

 Sumitomo Heavy Industries, Ltd.



# Integrated Report 2018

April 2017–March 2018





# BUILDING ON A SOLID FOUNDATION

## The SHI Group

Business Principles .....	02
SHI Group Tracings of Growth .....	04
Message from the President .....	06
SHI Group Value Creation .....	12
Relationship of Capitals and Strength of the SHI Group .....	14

## Strength of the SHI Group

Strength 1 Excellent Products and Services .....	16
Strength 2 Management Power to Realize High Market Share and Profitability .....	20
Strength 3 A Culture of Transformation ..	22

## Business Activities

At a Glance .....	24
Segment Overview .....	24
Machinery Components .....	26
Precision Machinery .....	28
Construction Machinery .....	31
Industrial Machinery .....	33
Ships .....	36
Environmental Facilities & Plants .....	37

## Base Supporting the SHI Group

Directors, Corporate Auditors, and Executive Officers .....	40
Message from the External Directors ..	42
Corporate Governance .....	43
Compliance Activities .....	46
Risk Management Activities .....	47

## CSR

CSR Mid-Term Plan .....	48
Environment .....	50
Human Resources .....	51
Employees .....	52

## Actual

Eleven-Year Summary and Key Financial Data .....	54
Seven-Year Non-Financial Key Data ...	56

## Financial Section

Consolidated Financial Statements .....	58
Major Subsidiaries and Affiliates .....	102
History .....	104
Corporate Data .....	105
Stock-Related Information .....	105

## Editorial Policy

The Sumitomo Heavy Industries Group (SHI Group) published an Integrated Report for FY2017 instead of the Annual Report that it had published until then. Integrated Report 2018 contains reports on financial information as well as the SHI Group's unique strengths and the sources of its medium-to long-term growth with the aim of deepening understanding among a wide range of stakeholders, including shareholders and investors.

Please refer to our website for detailed information and figures related to financial data (including Securities Reports) and non-financial data (such as CSR data).

## Reference Guidelines

- "International Integrated Reporting Framework," International Integrated Reporting Council (IIRC)
- "WICI Intangibles Reporting Framework Version 1.0," World Intellectual Capital Initiative
- "G4 Sustainability Reporting Guidelines," Global Reporting Initiative (GRI)
- "Guidance for Collaborative Value Creation," METI of Japan



## Cautionary Note Concerning Forward-Looking Statements

Integrated Report 2018 includes forward-looking statements regarding the future performance of Sumitomo Heavy Industries, Ltd. These forward-looking statements are based on information currently available to the Company and determined subjectively. All information contained herein is subject to changes in actual business performance.

## Positioning of Integrated Report 2018

### Corporate Information

#### Financial

#### Non-Financial

Securities Reports	Corporate Governance Report
Integrated Report 2018	
Website	

## Our Website

Please refer to our website for detailed information and figures related to financial data (including Securities Reports and timely disclosure information) and non-financial data (such as environmental and CSR data).

## Investor Relations

<http://www.shi.co.jp/english/ir>



## CSR

<http://www.shi.co.jp/english/csr>



# Business Principles

The SHI Group positions the “Sumitomo Business Spirit” as the basis of its management. The two points stated in the Sumitomo Business Spirit, “placing prime importance on integrity and sound management” and “not pursuing immoral business,” indicate how a business should be, regardless of times and business conditions, in any environment. Conforming to this spirit, the SHI Group will proceed steadily with business restructuring and create a more robust corporate character.

## The Sumitomo Business Spirit

### Business Principles

Article 1

Sumitomo shall achieve prosperity based on solid foundation by placing prime importance on integrity and sound management in the conduct of its business.

Article 2

Sumitomo’s business interest must always be in harmony with public interest; Sumitomo shall adapt to good times and bad times but will not pursue immoral business.

[Commentary]

- 1. Sumitomo shall achieve prosperity based on a solid foundation by placing prime importance on trust and reliability.
- 2. We need to watch changes and aggressively pursue business expansion using our management resources but should not behave hastily for an easy profit in any case.

Under the Sumitomo Business Spirit, employees of SHI share the corporate mission and our sense of values to perform their daily works.

## Business Principles

### Corporate Mission Statement

We will aim to become a machinery manufacturer that continues to provide excellent products and services to the world.

With integrity being a key principle in the Group, we will contribute towards society by gaining high respect and confidence from all stakeholders.

### Our Values

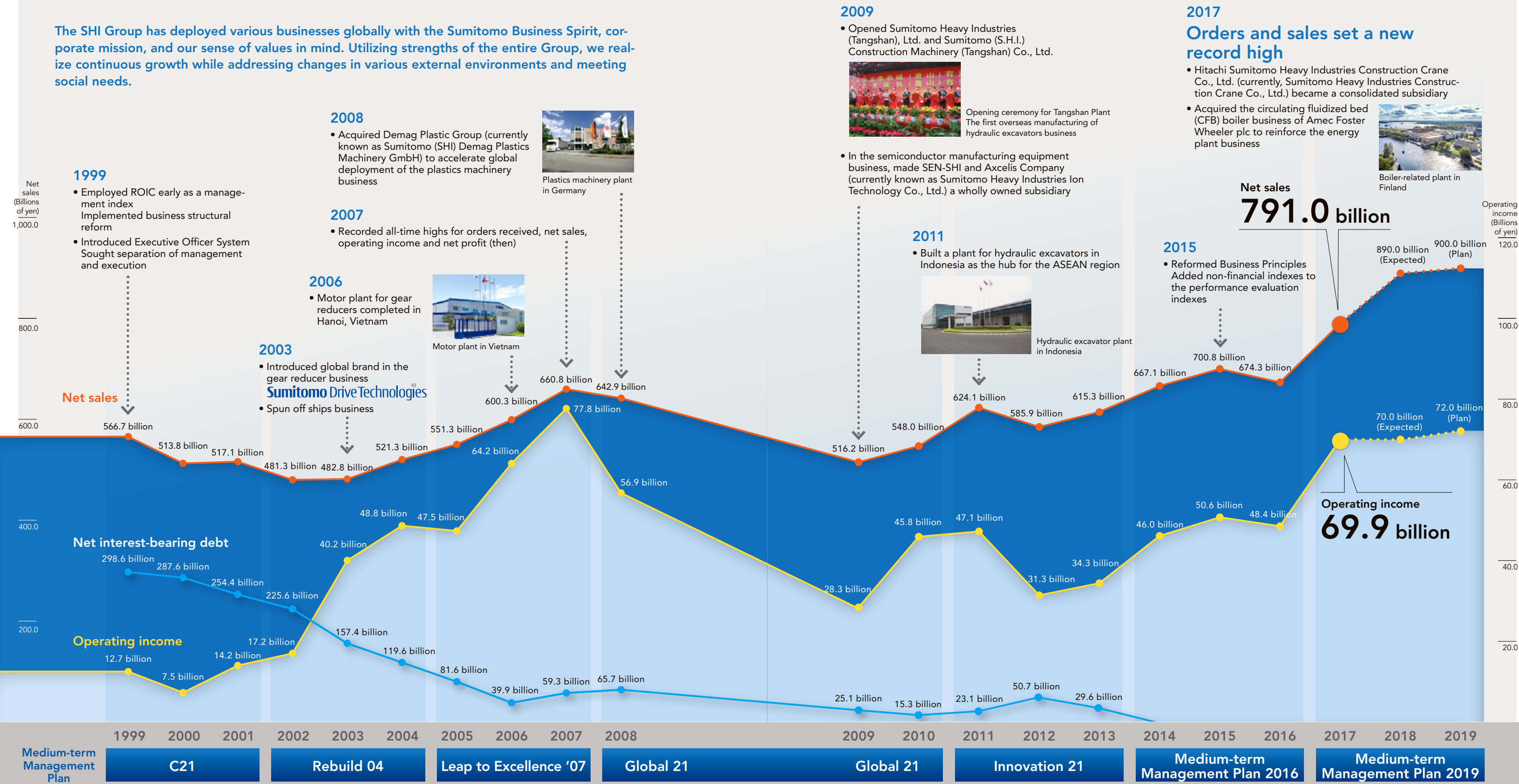
- ▶ **Customer First**  
We exceed customer expectations by providing sophisticated efficient products and services, giving the utmost consideration to their needs and requirements.
- ▶ **Embrace Changes**  
We will continue to drive and embrace changes without accepting the status quo.
- ▶ **Commitment to Technology and Innovation**  
We are passionate about contributing to society by further developing our unique, in-house technologies.
- ▶ **Respect People**  
We will nurture an organizational climate that fosters mutual respect, tolerance and learning for growth.





# SHI Group Tracings of Growth

The SHI Group has deployed various businesses globally with the Sumitomo Business Spirit, corporate mission, and our sense of values in mind. Utilizing strengths of the entire Group, we realize continuous growth while addressing changes in various external environments and meeting social needs.



## Trend of the World

1999

• Birth of the euro

2000

• Collapse of IT bubble

2005

• Revalue the renminbi

2007

• Collapse of US real estate bubble

2008

• Collapse of Lehman Brothers

2010

• European debt crisis

2011

• Great East Japan Earthquake

2016

• Introduction of negative interest rate by the Bank of Japan

Message from the President



We will aim for  
further growth  
through the  
measures under  
Medium-Term  
Management  
Plan 2019.

Shunsuke  
Betsukawa  
Representative Director,  
President and CEO

In Japan, the management environment surrounding corporate business is continuing a moderate recovery, thanks to support from demands in the private sector through consumer spending and capital expenditures, as well as from export recovery. Recovery of personal spending is in progress reflecting improvement in the employment environment, despite slower wage growth, while capital expenditures are moderately increasing in the corporate division as revenues improve. Outside of Japan, the global economy as a whole tends to get better moderately, although it is affected by concerns about economic slowdown, including intensified trade friction and accelerated raising of interest rate in the United States.

In this management environment, the SHI Group started Medium-Term Management Plan 2019 in fiscal 2017 to make active investments for growth through M&A and capital expenditures, make efforts to further improve operational quality, and promote priority measures such as an active pursuit of CSR.

