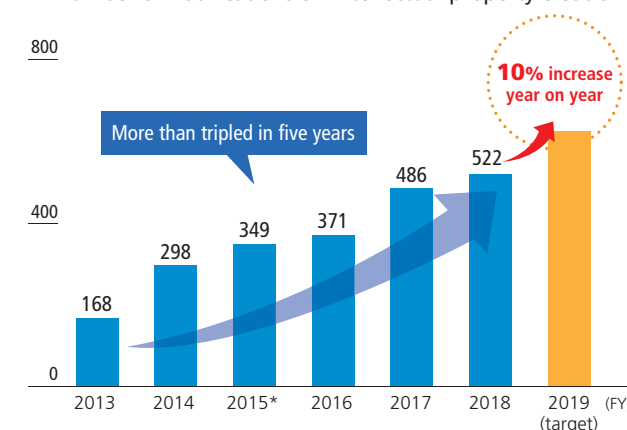
In its intellectual property strategies, the Nabtesco Group focuses on finding and enhancing technological elements for the future development of the Group in addition to protecting the existing businesses and profits.

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 their appropriate management.

Newly Including the Creation of Intellectual Property in the Performance Indicators

In FY2017, we included the creation of intellectual property in the performance indicators for the in-house companies and Group companies. It has been ensured that actions related to intellectual property strategies are systematized, formulated and implemented as one of the business plans in the medium-term management plans set for each of the in-house companies.

Number of notifications on intellectual property creation



* Because the fiscal year-end was changed from FY2015, the results for this fiscal year have been annualized.

In addition, with the aim of nurturing a culture in which all engineers proactively develop ideas for new businesses and technologies as well as design/manufacturing know-how, we encourage active creative activities as a performance evaluation target for in-house companies. Moreover, we give commendations to excellent in-house inventors who have contributed to our businesses under the Nabtesco Brilliant Inventor (NBI) system at the company's founding anniversary ceremonies, thus praising such contributions across the Group and increasing employees' motivation toward creative activities.

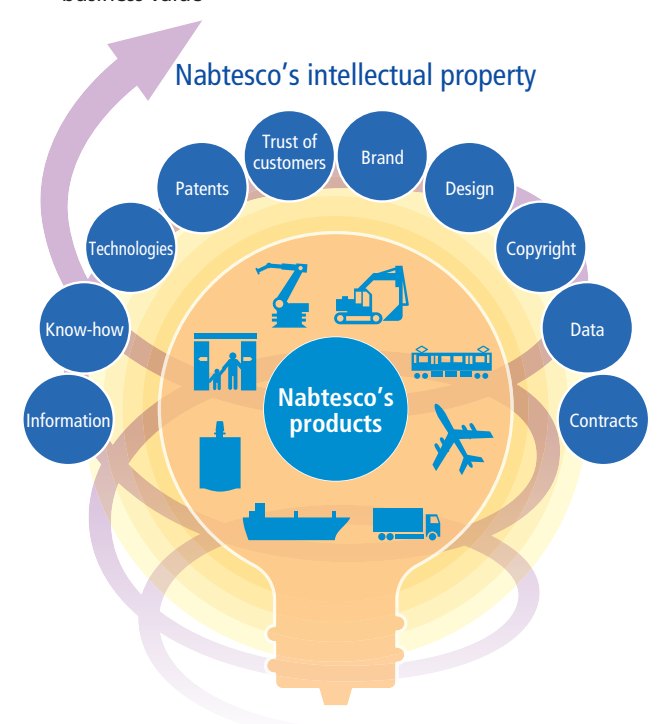
Through these initiatives, we endeavor to enhance the creativity of each employee to speed up the rate of innovation, with the aim of developing comprehensive technologies and intellectual capital.

Central Management of Intellectual Property and Promotion of Business Utilization

The Intellectual Property Department centrally manages information related to intellectual property, including original ideas and know-how, information on technological contracts and information about the intellectual property of customers and competitors gathered and analyzed by using technology marketing (IP landscaping), and utilizes such information for businesses based on information sharing within the Nabtesco Group and the generation of synergies from the core value.

The Nabtesco Group will continue to evolve its intellectual property activities in order to achieve sustainable and profitable growth with its customers in the future.

Intellectual property that enhances the Nabtesco Group's business value



Materiality

Enhance Customer Satisfaction

Manufacturing Innovation

Promoting Manufacturing Innovation with the Aim of Developing Unrivaled Manufacturing Technology to Be Globally Competitive

Since FY2016, the Nabtesco Group has been committed to promoting its manufacturing innovation in order to establish an overwhelming competitive edge and enhance profitability and capital efficiency.

Through manufacturing innovation, we endeavor to further enhance corporate value by pursuing even higher QCD performance to meet the needs of our customers based on advanced automation, renewed production management, logistics reforms and strengthening of supply chains, while improving profitability and capital efficiency.