Review of Fiscal 2017

New record-high orders achieved thanks to the investment environment and M&A effect

Orders set a new record high in fiscal 2017 at ¥864.0 billion, up ¥152.9 billion from fiscal 2016.

The following factors substantially contributed to our performance: strong performances of the mass production divisions of Machinery Components, Precision Machinery and Construction Machinery; results of Hitachi Sumitomo Heavy Industries Construction Crane Co., Ltd. (currently Sumitomo Heavy Industries Construction Crane Co., Ltd.) becoming a consolidated subsidiary in March 2017 which contributed to the Group’s results throughout the fiscal year; and consolidation of Sumitomo SHI FW Energie B.V. (SFW) that deploys renewable energy power plants as a subsidiary in June 2017.

Given these, net sales set a new record high at ¥791.0 billion, an increase of ¥116.7 billion from fiscal 2016. Operating income was ¥69.9 billion, an increase of ¥21.5 billion from fiscal 2016, and ordinary income was ¥67.5 billion, an increase of ¥19.2 billion from fiscal 2016. The Company reached a settlement agreement with Kyoto City in the litigation over the incinerated ash melting facility in December 2017 and reported a special loss of ¥14.8 billion, as a result of which profit attributable to owners of parent amounted to ¥34.7 billion, up ¥1.0 billion from fiscal 2016.

Fiscal 2017 Financial Summary

	(Billions of yen)		
	FY2016	FY2017	Change
Orders	711.1	864.0	152.9
Net Sales	674.3	791.0	116.7
Operating Income	48.4	69.9	21.5
Operating Income Ratio	7.2%	8.8%	1.6 pt
Profit Attributable to Owners of Parent	33.6	34.7	1.0
Return on Profit Attributable to Owners of Parent	5.0%	4.4%	−0.6 pt



Dividends increased from fiscal 2016 due to our strong performance, resulting in dividends per share being ¥85 and the payout ratio being 30.1%.

Total assets increased to ¥895.6 billion, an increase of ¥99.1 billion from fiscal 2016, of which ¥60.7 billion resulted from the consolidation of SFW during fiscal 2017. Excluding this, total assets increased by slightly less than ¥40.0 billion in real terms. Due to strong orders, fixed assets also increased as a result of increases in assets and investments.

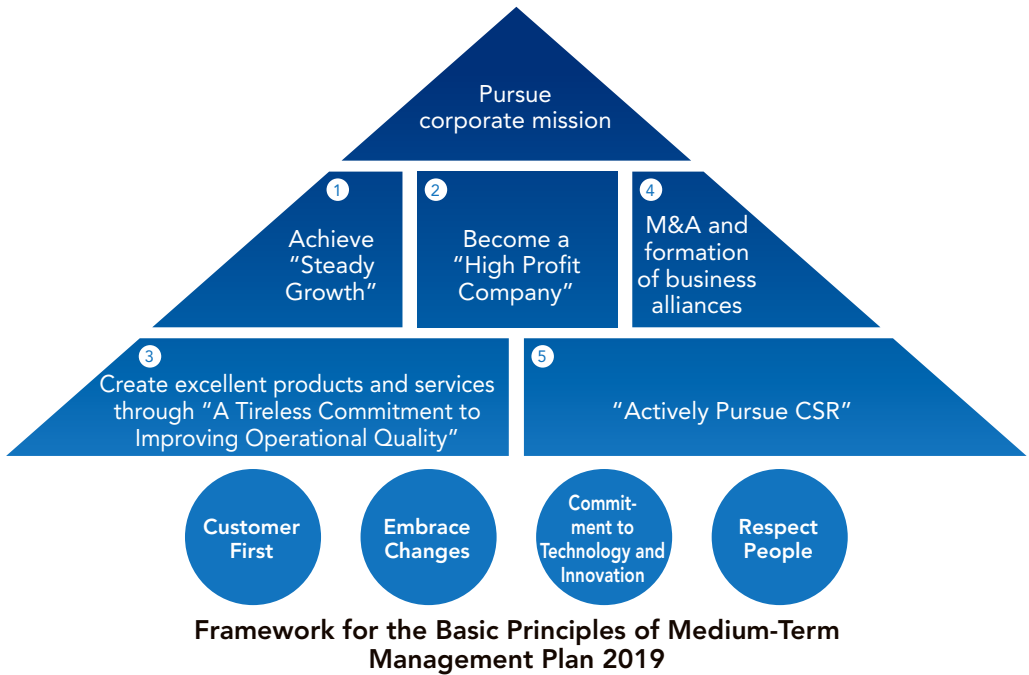
The stockholders' equity ratio was 48.1%, a decline of 1.9 points from fiscal 2016, as total assets increased.

On a consolidated basis, cash flows from operating activities substantially increased ¥33.0 billion to ¥71.1 billion. This resulted from working capital in operating activities turning to positive growth. Cash flows from investing activities grew partly due to our investment in SFW, and free cash flows amounted to ¥33.3 billion, up ¥21.0 billion.

Financial targets and progress in Medium-Term Management Plan 2019

In May 2017, the SHI Group formulated "Medium-Term Management Plan 2019," which will end in fiscal 2019.

Basic Principles of Medium-Term Management Plan 2019



Basic Concept of Medium-Term Management Plan 2019

- 1 Look to achieve "Steady Growth" after carrying out a stringent examination of the external environment
- 2 Become a "High Profit Company"
- 3 Create excellent products and services through "A Tireless Commitment to Improving Operational Quality"
- 4 Actively participate in "Business integrations, M&A, and formation of business alliances with third-party entities"
- 5 "Actively Pursue CSR"

In Medium-Term Management Plan 2019, we have set financial targets of achieving net sales of over ¥800.0 billion and an operating income ratio of at least 7.5% in fiscal 2019. Continually using ROIC\* after tax as the management indicator of the Group, we also aim to ensure an ROIC of over 7.5%.

To achieve the above targets, under the basic policies to 1 achieve "Steady Growth"; 2 become a "High Profit Company"; 3 create excellent products and services through "A Tireless Commitment to Improving Operational Quality"; 4 actively participate in "Business integrations, M&A, and formation of business alliances with third-party entities"; and 5 "Actively Pursue CSR", we will provide excellent products and services globally and contribute to society by gaining high respect and confidence from all stakeholders.

In carrying out our plans, we will continue to maintain financial discipline and make active investments to ensure growth by utilizing our enhanced financial strengths.

For the target of our shareholder returns, we have set a payout ratio of 30% for the three-year time span of the medium term management plan.

Projections for Fiscal 2018 Onward

Expecting to see orders of ¥920.0 billion and net sales of ¥890.0 billion

For the performance of fiscal 2018, we are expecting to see record highs in both orders and net sales, with ¥920.0 billion (up ¥56.0 billion compared to fiscal 2017) and ¥890.0 billion (up ¥99.0 billion compared to fiscal 2017), respectively. Operating income is also expected to reach ¥70.0 billion.

Anticipating that profit attributable to owners of parent will be ¥41.0 billion (up ¥6.3 billion), dividends per share will rise by ¥15 to ¥100 and the payout ratio will remain at the same level of 29.9% as in the previous year.

Based on the steady flow of current orders, we expect that fiscal 2019 will see net sales of ¥900.0 and operating income of ¥72.0 billion (operating income ratio of 8.0%). Regarding investment, we increased the amount of capital and development investments over three years from the initial plan of ¥132.0 billion to ¥175.0 billion.

Financial Targets for Fiscal 2019

Sales . . . . .	¥900.0 billion
Operating income (ratio) . .	¥72.0 billion (8.0%)
Return on Invested Capital (ROIC after tax) . . . . .	9.5%
Payout ratio . . . . .	Maintain 30%

\* ROIC (Return on Invested Capital) =  $\frac{(\text{Operating income} + \text{Interest and dividends received}) \times (1 - \text{Effective tax rate})}{(\text{FY average of stockholders' equity} + \text{FY average of interest-bearing debt})}$



For fiscal 2018 which is the middle year of Medium-Term Management Plan 2019, we will take the following measures to achieve the plan.

#### ① Achieve “Steady Growth”

As measures toward business expansion, we will maintain and enhance our competitiveness by making investments in a focused and timely manner corresponding to the roles of each business and attain steady growth for the Group as a whole.

We will also increase the strength of our products by brushing up on materials, controls and other common technologies, in addition to peculiar technologies cultivated for each product model. To this end, we will make necessary capital expenditures, development investments and procurement of human resources ahead of the plan, as described earlier.

#### ② Become a “High Profit Company”

We will continue our portfolio management, clarify target profits and focused challenges based on the state of competition and external environment of each business, reallocate management resources and push forward our business structural reform. In the business divisions leading the SHI Group, such as Machinery Components and Precision Machinery, we will drive high growth and profitability by setting higher goals and goals to be achieved by all business divisions, product models and regions. Through achievement of these goals, we will transform ourselves into a corporate group with a culture of high profitability and solidify our businesses.

#### ③ Create excellent products and services through “A Tireless Commitment to Improving Operational Quality”

##### (a) Improving product quality

The Head Office and business divisions will work together and make combined efforts to improve product quality to continue to put “quality first” management into practice. As inter-division alliance measures, we will position reinforcement of after-market business as one of the Group’s shared challenges and push forward commercial process reforms to share and actively utilize customer needs within the Group. We will also move on ICT and IoT projects headed by the Corporate Technology Management Group and Corporate Information & Communication Technology Department and take the initiative to develop necessary infrastructures.

##### (b) Ensuring strict compliance

The SHI Group continues to consider ensuring strict compliance as one of our most important challenges and continues to provide officers and employees of the Company and each of the companies within the Group with compliance education, thereby keeping the Group as a whole more thoroughly informed of compliance issues.

##### (c) Taking safety initiatives

Currently, the SHI Group has formulated the Health and Safety Improvement Plan and is implementing various health and safety activities by designating the years of 2017–2019 as the third execution phase. To achieve our goals under the Health and Safety Improvement Plan, we will strive to eliminate industrial accidents and create physically and mentally healthy workplaces.

#### ④ Actively participate in “M&A and formation of business alliances”

We will proceed with business integrations and inter-organization alliances, as necessary, so that we can achieve the effect of inter-business synergies within the Group, while actively seeking opportunities for each business to participate in M&A and to form business alliances with third-party entities.

#### ⑤ “Actively Pursue CSR”

In fiscal 2018, the SHI Group will take the following measures in the four priority areas of “Products and Services,” “Environment,” “Society” and “Employees” set forth in the CSR Mid-term Plan.

In “Products and Services,” we have been making efforts since fiscal 2017 to enable us to design and develop products and services that will contribute to realization of a sustainable society through our discussions with employees of each business division about how our businesses contribute to the solution of social issues. We will continue these efforts and consider product planning with an eye to solving social issues in fiscal 2018.

In “Environment,” we will endeavor to minimize the environmental load across the entire product life cycle, and make further effort to actively communicate the effects externally. We will also concentrate our efforts to improve our external track record for responding to the trends of ESG investment, which is recently gaining more attention.

In “Society,” we strive to cooperate with stakeholders; comply with CSR procurement guidelines, various laws and regulations and social norms; and build up sustainable relationships with our suppliers, so that we can gain the trust of society. In fiscal 2018, we will continue to hold larger-scale briefing sessions for our suppliers about CSR procurement guidelines to let these efforts further penetrate our supply lines.

In “Employee,” we will create workplaces where a broad variety of human resources can be fully utilized, with a focus on our diversity promotion activities. We will also endeavor to reduce working hours and introduce teleworking on a full-scale basis to improve the work-life balances of employees, and adopt health management systems with the goal of creating physically and mentally healthy workplaces.

We will strive to communicate these combined efforts internally and externally for further penetration of our CSR efforts.

Going forward, we will consolidate these initiatives and convey their status within and outside the SHI Group, working towards further penetration of our corporate social responsibilities.



Shunsuke Betsukawa  
Representative Director,  
President and CEO

# SHI Group Value Creation

The SHI Group contributes to customer value creation by offering "Excellent Products and Services" based on our high-level technological capabilities. This value creation was made possible by our "Culture of Transformation," which has been refined over many years. We will also utilize our "Management Capability to Realize High Market Share and Profitability" to continuously improve our corporate value.

## Strength of the SHI Group

## Business Activities

## Value that SHI Offers

### Business Principles

#### Corporate Mission Statement

- ▶ We will aim to become a machinery manufacturer that continues to provide excellent products and services to the world.
- ▶ With integrity being a key principle in the Group, we will contribute towards society by gaining high respect and confidence from all stakeholders.

#### Our Values

- ▶ Customer First
- ▶ Embrace Changes
- ▶ Commitment to Technology and Innovation
- ▶ Respect People



Machinery Components

Precision Machinery

Construction Machinery

Industrial Machinery

Ships

Environmental Facilities & Plants

Contribution to Efficiency

Contribution to Comfort

Contribution to Security

Contribution to Medical Technology

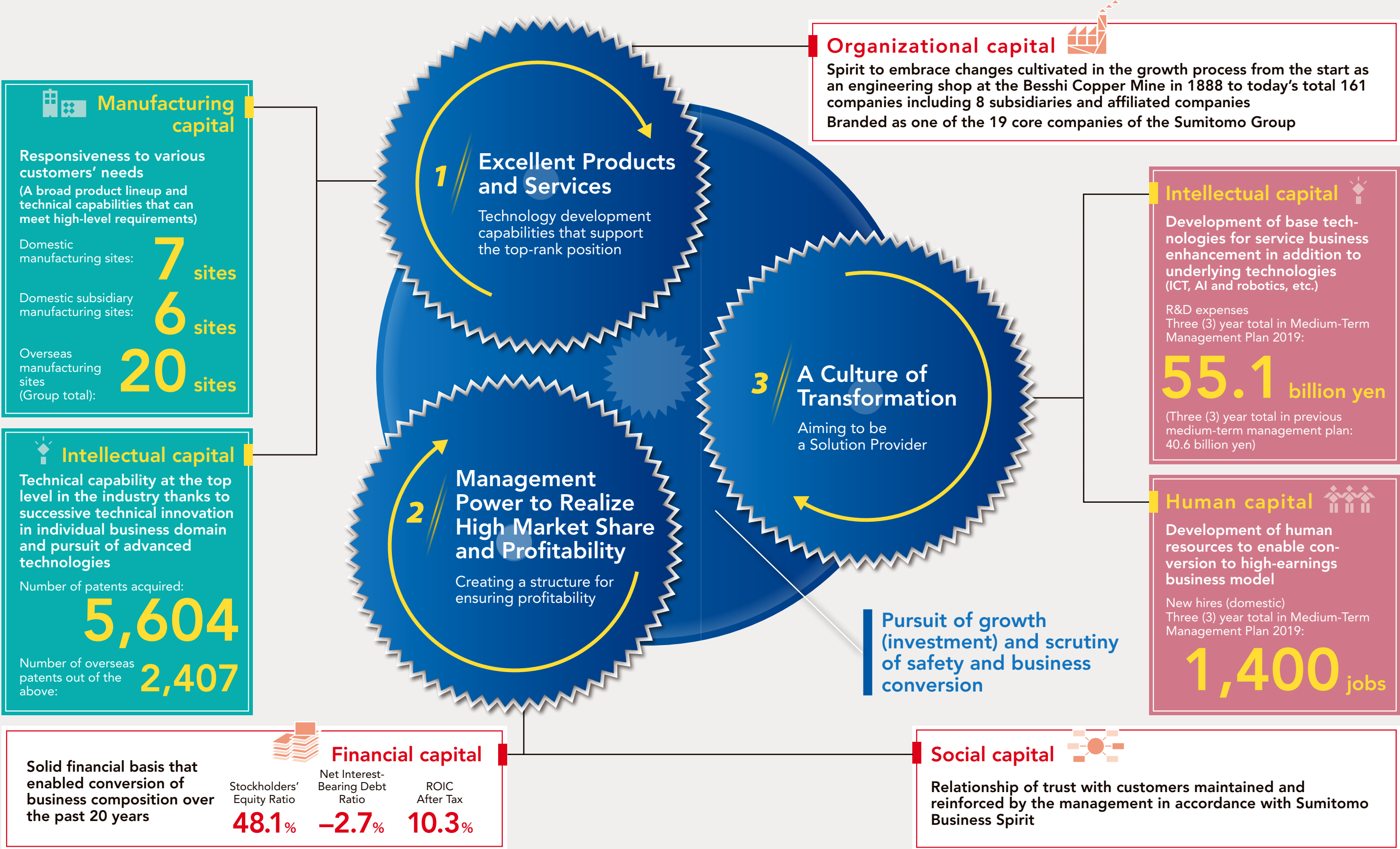
Contribution to Reduction of Environmental Impact

Base Supporting the SHI Group

Corporate Governance, CSR and Human Resources



Relationship of Capitals and Strength of the SHI Group



# Strength 1

## Excellent Products and Services

### What SHI Considers as Excellent Products and Services

The SHI Group considers products and services that customers “really want to buy” or “really want us to sell” as Excellent Products and Services. In order to create Excellent Products and Services that deliver confidence to customers, we are rigorously pursuing solutions for each customer’s problems and what we can do to create customer value.

### Smart Product Project

The Group is running the Smart Product Project as part of its Excellent Product Creation Project.

#### Definition of a smart product

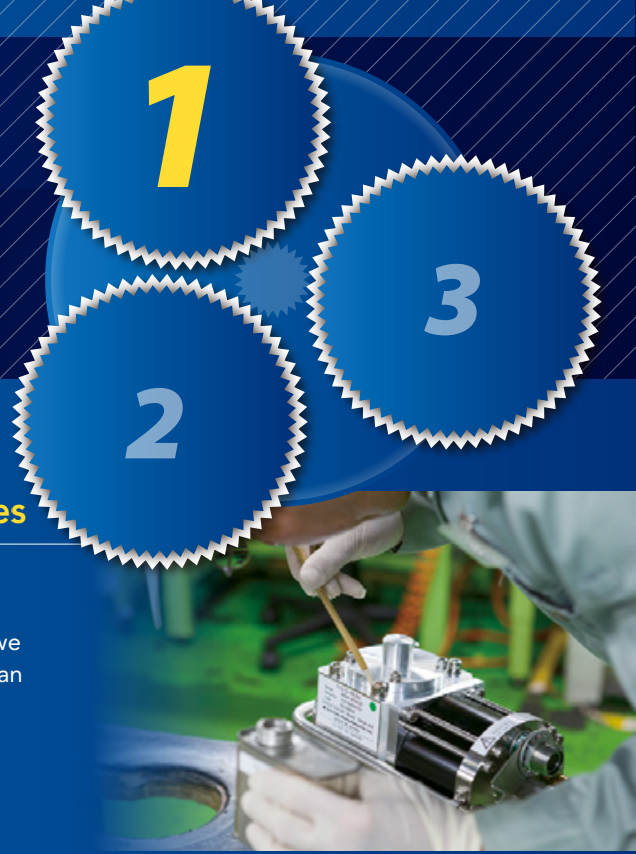
IoT/ICT products that improve customer’s profitability through operation monitoring, failure prediction, and other functions

Highly intelligent, attractive products that inspire customers

#### Smart Product Project

Persons in charge of product planning and development of the following eight models participate in the Smart Product Project and, with an eye towards next generations, work on new product development, main body development, application development, and other themes in the collaborative framework involving the Corporate Technology Management Group and each business division.