Identifying Strengths and Weaknesses through Analysis of the Management KPIs of Each In-house Company

Based on multifaceted analysis of management Key Performance Indicators (KPIs), including the operating profit ratio, value added per manufacturing worker, inventory turnover period, production lead time and on-time delivery rate for customer services and procurement, we identify the strengths and weaknesses of each in-house company and implement measures based on such strengths across the Group while promoting the further enhancement of strengths.

Building a Visualization (Status Monitoring) System with ICT

As a result of the analysis of management KPIs, it was revealed that there have been significant delays in identifying issues and taking countermeasures due to a failure to grasp on-site issues on a real-time basis.

To address this issue, we have taken measures to develop a system to promote the visualization and unified management of on-site information as well as the early detection of daily issues through the usage of ICT devices.

We plan to automate decision-making and forecasting, which are currently conducted by people, through the introduction of manufacturing execution systems with

the use of AI, thus developing cutting-edge systems to realize production management suitable for each in-house company in the future.

Promoting Automation of Labor-intensive Work That Requires Advanced Skills

As there are processes that require advanced skills, including machining processes, assembly and inspection in plant operations, the automation of processes that depend on the advanced skills of workers is indispensable looking ahead to the further decline of the working-age population.

To this end, we promote the automation of high-level work processes by introducing and utilizing unique production technologies in addition to advanced robot and sensing technologies. In addition, we aim to develop flexible, advanced automated lines in order to respond to large variety and small quantity production and enable agile changes in variety and quantity.

Logistics Reforms for Overall Optimization across Supply Chains

While realizing a comprehensive production system without excess inventories by expanding the use of automated guided vehicles (AGVs) within the Group, we reinforce data linkage in supply chains. Moreover, we strive to enhance logistics efficiency through 3rd party logistics (3PL) and the milk-run system*.

* Collecting shipments in a preset route

Acquiring Overwhelming Cost Competitiveness While Maintaining Win-Win Relationships with Suppliers

We aim to attain cost competitiveness that overwhelms competitors through the synergies of in-house companies in purchasing activities such as centralized/joint procurement from suppliers that continue to provide high performance in terms of quality, cost and delivery (QCD). While pushing forward with CSR-oriented procurement, we are currently promoting the development of business continuity plans (BCPs) by our suppliers.

● ROIC Improvement by Building Manufacturing Innovation

ROIC improvement measures	Aim	Direction	Key challenges
Increasing operating income margin	■ Reduce internal costs	Strengthening production capability	<ul style="list-style-type: none"> • More advanced automation • Standardization/on-site improvement (manufacturing support) • Development of unique production technologies
	■ Lower procurement costs	Strengthening procurement ability (strengthening of supply chains)	<ul style="list-style-type: none"> • Optimization of "Make & Buy" • Cross-organizational procurement • Generating CR (Cost Reduction) synergies - Centralized/joint procurement
Increasing assets turnover	<ul style="list-style-type: none"> ■ Shortening production lead times ■ Shortening inventory turnover period 	Strengthening production management ability	<ul style="list-style-type: none"> • Renewal of production management with the use of ICT • Logistics reform - Realization of 3PL, milk-run system, etc.

Materiality

Proper, Fair and Transparent Procurement Activities

We at the Nabtesco Group have been pursuing collaboration with suppliers with the aim of strengthening our comprehensive procurement capabilities from the perspectives of sustainability, including 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 proper, fair and transparent procurement activities as one aspects of our materiality.

Nabtesco Group's Procurement Activities

Fundamental Approach for Proper, Fair and Transparent Procurement Activities

The Nabtesco Group conducts business with about 1,000 suppliers of various types, 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 proper, fair and transparent business transactions based on the proper cost structure and close partnerships with suppliers.

we have implemented SAQ* for primary suppliers, including key suppliers in and outside Japan every year since FY2014.

In FY2018, by expanding our scope to China, we implemented SAQ, which is based on our CSR-Oriented Procurement Policy using the questionnaire method, to 990 suppliers (all primary suppliers including 862 suppliers in Japan and 128 suppliers in China).

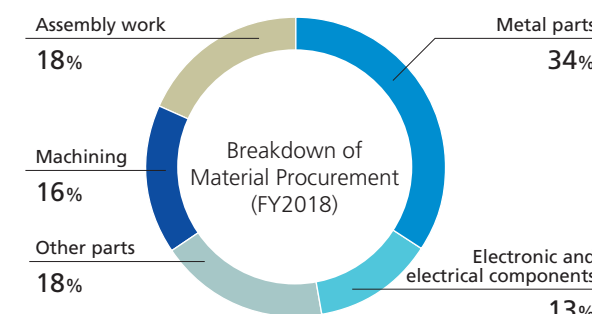
The questions in the questionnaire comprise six large categories and 41 middle categories based on the items in the CSR-Oriented Procurement Policy. We performed an evaluation according to the weight of each middle category item. We revised questions related to the environment in line with our science based targets (SBT).

Our goal is to obtain 80 points or more out of 100 points in each large category item by FY2019. In FY2018, 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 order to enhance our CSR activities, we visited 12 companies in Japan and five companies in China in FY2018 and worked on 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 questions and response methods.

*SAQ: Self Assessment Questionnaire (self-check sheet)

● Material Procurement in Japan



Establishment of Nabtesco Group CSR-Oriented Procurement Policy

In 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 primary suppliers for our business sustainability based on their trade volume, QCD performance, technical development capability, financial health and other factors and reflects them in our transactions. To enhance our CSR-oriented procurement,

Measures to Support Suppliers, Development of Business Continuity Plans (BCPs)

We at the Nabtesco Group deem potential damage to suppliers in the event of a large-scale disaster as a significant risk to our business continuity and have been taking measures to mitigate procurement risk.

In collaboration with local communities of the areas where many of our suppliers are located, we have asked many suppliers to attend the BCP awareness seminars held by the local communities. In addition, we provide those suppliers that have attended such seminars with an opportunity to participate in our lectures on formulating a BCP, thus providing an opportunity to implement measures toward formulating a BCP as a practical exercise.

Materiality

Ensure Quality and Safety

In our long-term relationships of trust with customers, the Nabtesco Group has engaged in market creation, product development and product safety in collaboration with customers. By recognizing the realization of safety, comfort and a sense of security for general people who use our customers' products as a material issue, we endeavor to collect and analyze data on actual usage conditions and usage environment while seeking the necessary safety, reliability and stability as well as comfort based on functionality and performance in order to ensure quality and safety.

Management of Quality

Promotion System Based on the Quality & PL Committee

In an effort to listen to the voices of its customers and the users of its products and to respond to the changes, demands and requests of society, the Nabtesco Group sets forth the Nabtesco Group Quality and PL* Policy and promotes manufacturing based on quality engineering, quality management and PL management (including product safety control) under the leadership of the Quality and PL Committee.

At the Quality and PL Committee, annual activity policies are determined by clarifying issues and challenges for the entire Group, and actual work is conducted by each in-house company by applying the policies to specific activities. However, since the types of products and target industries significantly vary among in-house companies, it has become increasingly difficult to carry out audits on the activities of all in-house companies in accordance with fixed rules and standards. To address such issues, we strive to grasp the situation of each in-house company, provide advice and identify what the head office can do in order to support improvement at our regular meetings, thus implementing more effective, specific measures.

*PL: Product Liability

● 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.

Continuing to Cultivate a Quality-Oriented Workforce to Create an Advanced Quality Culture

The Nabtesco Group provides a variety of systems and product lineups and believes that we will not be able to 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 a 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.

While the Quality University courses were initially targeted at selected design engineers when they were introduced in 2007, a course for managers was added in 2009. Since FY2012, we have designated a mandatory quality education 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 to increase their quality awareness. The number of employees who have completed the Quality University courses has been steadily increasing each year. The graduates have been acting as forerunners of the Nabtesco Group's culture of quality manufacturing.



Group photo of past students of the Quality University courses (Jan. 2010)

Attributing Importance to "Knowing Why" in Business Operations

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 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.

Measures toward Enhancing the Basis for Quality

In addition to the aforementioned 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, manufacturers' ethics training and training for mid-career hires.

* 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, "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". 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 members also summarize 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.

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"*1 incident reporting and safety awareness-raising activities.

As a result of these efforts, the lost time injury frequency rate*2 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.

*1 Near miss: An event that could have resulted in injury or other incidents
*2 lost time injury frequency rate: Please see Financial/Non-Financial Highlights on page 12.

Starting New Activities to Nurture a Safety Culture

In order to further improve workplace safety, we commenced new activities aimed at nurturing a safety culture and ensuring that the entire organization adopts a more safety-oriented attitude in 2017 in addition to implementing measures against individual risk factors. We will aim to achieve zero-workplace accidents by creating an organization that nurtures a safety culture through our four activities including the STOP3 activity, stratified safety education system, safety model workplaces and environmental safety forums.

Materiality

Develop Human Capital and Promote Workplace Diversity, Provide Safe and Comfortable Workplaces

The Nabtesco Group is implementing a wide range of initiatives on human capital management that makes use of the abilities of individual employees for the benefit of the entire company. 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 our human capital as the driving force for the growth of the Group.

Work Style Reforms

Securing Talented Workers and Increasing Labor Productivity

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 had been recorded monthly at around 25% of the company prior to the implementation of the work style reforms. While overtime has been reduced to around 20% now as a result of rectification measures against long working hours, we believe it is necessary to continue our efforts to improve labor productivity.

Furthermore, as the Japanese population is declining, the shrinking workforce is becoming a medium- to long-term social issue. Accordingly more businesses are eagerly trying to secure talented human resources while more and more people are quitting their companies for personal reasons.

Amid the rise in fluidity of human resources anticipated in the future, we believe that it will significantly boost our competitiveness if we give consideration to the work styles of individual employees and increase our attractiveness to potential employees by helping employees work with vigor while also leading fulfilling personal lives.