#### Enrolled Products



### R&D Framework

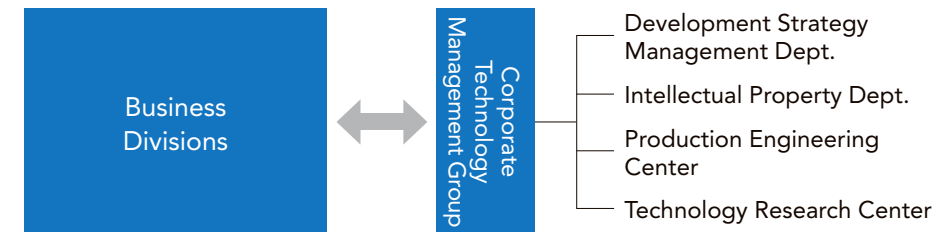
The Group will differentiate itself through products and services in order to convert to a high-earnings business model, and it will pool its collective capacities to create Excellent Products and Services. For new product development, we are promoting activities with close coordination between business divisions and the Technology Research Center, and we are implementing an integrated development process that involves conducting basic technology and elemental technology development in advance at the center and commercialization development in our business divisions.

**Yoshiyuki Tomita**  
General Manager of  
Corporate Technology  
Management Group  
In charge of Corporate  
Quality Group



#### Collaborative Framework for Corporate Technology Management Group and Business Divisions

The Corporate Technology Management Group works in close collaboration with the business divisions through organizational units differentiated by function.



Technology Research Center  
(Yokosuka, Kanagawa Prefecture)

### R&D Field

In addition to the basic technology development of the new products previously mentioned, the Technology Research Center is focused on the development of proprietary technologies for our six business segments, comprising Machinery Components, Precision Machinery, Construction Machinery, Industrial Machinery, Ships, and Environmental Facilities & Plants, as well as on the development of basic technologies that are essential to these business segments, including machine elements, materials, CAE, control, ICT, AI, and robotics, based on a medium- to long-term roadmap.

The Production Engineering Center promotes the development of management technology and technologies for production innovation and the further training of human resources in order to achieve a robust form of manufacturing that is responsive to diverse customer needs while securing a competitive advantage.

With respect to elemental technologies, in particular, we are working on extracting necessary technologies from megatrends, such as human-collaborative robotics that is expected to increase in demand with the shrinking domestic workforce in the future.

Many of the Group’s businesses are exposed to intense competition in the global market, and there is an even greater demand for providing Excellent Products and Services that will deliver confidence to customers. In order to provide items requested by customers as quickly as possible, we will promote global networking of R&D functions through open innovation based on recognition that the era in which R&D is contained within our proprietary technology has ended. For example, we are conducting collaborative research with universities in Europe and the United States and collaborating with overseas subsidiaries for R&D.



Intellectual Property Strategy

Intellectual property for the SHI Group is a source of competitive advantage. With a focus on Creating (securing rights to intellectual property), Attacking (utilizing exclusive rights) and Defending (respecting the rights of other companies), the SHI Group actively works on a unified basis to create, protect and utilize the Group’s intellectual property. To establish a direct connection between senior management in business divisions and intellectual property activities, we have appointed chief intellectual property officers (CIPO) in each division. The Intellectual Property Department also participates in the intellectual property activities of divisions in all respects and conducts activities to enhance interdivisional synergies to raise intellectual property value throughout the Group from a medium- to long-term standpoint and to further vitalize related activities at the division level. In order to establish superiority in development of overseas business, we are actively working to raise the overseas acquisition ratio of patent rights.

Major Intellectual Property Activities

**Creating**

**Acquisition of intellectual property rights**

Regarding Excellent Products and Services, we plan intellectual property portfolios from a medium- to long-term perspective at the stage before R&D and brainstorm ideas with each division and research center to establish intellectual property portfolios. Intellectual property portfolios are periodically reviewed to maintain a competitive advantage.

**Attacking**

**Intellectual property utilization**

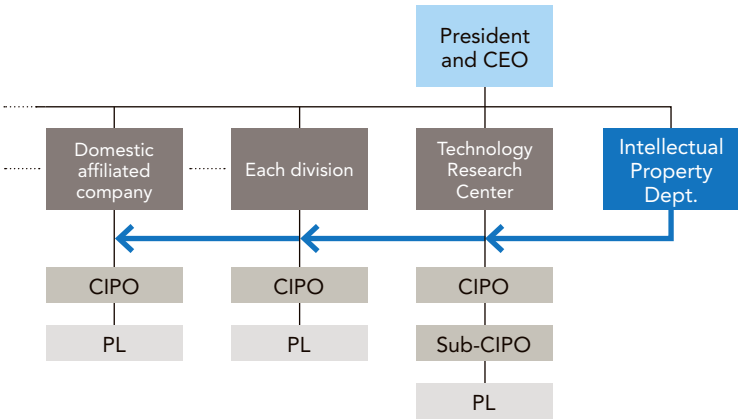
Acquired intellectual property rights are utilized not only for publicity and PR of Excellent Products and Services, but also for checking against companies that do not respect the rights, helping our business activities. In recent years, we have also focused on licensing and transferring and are trying to make more effective use of intellectual property rights.

**Defending**

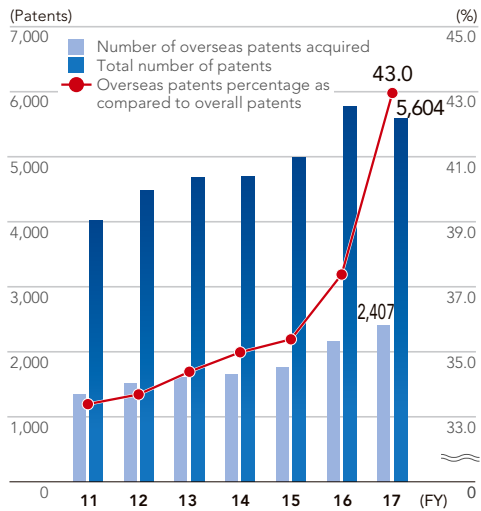
**Respect of other company’s rights**

From the spirit of compliance, we respect other company’s rights and never infringe on them. We conduct a thorough investigation of rights of other companies before starting R&D, and continue doing an ongoing investigation from that point onward. In addition, the rights of other companies are checked during each phase of DR (design review), ensuring intellectual property activities are integrated into the quality assurance system.

**CIPO System**  
CIPO: Chief Intellectual Property Officer  
Sub-CIPO: Deputy CIPO (Group Leader)  
PL: Patent Leader



Acquisition of Patent Rights



Quality Management System

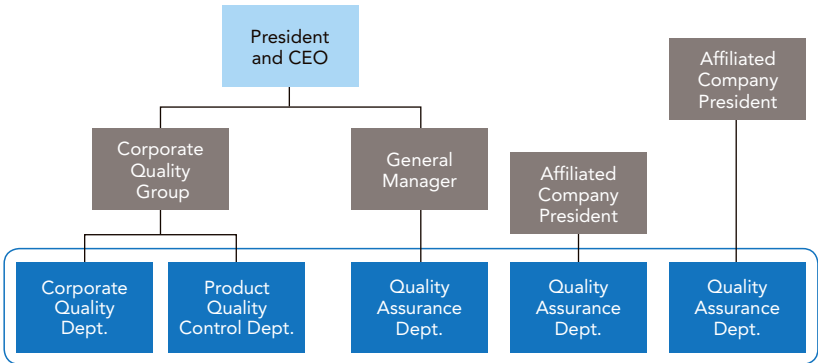
We will continue to consistently provide high-quality products and services that are appreciated by customers.

Our Approach to Quality Assurance

The SHI Group believes that the quality of products depends not on chance but on its way of doing work, that is, on the appropriateness of processes employed. To that end, the President and CEO conducts diagnosis of the process of each business division and the Management Quality Headquarters of the Head Office conducts QMS (quality management system) audits. In addition, we have introduced Six Sigma as the Group’s common idea and are providing practical education on it. Master Black Belts and Black Belts placed in each division and affiliated companies are voluntarily working on strengthening process capabilities. The cumulative number of Green Belt certification holders has reached 2,000, bringing the Group’s quality activities to a higher level.

Quality Assurance System

Each business division and affiliated company of the SHI Group has their own quality assurance systems that are suitable for their various businesses ranging from large building structures like ships to key components incorporated into industrial machinery and various devices. The Quality Assurance Department reports directly to the business manager or president for affiliated companies, to ensure independence. In addition, the Group’s quality assurance managers get together to share ideas, policies, and measures for improving quality and learn from each other through group discussion at the Quality Assurance Department managers meeting. In FY2017, we worked on the theme “Recurrence prevention by in-depth process examination,” and the theme of activities of FY2018 is “From strengthening of recurrence prevention activities to proactive activities.”



SHI Group Quality Policy

Quality Principals	
Through the continuous and unwavering pursuit of world-class quality that is recognized globally, we will supply customers with products and services that they recognize as adding value to their business.	
Quality Policy	
Customer First:	Define quality targets based on the expectations of the customer
Continuous Progress:	Continuously advance the quality system and incorporate quality with a process mindset
Everyone Participates:	Every person involved in quality sets an objective and tackles quality issues head on as a team

## Strength 2 Management Power to Realize High Market Share and Profitability

### Management with ROIC\* as One of the Key Indexes

From viewpoints with a stockholder focus, SHI introduced ROIC in FY1999 as one of the key management indexes, and has made efforts to improve corporate value with the goal of ROIC exceeding WACC (Weighted Average Cost of Capital). At first, while global competition was heating up, we promoted selection and prioritization of businesses based on ROIC and market competitiveness of each business. In the Industrial Machinery business, Ships business, and Construction Machinery business, restructuring resulted in compression of invested capital and improvement of profitability. In contrast, in the Machinery Components business and Plastics Machinery business, aggressive investments including M&A have been made to improve the revenue base.

Since then, by allocating adequate invested capital to each business with ROIC as an index, unnecessary increases in total assets have been suppressed and competitiveness in business enhanced. Also efforts have been made to improve profitability by rigorous management of sales and profits that invested capital generates. These efforts have led to a healthy financial structure that can support investments for growth, and is tied to today's steady growth.