Becoming an Attractive Company where Employees Can Work with More Satisfaction

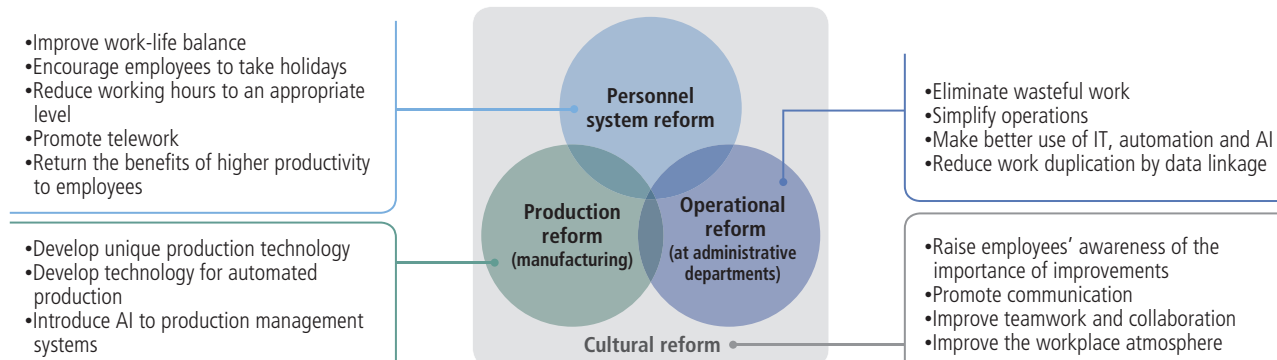
The Nabtesco Group has been fostering work style reforms entitled "Stage-up 2.0." This is comprised of (1) personnel system reform to improve work-life balance and the work environment; (2) operational reform to eliminate wasteful work by making better use of IT, automation and AI; (3) production reform to foster the development of production and automation technologies; and (4) cultural reform to provide the basis for other types of reform. By steadily securing talented employees and increasing labor productivity 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.

Methods for Implementing 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 continuing to execute a PDCA cycle, we will make each employee more aware of the importance of operational efficiency and provide an environment in which they can "Enjoy the Challenge," as stated in our long-term vision.

● Four Types of Reform for Work Style Reforms



Fostering Workplace Diversity

Active Employment of Non-Japanese Nationals Including Foreign Students Studying in Japan

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 the Nabtesco Group targeted specifically at foreign students studying in Japan and conducting recruiting activities aimed at overseas universities, as of December 31, 2018, foreign nationals from nine countries have joined Nabtesco's workforce.

Proactive Employment of Women

To promote employment of female employees, we hold job fairs specifically for female college students. While our target had been to attain a ratio of females among new graduates for managerial positions at no lower than 20% each year, the actual ratio for FY2017 and FY2018 fell below 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.

Promoting Employment of Persons with Disabilities


The Nabtesco Group has endeavored to maintain the employment of persons with disabilities and has achieved the statutory employment rate every year since FY2015.

In addition, we established Nabtesco Link Corporation, a Group company intended to promote the employment of persons with disabilities in Gifu Prefecture where one of our production sites is located, in FY2015. 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. In FY2017, Gifu Prefecture selected Nabtesco Link as one of the model employers for the employment of persons with disabilities.

Work-Life Balance

Realizing a 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 our organizations and increase our productivity. Based on this recognition we have introduced a range of systems for a better work-life balance.

Web  Work-Life Balance
<https://nabtesco.disclosure.site/en/themes/122>

As a result of these measures, Nabtesco has been certified as one of the Health and Productivity Management Organizations in the large enterprise category (White 500), receiving high recognition externally as well.

Human Rights Management

Human Rights Policy

The Nabtesco Group is committed to the upholding of human rights and prevention of corruption as our material issues. In FY2016, we established the Nabtesco Group Code of Ethics.

Further, Nabtesco committed to 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.

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.

Following an analysis on country-specific human rights risks in 16 countries where our business locations were situated, we performed human rights risk assessments at 41 Group companies located in the countries with higher risks, as well as major subsidiaries and production/sales bases in Japan (which cover 95% of Group employees). As a result, while none of the respondents were found to be noncompliant with local laws and regulations or international standards, we confirmed the facts with two companies for which concerns over the development of internal regulations and occupational health and safety management had been identified. We will urge corrective actions to these companies as required while conducting follow-up assessments in the future.

Materiality

Develop Human Capital and Promote Workplace Diversity, Provide Safe and Comfortable Workplaces

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 human capital in which 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. In addition to various training programs aimed at enhancing language capabilities including the intensive study camp for English conversation, we introduced an overseas trainee program that includes both study and work components in FY2012. By the end of FY2018 we had sent a total of 27 employees overseas under this program. Furthermore, in 2017, we

also introduced overseas job training for all employees in their fourth year of employment, in principle, with the aim of nurturing international business sense by experiencing different cultures.

To proactively develop human resources at Group companies outside Japan, the Nabtesco Group has been implementing various training programs aimed at improving the skills of locally hired personnel. In China, we provide business management training for executive candidates at business locations to promote the appointment of locally employed staff to managerial positions. In addition, we offer an OJT-based training program 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. 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.

In order to help employees understand and implement our values prescribed in The Nabtesco Way through 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. We have also been holding the "Nabtesco Way Month" every in April since FY2013. These meetings are held at everyone's own workplaces, allowing participants to discuss and share about the Nabtesco Way as well as how they relate it with their own experiences and daily thoughts. In addition, 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 level-specific training seminars and other employees selected based on certain themes deepen their understanding and implementation of The Nabtesco Way, and thus develop a greater 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 has been increasing both within and outside Japan.

Sharing Values among All Group Members

These awareness-raising activities have proved to be effective in creating a sense of unity across the Nabtesco Group. For further improvements, however, since 2018 we have changed the content of the activities in consideration of the actual situation at each base and company. The facilitators, who better understand the local situation, 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)
Ratio of satisfaction	67.1	68.6	69.3	78.5
(Male)		69.0	69.5	-
(Female)	67.1	68.1	69.2	-
Coverage of employee respondents	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 and 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).

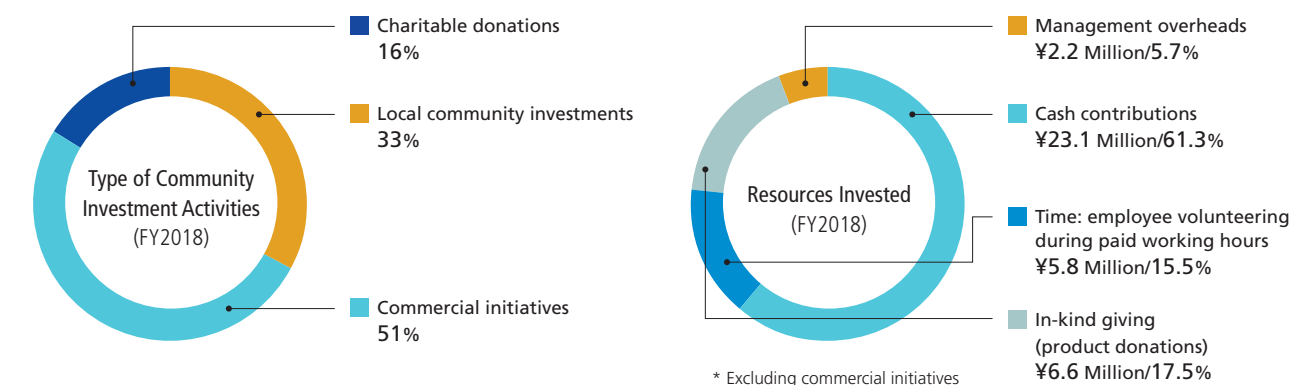
Materiality

Local Community Development

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 its products and services and community investment activities.

Nabtesco Group's Community Investment

Resources Invested and Impact



◆ Environment

Number of mangroves planted (FY2013 to FY2018)
FY2018: 720
Accumulated total: 3,570

Number of persons who planted mangroves (FY2013 to FY2018)
FY2018: 245
Accumulated total: 852

◆ Education

Number of persons who joined various programs
FY2018: 251,212

◆ Welfare

Number of welfare devices donated (FY2008 to FY2018)
FY2018: 15
Accumulated total: 323

Establishment of the Nabtesco Group Community Investment Policy

In the Nabtesco Group Community Investment Policy established in FY2018, it is clearly stated 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. The policy states the targets of the activities as value creation for stakeholders to contribute to solving global social challenges and social challenges faced by local communities in each region where the Group conducts business. As the Group values, it also states that we encourage employees' challenging spirit and innovative ways of thinking by contributing to solving social issues in fields related to the Group's business and that we strive

to further increase the Group's brand value. Moreover, 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 the environment, education, and welfare as priority areas. Those three areas are highly related to the sustainable business activities of the Group and correspond to the SDGs discussed in the section on materiality. Through the proactive promotion of community investment activities, we will work to establish relationships of trust with local communities while contributing to their development.

Web



Consideration of Community and Society
<https://nabtesco.disclosure.site/en/themes/140>

Materiality Environment

The Nabtesco Group is implementing a range of environmental initiatives. In line with the enforcement of the Paris Agreement in 2016, the Nabtesco Group has set our long-term CO₂ emission reduction targets to be attained by FY2050 and is speeding up anti-climate change measures. We are also fostering multifaceted 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

Since its establishment in 2003, the Nabtesco Group has positioned environmental measures as one of its business strategic priorities and promoted environmental management.

The Nabtesco Group has set up the Group ESH Committee as the promotional organization related to the environment, safety and health. A series of discussions has 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.