\* ROIC (Return on Invested Capital) =  $\frac{(\text{Operating income} + \text{Interest and dividends received}) \times (1 - \text{Effective tax rate})}{(\text{FY average of stockholders' equity} + \text{FY average of interest bearing debt})}$

**Hideo Suzuki**  
General Manager of Corporate  
Finance, Accounting &  
Administration Group



### Continuous Corporate Value Creation

Medium-Term Management Plan 2019 aims for ROIC of 7.5% or more. To achieve the target, we promote aggressive investment in R&D, equipment and human resources in addition to M&A. We will aggressively allocate our invested capital to businesses where growth and high profitability can be expected, such as the Environmental Facilities & Plants business where we recently acquired the circulating fluidized bed (CFB) boiler business of Amec Foster Wheeler plc and established Sumitomo SHI FW Energie B.V., and the

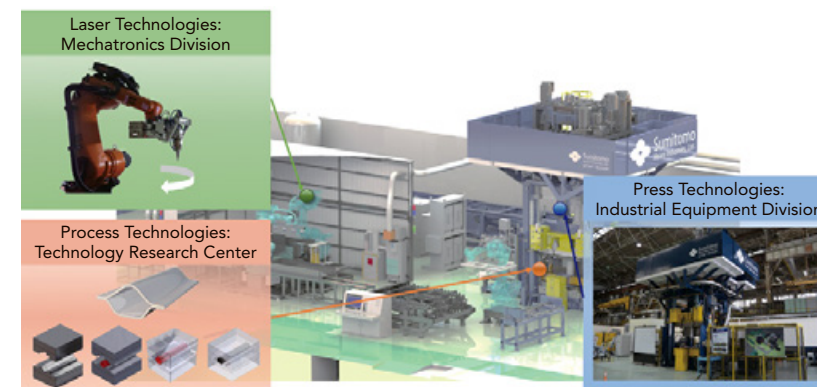
Machinery Components business where we acquired Italian industrial motor manufacturer Lafert group, in pursuit of profit maximization. Concerning businesses with room for profit improvement, along with effort to suppress invested capital, investigation of business restructuring based on the ratio of profit to sales will be started and necessary actions will be taken. These actions will keep the profitability that the group ROIC successively exceeds the capital cost, and will help us to create further corporate value.

### Polish Up Our Strength Rigorously

At SHI, FY2017 marks the start of Medium-Term Management Plan 2019 (MTMP19). To realize "Steady Growth" as one of the key objectives of the plan, we are enhancing product capabilities by improving upon common technologies used for materials and control, in addition to special technologies associated with each model.

As an example, we aimed to downsize automotive body frames and developed the Steel Tube Air Forming (STAF) manufacturing method, in which a steel tube that is set in the mold of our press machine goes through a process of resistance heating → high pressure air injection → forming → hardening. In FY2017, we completed an evaluation of a system that combines this manufacturing method and our own laser finishing machine, and we received orders for prototypes from many automotive manufacturers. In this way, by utilizing and rigorously polishing up our strengths, we will nurture buds of new businesses and realize steady growth.

**Morihiro Kondo**  
General Manager of  
Corporate Planning Group



General view of the STAF system and our own technology



Applicable areas of STAF parts

### Scrutiny of Markets Where Our Strengths Become Advantages and Rigorous Allocation of Management Resources

After evaluation of growth potential and profitability of each business of a group, roles are adjusted and management resources are allocated in accordance with each role so that growth and profitability can be improved. Above all, investment will be focused on businesses targeting growth and high profitability.

In FY2017, aiming at the growth of the Environmental Facilities & Plant business, we acquired the CFB boiler business of Amec Foster Wheeler plc and established a new company, Sumitomo SHI FW Energie B.V. In FY2018, we acquired the shares of Lafert S.p.A, an Italian industrial motor manufacturer to enhance our competitiveness on a global scale in the Machinery Components business.

### Our Strength Brought from the Portfolio

Our Group comprises many business portfolios as can be seen in the six segments. These businesses create strong synergies with each other involving technical knowledge and sales platforms, and have become a source of competitiveness for the entire Group as evidenced in the development of the STAF manufacturing method, which was born from involvement of the Technology Research Center with multiple businesses. These business groups, from a different viewpoint, can be roughly classified into either mass production-based businesses that respond to economic trends, or single product ordering businesses with long lead times, and are considered to contribute to stable business operations under the cyclic fluctuations of economic trends.

In this way, we will utilize the organic connections of each business in the business portfolios to pursue growth and higher profitability of the entire Group in the future as well.



## Strength 3

### A Culture of Transformation

#### The SHI Group's History of Transformation

The main products of the Power Transmission & Controls Group (PTC Group/ Machinery Components segment) are gearboxes and gearmotors for industrial use. Since its inception as a business started from a technical tie-up, we have made original improvements to achieve higher performance and make products more compact, as well as added new models to meet various customer needs. In addition, we have focused on the importance of overseas markets from the early days and have increased our overseas presence by opening plants and acquiring companies in the same business. As a result, we have achieved a dominant market share in Japan and gained a top position overseas. It genuinely is a "history of transformation."

**Toshiharu Tanaka**  
General Manager of  
Power Transmission &  
Controls Group

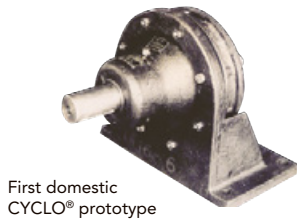


#### Achievement of Downsizing

CYCLO®DRIVE, the main product of the PTC Group, features a high reduction gear ratio, strong impact load, high rigidity, high durability, high efficiency, and long service life, and is widely used for transport, environmental, factory automation machines (production facilities), etc., enjoying a large market share.

We formed a technical tie-up in 1937 with a German company, Cyclo Getriebebau Lorenz Braren GmbH (the current Sumitomo (SHI) Cyclo Drive Germany GmbH), and started domestic production of the CYCLO® series in 1939. Next year is the 80th anniversary since the start of domestic production in Japan.

During that period, every time new products were developed, we incorporated technical innovations along with ideas for downsizing. With the series currently on sale, we adopted low friction surface processing technology, load balancing design, and 3D model-based analysis technology to achieve weight reduction to 1/7 compared to the model sold in 1965 with the same capabilities and downsizing to 1/2 in outside diameter.



First domestic  
CYCLO® prototype

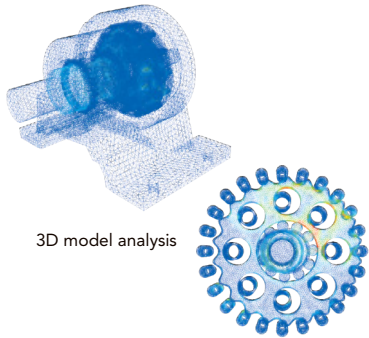
#### History of Technological Accumulation

Until 1965, they were manufactured and sold on the basis of the technical tie-up, but domestic proprietary technologies were introduced from a product released in 1969. This product adopted vacuum degassing material made available by leveraging advancements in steel technology and achieved downsizing to 1/2 compared to the model produced on the basis of the technical tie-up technology.

To the product released in 1980, we added improvements such as multiple tooth numbers, individual tooth profiles, local deformation analysis technology, review of gear specifications and the tooth profile modification method, optimization of bearing arrangement, and basic structure design to accomplish further downsizing to 1/2 compared to the 1969 model. The previous product design had been apt to rely too much on the personal capabilities of engineers. Then, in developing the next model, we established standards on product design concepts, calculation methods, and others. It was with the product released in 1980 that a product which would always allow anyone to design on the basis of the latest technical level and take advantage of our accumulated downsizing technology was first developed.



Cross section of CYCLO®DRIVE



3D model analysis

#### Establishment of Global Standards

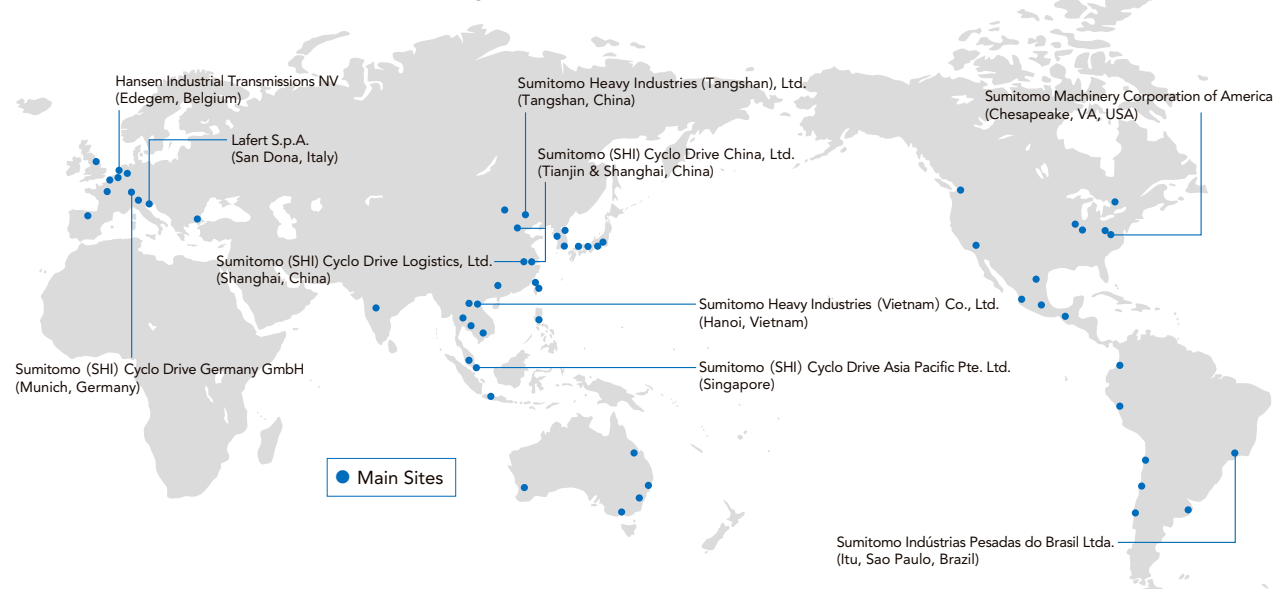
For models released around 1990, we were able to accelerate overseas operations through continued product development incorporating material and lubricant improvements to achieve higher quality as well as the establishment of global standard models. Until then, product specifications and sales methods differed depending on the countries and regions where there were sold. For example, the size was indicated in imperial units, not in metric, in the United States. Also in Germany, sales activities were mainly carried out by customizing products based on customer needs, not by the method using catalogs. The concept of standardizing them and establishing common standards that can

be used across the world was intended for full-scale global expansion in the future.