By formulating our Environmental Philosophy and Environmental Action Plan in 2005, 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, leveraging it in the building and operation of our environmental management system. All Nabtesco Corporation plants and seven major Group companies (that account for over 70% of consolidated sales) are already certified under ISO 14001, and we are fostering environmental measures across the Group.

In addition, we have established a team to respond to the recommendations by the Task Force on Climate-related Financial Disclosures (TCFD), which were reported to the Financial Stability Board (FSB) in 2017, and have been endeavoring to grasp the financial impact of risks and opportunities arising from climate change.

Speeding Up the Execution of the PDCA Cycle for Saving Energy through the Nabtesco Energy Management System (NEMS)

For energy conservation, we established the Nabtesco Energy Management System (NEMS) for the continuous execution of the PDCA cycle under the control of the Group ESH Committee 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. By disseminating and sharing the obtained data at the monthly meetings of our sites, we extract energy conservation ideas and promote activities for saving energy by all employees. Also, by sharing information on such activities at the Board of Directors meeting each month, we will respond quickly when improvement is deemed necessary.

Reducing CO₂ 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, as well as a 9% or more reduction in our CO₂ emissions per unit of sales (global) including our sites outside Japan (relative to FY2015 levels). Furthermore, we have set reduction targets for CO₂ emissions per unit of sales (global) of 30% for FY2030 and 80% for FY2050.

These targets are in line with the 2 degrees Celsius target¹ set as an international benchmark for climate change countermeasures to be implemented in and after 2020 under the Paris Agreement², which came into effect in 2016. Our long-term target for Nabtesco Corporation's CO₂ emissions also qualifies as a Science Based Target (SBT)³. Nabtesco is the eighth Japanese company to get the SBT qualification.

In order to achieve the long-term target, we are promoting environmental conservation through the provision of our products based on 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, we incorporated "environmental contribution achievement level" in the performance indicators for each division in FY2017, 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 us to work closely with our suppliers to take initiatives to reduce their greenhouse gas emissions. In response, as of 2017 we began a survey of our main suppliers (top suppliers that constitute 70% of the annual amount of purchases) to see whether they have set voluntary targets to reduce their greenhouse gas emissions. According to the results of the FY2018 survey, 51.3% 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.

Greenhouse Gas Emissions from the Entire Supply Chain

Classification	FY2015	FY2016	FY2017	FY2018
Direct emissions (Scope 1) ^{1, 2}	7,074	7,259	8,686	8,781
Indirect emissions through the use of electricity and others (Scope 2) ^{1, 2}	47,729	50,865	61,538	61,395
Emissions from the supply chain (Scope 3) ³	826,842	885,494	871,463	979,097

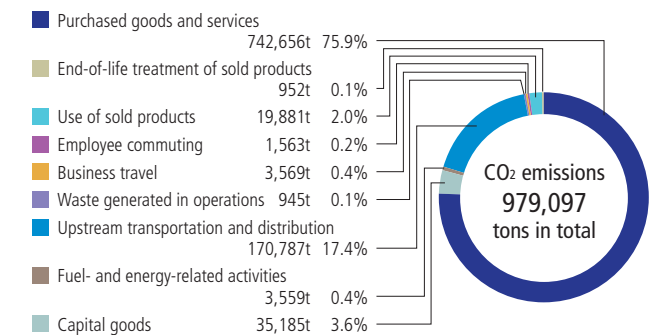
[Note] The figure for the Nabtesco Group in FY2015 was calculated with the scope of the survey being the 12 months from January to December 2015.

*1 The calculation scope includes Nabtesco Corporation and Group companies both in and outside Japan (25 companies and 41 sites).

*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.

Scope 3 Emissions



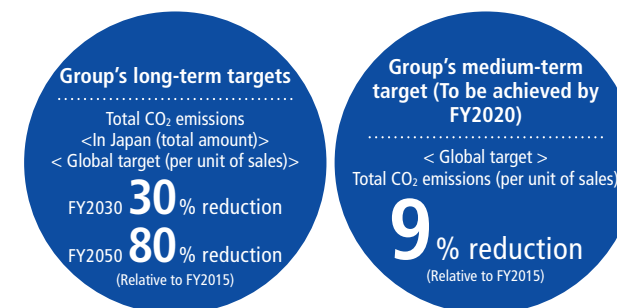
The Scope 3 calculations for FY2018 were made by the following method and for the following period and scope.

● 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

Web Striving for Harmony with Global Environment Combating Climate Change
<https://nabtesco.disclosure.site/en/themes/126>

Measures Addressing 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 Achievement of positive environmental contribution
Environmental Management	2003: Six plants operated NEMS by major Group companies, have become ISO 14001 certified			Tools for managing environmental information		NEMS(Nabtesco Energy Management)	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 emissions	Calculation of Scope 3 emissions			Third-party verification of calculation of Scope 3 emissions	
Cooperation with suppliers and customers							Improving logistics efficiency using Scope 3 data Started Environmental Self Assessment Questionnaire (SAQ)



Gaining Higher External Evaluation

Being internationally recognized for its environmental measures and information disclosure, Nabtesco was included in CDP's Climate Change A List 2018 and was selected as Supplier Engagement Leader 2019, 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 strategies to combat climate change and CO₂ emissions. The CDP



Materiality Environment

annually discloses evaluation scores to the public and selects companies that demonstrate excellence in the relevant measures as the A List companies.

In addition, Nabtesco was placed first in the machinery category in the Ranking of Japanese Corporations for Effective Efforts to Address Climate and Energy Issues: Machinery and Precision Equipment published by the World Wide Fund for Nature (WWF) Japan. 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 activities to reduce landfill waste to zero based on the approach of the 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.

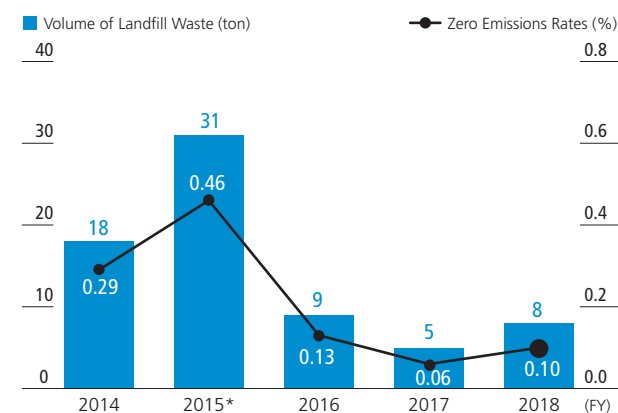
In FY2018, the separation of waste bound for landfill was delayed due to an increase in production load at some plants, which resulted in a temporary rise in the amount of waste.

The zero emissions rate was 0.1%, below the target rate for FY2018. 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.

*0.05% or below is set as 0

Volume of Landfill Waste and Zero Emissions Rates



* 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.

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.

Measures to Reduce Use of Raw Materials

By reusing components and reducing the production of new ones, the Nabtesco Group is working to minimize the use of resources. In addition, we have been fostering the MRO (maintenance, repair, and overhaul) business to optimize 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 amounts 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 our 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.



Being internationally recognized for these measures and information disclosure, Nabtesco was included in the CDP's Water Security A List 2018, receiving the highest-level rating from the organization.

Water Use and Water Discharge Management

The Nabtesco Group 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 FY2018, 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 FY2018 amounted to 700,000m³, which was slightly lower than the previous fiscal year. 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 our 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 FY2018, we spent ¥2.86 million to enhance the rainwater discharging function, install drainage pipes and make our facilities more water-resistant.

Target of Water Use Activities and FY2018 Results

Item	Targets	FY2018 results	Status
Global water use	Year-on-year change rate at 10%: 0.858Mm ³ or less	0.756Mm ³	Achieved
Global water quality control	In-house management criteria* Excessive number: zero	0	Achieved

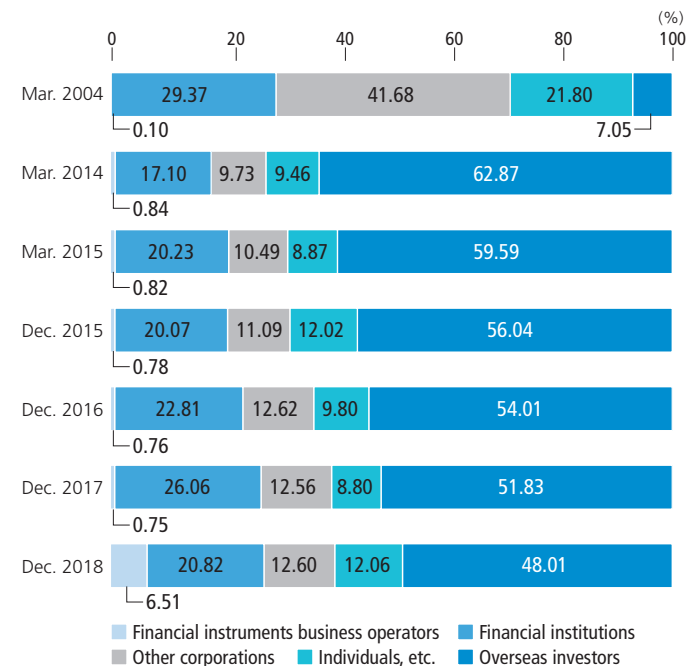
* Set criteria that are stricter than local standards, and monitor and manage the discharge of water.