The idea of introducing new technologies associated with product downsizing and establishing design manuals and standards is commonly shared with other products of the PTC Group such as HYPONIC® and Bevel BUDDYBOX® gear reducers.

It can be said that we have established the foundation for advancing true globalization by building the brand identity of Sumitomo Drive Technologies, which was made possible only through our accumulated technologies and established global standards.

#### Global Network of Sumitomo Drive Technologies



#### Transformation to Solution Provider

We have broadened the variation of product lines and actively promoted the acquisition of companies on a global scale, thus greatly improving our presence. We believe that the social significance of the PTC Group is not only to provide gear reducers as products and raise the value of technologies, services, and support in peripheral domains, but also to continue to move and support every aspect of society and daily life.

Our products are used in a wide range of industries and markets, and, until now, we have provided products that are suitable for specific applications such as material handling machines, robots, production facilities, precision equipment. However, in recent years,

integration of motors, electrical control, and machine parts is progressing rapidly; for example, robot arms are attached to conveying carriages in distribution systems.

We will actively work on developing next-generation products with higher performance expected from the market, and at the same time, we will further strengthen our competitive advantage, the global network for after-sales services.

Together with Lafert, a European motor manufacturer acquired in June this year, we will continue to drive change, aiming to become a Solution Provider that copes with a wide range of customer requests.

# At a Glance



## Group Financial Highlights

Net Sales	¥791.0 billion	Operating Income	¥69.9 billion
Stockholders' Equity Ratio	48.1 %	Net Interest-Bearing Debt Ratio	-2.7 %
ROIC (after tax)	10.3%		

## Group Non-Financial Highlights

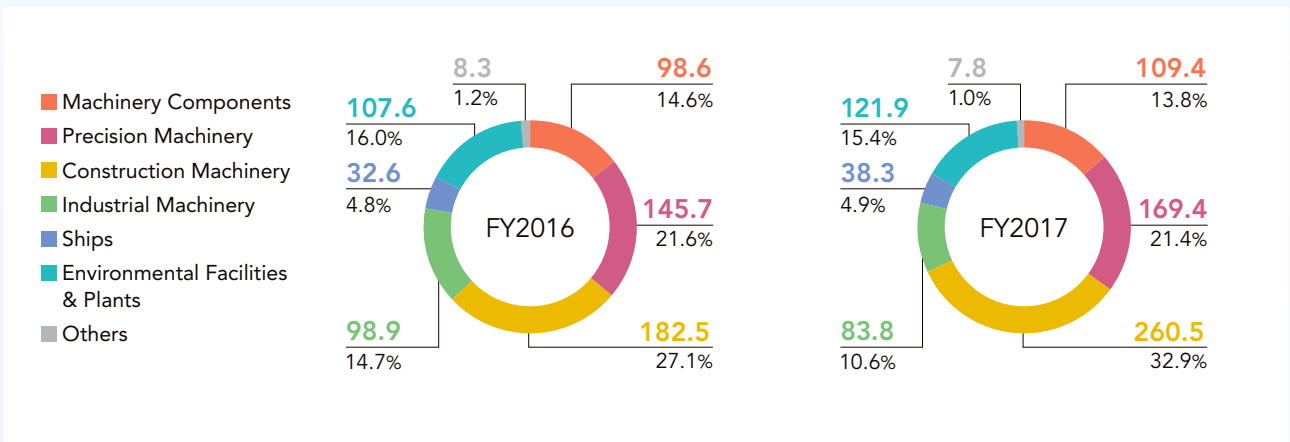
Waste Volume	Total discharge / 26,008 tons Recycled volume / 26,005 tons	CO <sub>2</sub> Emissions	Domestic / 110,000 tons (Declined by 4.9% from the previous year) Overseas / 76,000 tons
Waste Reduction Ratio	23% (Compared with FY2013)	Reduction Amount of CO <sub>2</sub> Related to Production Process	Single year / 590,000 tons per year Cumulative / 16,110,000 tons
Water Consumption	1,166,000 tons (Increased by 3.2% from the average of FY2014 to FY2016)		

## Segment Overview

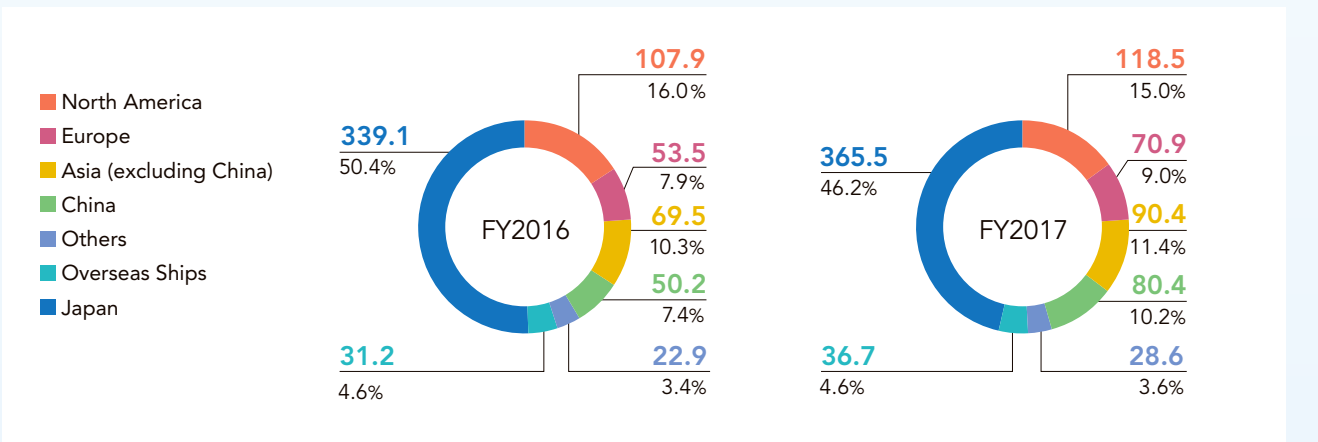
 <h3>Machinery Components</h3> <p>This segment's main products are power transmissions and controls, which are essential for operating motor drives. Our power transmission and controls lower the rotating speed of a motor while increasing torque. They are used widely in various fields ranging from the handling line of production plants to robot joints. We have the leading domestic market share and a top-level sales record globally.</p>	 <h3>Precision Machinery</h3> <p>Our injection molding machines used to manufacture plastic products excel in high-precision, high-cycle work and have particular strength in electric and electronic-related markets. Our cryogenic equipment is not only used in the medical field for MRI and the like, but is also widely used in the field of semiconductor equipment in cryopumps and more.</p>	 <h3>Construction Machinery</h3> <p>The products in this segment include our hydraulic excavator models, which were the first pieces of construction machinery awarded prizes for energy efficiency. Moreover, our products also have superior operability and safety, and have been bestowed with the Good Design Award in the past. Our asphalt finishers are an essential piece of equipment for pavement finishing works.</p>
<p>Net Sales ¥109.4 billion</p> <p>Operating Income ¥11.8 billion</p>	<p>Net Sales ¥169.4 billion</p> <p>Operating Income ¥19.5 billion</p>	<p>Net Sales ¥260.5 billion</p> <p>Operating Income ¥17.4 billion</p>

 <h3>Industrial Machinery</h3> <p>This segment is responsible for various types of products including advanced devices that use cyclotrons to diagnose and treat cancer, forging presses for automotive components, large-scale cranes for shipyards and ports and transport equipment for logistics. We are focusing on steam turbines for biomass captive power generators overseas. Our continuous unloaders hold the leading share in Japan.</p>	 <h3>Ships</h3> <p>This segment specializes in mid-scale oil tankers. By narrowing down the number of vessel types we handle, it is possible to realize efficiencies in design and manufacturing, and achieve further differentiation in products.</p>	 <h3>Environmental Facilities &amp; Plants</h3> <p>Our circulating fluidized bed (CFB) boilers that can be used with various fuels, including biomass, boast the top share in the global market. Our effluent water treatment systems and sewage treatment systems used in production plants are highly regarded for their energy-saving performance and are being provided for a wide range of uses, from construction of facilities through to operation management.</p>
<p>Net Sales ¥83.8 billion</p> <p>Operating Income ¥8.8 billion</p>	<p>Net Sales ¥38.3 billion</p> <p>Operating Income ¥0.7 billion</p>	<p>Net Sales ¥121.9 billion</p> <p>Operating Income ¥9.5 billion</p>

## Net Sales Ratio by Segment (Billions of yen)



## Net Sales Ratio by Region (Billions of yen)





# Machinery Components

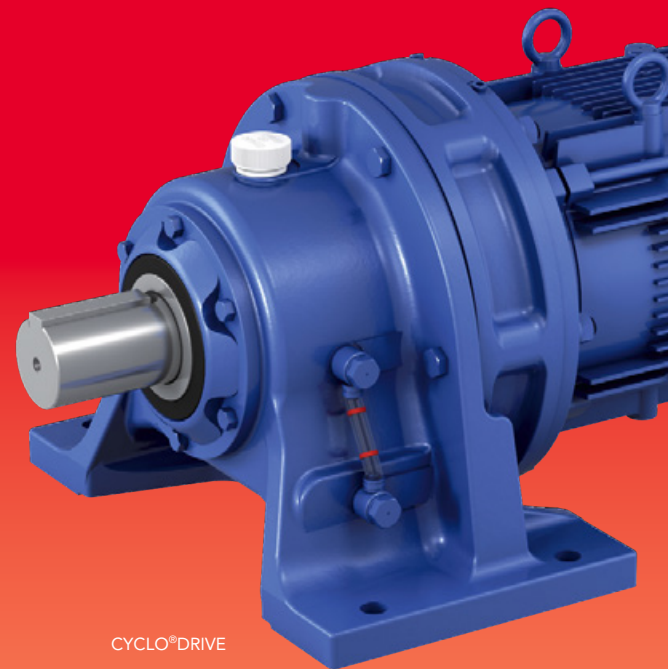


## Main Products

Power transmission and controls  
Motors

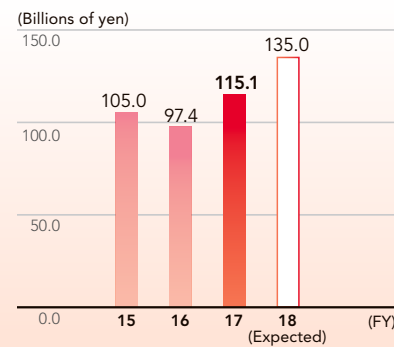
## Major Applications/Markets

Factory automation machinery,  
Industrial robots, Machine tools,  
Conveying and logistics  
machinery, Steel and iron making  
machinery, Chemical processing  
machinery, Material handling  
machinery, Mining machinery,  
Food processing machinery,  
Water treatment plants,  
Elevators and escalators

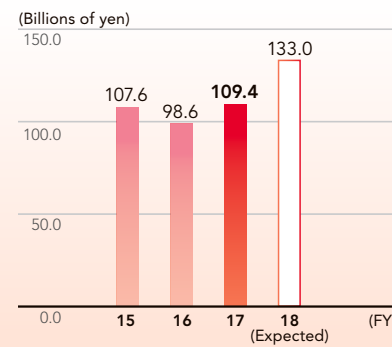


CYCLO®DRIVE

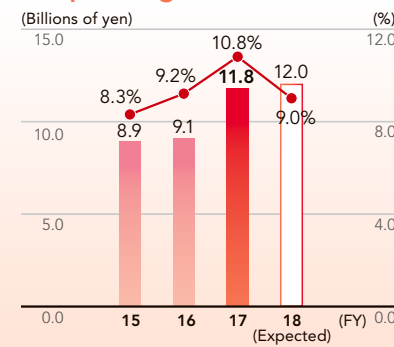
## ► Orders



## ► Net Sales



## ► Operating Income/ Operating Income Ratio



## Power Transmission and Controls

### Market Environment

In FY2017, the world economy continued to expand and demand for gear reducers remained steady both in Japan and overseas. Market trends for medium- and small-sized, high-precision gear reducers used for FA/logistics and liquid crystals/semiconductors remained strong. In particular, demand for precision gear reducers used in industrial robots has greatly increased worldwide. Market trends for large gear boxes used in mining, chemistry, and others were on a track of recovery.

In FY2018, despite the uncertainty about the future due to intensified trade friction and the risk of a downturn in the economy, demand for gear reducers is steadily increasing. The domestic market is expected to continue to grow gradually, supported by redevelopment in urban areas and the establishment of logistics facilities following expansion of the Internet mail order market. Overseas, economic slowdown is predicted in some regions such as China, but investment to achieve automation and labor saving in response to the labor shortage remains firm.



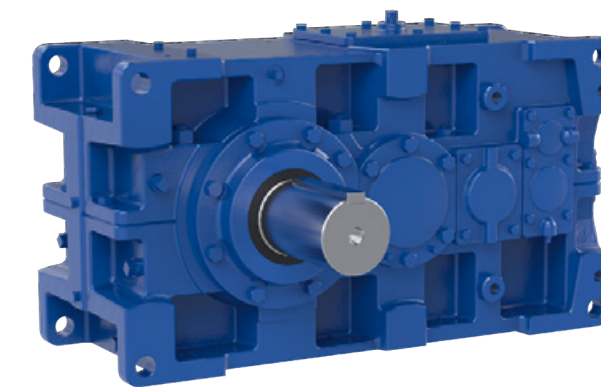
High-precision gear reducers used for industrial robots



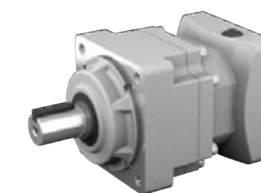
High-precision  
CYCLO®DRIVE D Series



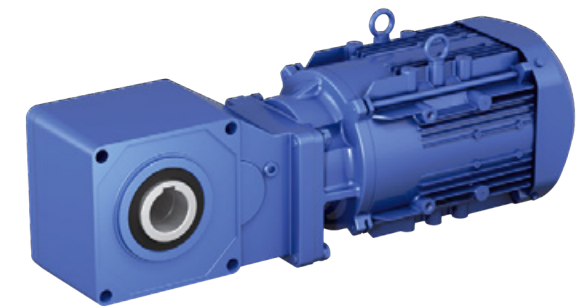
High-precision  
CYCLO®DRIVE UA Series



PARAMAX® 9000 Series gear box



Planetary gear reducer for servo motors  
IB Series PE Type



Bevel BUDDYBOX® H Series gear reducer

## Fiscal 2017 Review and Key Topics

In FY2017, we were able to achieve our targets for all of orders, sales, and operating income, thanks to growing corporate enthusiasm for capital investment.

We are making aggressive investments mainly overseas. In particular, we advanced the investment to increase our production capacity of precision gear reducers whose demand is growing all over the world including in China. This investment was originally scheduled in the three-year time span under Medium-Term Management Plan 2019.

In a move to rebuild and strengthen our large gearbox business, we integrated our gearbox division with Sumitomo Heavy Industries Gearbox Co., Ltd. in April 2017, and launched the global gearbox R&D center at Hansen Industrial Transmissions NV in Belgium in December 2017.

As a new product for specific applications, we launched the compact hollow shaft Bevel BUDDYBOX® H Series gear reducer specialized for low reduction ratio, and conducted promotional activities mainly for FA/logistics-related customers.

## Fiscal 2018 Strategies and Initiatives

In FY2018, we will achieve steady growth and improve profitability to ensure the achievement of the targets set in our current medium-term plan.

We will continue to actively make capital investments both in Japan and overseas. We will expand our Vietnam factory to strengthen the global supply chain. In domestic and other regions as well, we will make capital investments sequentially focusing on the increase in production capacity.

In addition, we will conduct marketing and product planning in anticipation of changes in the markets of FA/logistics, food/beverage, and robot/positioning targeted in our current medium-term plan, as well as make efforts to achieve faster time-to-market for products under development. In May 2018, we launched the Planetary Gear Reducer IB Series PE Type for Servo Motors that achieves high cost performance and short delivery time as an effort to focus on the development of new markets and applications.

In the service business, we are expanding inspection and diagnostic activities of gear reducers. We established the service technical center of Sumitomo Heavy Industries Power Transmission & Controls Sales Co., Ltd next to Nagoya Works in April 2018 to improve customer support capabilities.

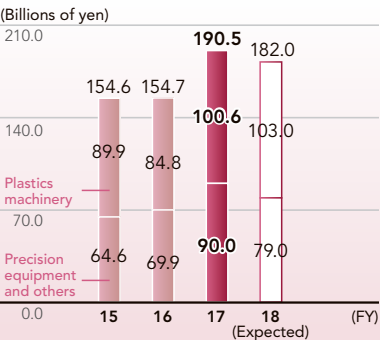
In June 2018, we acquired the shares of Lafert Group, an Italian industrial motor manufacturer to make it a wholly owned subsidiary. We will strive to strengthen our business and improve our presence overseas, mainly in Europe, as the first step in expanding our business area to the electrical and control fields. In addition, we will accelerate cooperation with the outside to enter expanding markets and introduce new products more speedily to help achieve growth in business.

# Precision Machinery

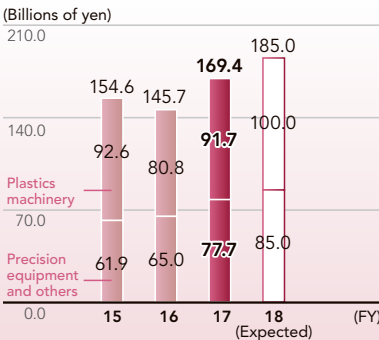


Main Products	Major Applications/Markets
Plastics machinery	Electronics, Electric equipment, Automobiles, Containers, Medical equipment
Ion-implantation systems	
Laser processing systems	
XY stages	Semiconductors, LCDs
Transfer-molding press machines	
Cryogenic equipment	Medical equipment, Measuring and analyzing equipment, Semiconductors
Precision forgings	Jet engines for airplanes, Turbines for power generation
Defense equipment	Defense

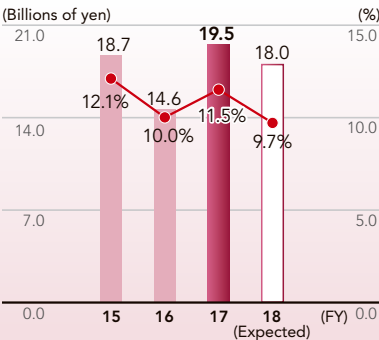
## ► Orders



## ► Net Sales



## ► Operating Income/ Operating Income Ratio



## Plastics Machinery

### Market Environment

In FY2017, demand remained high due to the strong world economy. Demand grew dramatically with steady market conditions in Japan, Europe, and the United States and expansion of smartphones and automobile-related markets in China. However, there is a continuing shortage of major components due to the rapid increase in demand and its influence on production is a cause of concern.

As 2018 began, solid market conditions continued in emerging countries such as China and Southeast Asia, but we anticipate some slowdown in the second half.

### Fiscal 2017 Review and Key Topics

In the Plastics Machinery business, we beat all our targets for orders, sales, and operating income, thanks to the growth in worldwide demand, especially in the Chinese market due to significant growth in demand for electrical and electronic components, including smartphone components, and the economic boom in Europe. By sector, daily necessities markets

saw active investment around containers and medical fields and automobile-related markets remained steady mainly overseas.