Corporate Profile

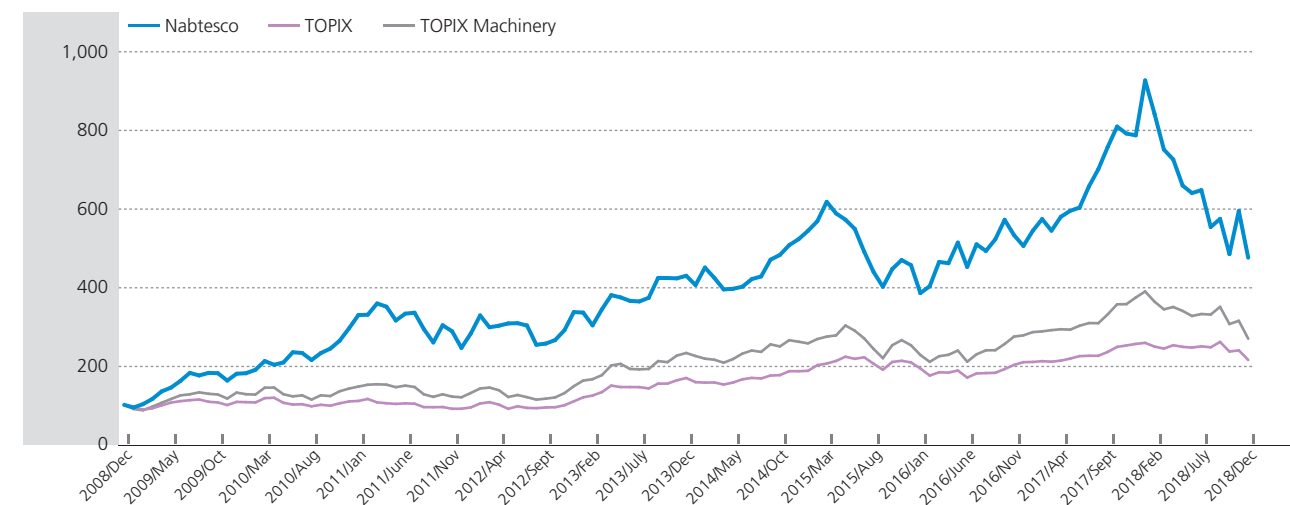
Corporate Profile (as of December 31, 2018)

Company Name	Nabtesco Corporation
Established	September 29, 2003
Address	7-9, Hirakawa-cho 2-chome, Chiyoda-ku, Tokyo 102-0093, Japan
TEL	+81-3-5213-1133
FAX	+81-3-5213-1171
Capital	¥10 Billion
Number of Issued Shares	125,133,799
Minimum Trading Unit	100 All of our issued shares are common stock with a minimum trading unit of 100 shares.
Employees	Non-consolidated 2,296 Consolidated 7,713
Consolidated In Japan	14 (excl. 4 equity method affiliates)
Companies Overseas	46 (excl. 5 equity method affiliates)

Breakdown of Shareholding by Investor Type



Total Shareholder Return (TSR) for the Past 10 Years



Return on Investment (ROI) as of December 31, 2018

	Past one year	Past three years		Past five years		Past 10 years	
	Annualized return	Cumulative return	Annualized return	Cumulative return	Annualized return	Cumulative return	Annualized return
Nabtesco	-42.8%	4.6%	1.5%	11.3%	2.2%	374.3%	16.8%
TOPIX	-16.0%	3.0%	1.0%	27.3%	4.9%	114.3%	7.9%
TOPIX Machinery	-28.0%	6.7%	2.2%	15.7%	3.0%	168.5%	10.4%

(Note 1) Total shareholder return (TSR) refers to total investment return for shareholders by combining capital gains and dividends.

(Note 2) The above graphs show ROI as of December 31, 2018 in case where investments were made on December 31, 2018. As for the data on Nabtesco shares, investment results calculated based on the stock prices by adding dividends (on the assumption that dividends will not be reinvested) have been indexed by setting the amount of investments as of December 31, 2008 as 100. TOPIX and TOPIX Machinery have also been indexed in a similar manner by using data that included dividends.

(Note 3) The above chart indicates ROI (dividend-included) as of December 31, 2018 based on the cumulative return and the annualized return in cases where investments were made at respective timing during the period between one year ago (on December 31, 2017) and 10 years ago (on December 31, 2008).

(Note 4) Figures of annualized return indicate annual average rates of return which are annualized using geometric average of ROI during the applicable period.

(Source) Prepared by the Nabtesco Group based on the Tokyo Stock Exchange's monthly closing stock prices and other data

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, 2018 to December 31, 2018

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 2019 (Published annually)

Performance Data

Nabtesco has changed the accounting closing date of the 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 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 our 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 recognized on an international level, which is evident by the fact that Nabtesco is included in the Dow Jones Sustainability World Index, FTSE4Good, STOXX Global ESG Leaders Index and all ESG indices adopted by the GPIF. In addition, we have obtained the highest evaluations on environmental measures from the CDP in three different fields.

MEMBER OF
Dow Jones Sustainability Indices
In Collaboration with RobecoSAM



MSCI 2018 Constituent
MSCI ESG Leaders Indexes

MSCI 2018 Constituent
MSCI Japan ESG Select Leaders Index

MSCI 2018 Constituent
MSCI Japan Empowering Women Index (WIN)