Sumitomo (SHI) Demag Plastics Machinery GmbH grew its market share on the back of a rise in sales of electric injection molding machines and other sales in Europe.

### Fiscal 2018 Strategies and Initiatives

To realize a competitive product portfolio, we will redouble efforts in related markets such as automotive and daily necessities markets drawing on the strength in our traditional electrical- and electronic-related domains. As demand for electronic and optical systems is expected to increase due to the conversion to EV and automatic operation, we will reinforce our solution proposal to meet customer needs. We will also invest in domestic production innovation and promote the provision of electric injection molding machines as a series in Europe to further improve customer value.

## Precision Equipment and Others (Cryo)

### Market Environment

In the medical MRI market, slight growth is continuing with signs of a strong performance in Europe and the United States despite a decline in growth in China. The semiconductor market is likely to stay on a growth trajectory, fueled by the demand of various sensors for IoT, memory for cloud computing, and in-vehicle devices, but the situation is unpredictable considering Taiwan and Korea have postponed their capital investment due to supply-demand adjustment. In the display market, organic EL for smartphones was launched and large-scale investment was planned in Korea and China. However, there also is information about postponement and freezing, making us take a cautious approach.

### Fiscal 2017 Review and Key Topics

We increased orders for cryogenic coolers and cryopumps by targeting greater market share with new products and aiming to capture replacement demand. In the medical MRI market, we started evaluating high-efficiency refrigerating machines at major customers and started sales of new types of compressors with self-diagnosis functions. In the

semiconductor market, we launched cryopumps that use 40% less energy and have double Ar gas pumping capacity compared with previous models and they are increasingly used by new customers and for new equipment. In March 2017, we acquired the shares of Persimmon Technologies Corporation (Massachusetts, the United States) to make it a wholly owned subsidiary. It primarily manufactures and sells vacuum robotics for use in semiconductor manufacturing processes such as wafer transport and we have already received mass-volume orders from target customers.

### Fiscal 2018 Strategies and Initiatives

In the cryogenic cooler market, we aim to improve profitability along with establishing a competitive advantage by shifting to highly efficient products and by reducing costs. We are promoting the use of cryopumps, which were mainly used on sputtering systems, for ion implantation equipment and look to receive volume orders from major customers and new customers. In the vacuum robotics business, we will promote activities aimed at expanding the share within key customers and acquiring new customers.



SICERA® Ultra cryopump



Plastics machinery  
(All-electric injection molder machine SE280EV-A-HD)



Precision Equipment and Others  
(Semiconductors)

Market Environment

In the semiconductor industry, the shipment value of semiconductors increased by approximately 20% from FY2016, supported by the rising demand for SSDs and various semiconductors for data centers in the United States as well as increased shipment volumes of various electronic devices such as for smartphones and servers in Asia, China, and other regions. Under these circumstances, high operating conditions at each factory continued among semiconductor device manufacturers, boosting aggressive capital investment.

Fiscal 2017 Review and Key Topics

New equipment orders nearly doubled from the previous year. In the domestic business, we received orders from memory and power semiconductor manufacturers as well as orders for image sensor equipment, and orders from Taiwan foundry manufacturers also increased. In China, where we established a local subsidiary in FY2017, we won large orders from foundry manufacturers and thus we took a major step towards expanding our global market share.

We made evaluations of ultra-high-energy equipment with higher performance than conventional models with a view to incorporating it into customers' manufacturing processes, brought to market new concept equipment with an expanded injection area to improve application flexibility, and conducted

several evaluations based on customer environments. Thus, we are concentrating our management resources towards strengthening the product capabilities of main models that are expected to play a central role in the next medium-term plan.

Fiscal 2018 Strategies and Initiatives

In the semiconductor market, demand for various semiconductors for data centers continues to be strong in FY2018 and we anticipate higher demand for conversion from HDDs to SSDs because the bit price of SSDs has fallen below HDDs. In the medium term, demand for semiconductors will continue to increase due to the increase in the number of semiconductors per unit used for home appliances, automobiles, and industrial equipment, and other factors such as the popularization of devices equipped with 5G, a next-generation communication standard. Against this backdrop of strong semiconductor market conditions, we expect that investment in semiconductor manufacturing equipment will continue steadily.

As was the case in the previous year, we will focus our equipment sales on the highly profitable S-UHE Series and new model SAion and position aftermarket service as the revenue-supporting business to ensure more stable business operation.



Semiconductor production equipment  
(Ultra-high-energy ion-implantation system)

Construction Machinery

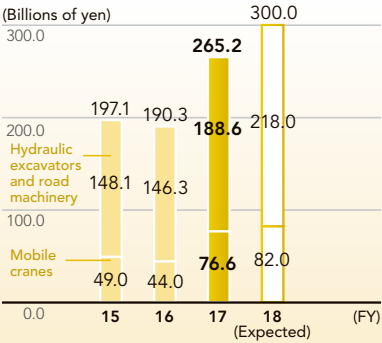


Main Products	Major Applications/Markets
Hydraulic excavators	Construction, Civil engineering, Scrap, Forestry
Mobile cranes	Construction, Civil engineering
Road machinery	Roadway construction

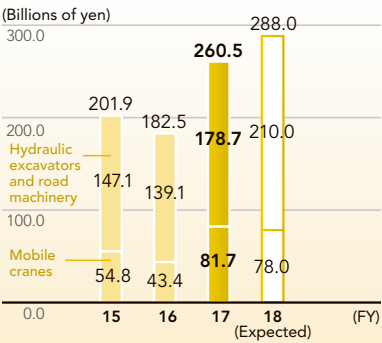


Hydraulic excavator SH250-7

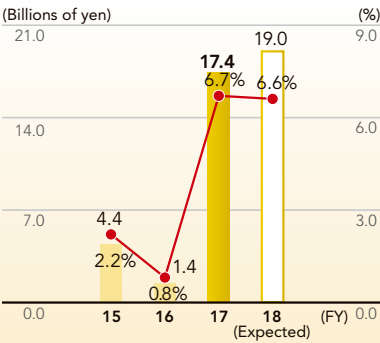
► Orders



► Net Sales



► Operating Income/  
Operating Income Ratio



Hydraulic Excavators and Road Machinery  
Sumitomo (S.H.I.) Construction Machinery Co., Ltd.

Market Environment

The domestic hydraulic excavator market in FY2017 saw a surge in demand ahead of the change in emission rules, mainly in rental demand, and it increased by 10% from the previous year to 25,000 units. China, which is the largest market, expanded to more than 112,000 units, more than doubling the previous year, leading global demand. Expanding in all other regions, global demand increased 47% to 261,000 units compared with the previous fiscal year.

Fiscal 2017 Review and Key Topics

In the domestic market, we focused on capturing the surge in demand of hydraulic excavators especially for the rental market. As a result, a record 12.3% share was achieved. In addition, as demand for hydraulic excavators expanded in all regions of the world, we focused on enhancing production capacity at three global plants in Japan, China, and Indonesia to raise supply capacity, resulting in a shipment of more than 11,000 hydraulic excavators to the world over. In addition, we launched five models of new hydraulic

excavators compliant with the 2014 standard for Act on Regulation, Etc. of Emissions from Non-road Special Motor Vehicles (off-road law), and simultaneously launched ICT construction machines and state-of-the-art hybrid machines that were compatible with information construction. Turning to the road-paving business, we publically disclosed two models of asphalt pavers that conform to the off-road law's 2014 standard and an ICT-compliant model. Due to these demand trends and policies, we achieved record sales of ¥178.7 billion in fiscal 2017.

Fiscal 2018 Strategies and Initiatives

World demand for hydraulic excavators in FY2018 is expected to continue to expand worldwide, except in Japan, where a recoil from the surge in demand is anticipated. In order to respond to such market expansion, we will increase production efficiency at the three plants and further increase personnel to maximize production volume. In the domestic market, we will aim to expand sales of new excavators and road machinery equipped with a new safety support device (Field View Monitor-II) and compatible with information construction. Overseas, we aim to increase our market share through reinforced marketing and



servicing activities tailored to specific areas around the world. In the service and components area, we are pushing for higher supply speeds for components and improved profitability. Our development division will develop products that utilize the most advanced technologies to enhance customers’ productivity and speed up development.

**Mobile Cranes** Sumitomo Heavy Industries Construction Cranes Co., Ltd.  
Link-Belt Cranes, L.P., LLLP

Market Environment

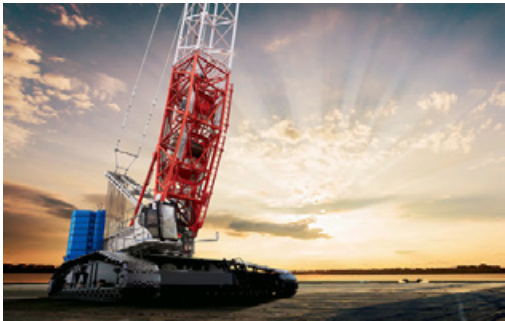
In the construction crane market, although the operation status of the machine was steady due to an increase in public works and the Tokyo Olympics-related work started in full swing in the domestic market, demand declined compared to the previous year because of a shortage of operators and contained investment in reaction to strong demand in the past years. Overseas, although the price of crude oil in North America began to rise, expected infrastructure construction work still remains slow and the economy in western Europe continues to stagnate. Demand sharply increased in emerging markets with the increase in China’s domestic infrastructure investment, but demand in each region, including Asia but excluding China, remained flat or decreased, resulting in a slight increase in demand in total.



Hydraulic excavator SH250-7



Asphalt paver HA60W



Hydraulic crawler crane SCX3500-3

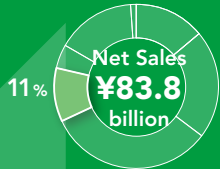
Fiscal 2017 Review and Key Topics

FY2017 was the first year with Sumitomo Heavy Industries Construction Cranes Co., Ltd. as a consolidated subsidiary of the Company. Although the service business expanded in the domestic business and sales of large-sized machines increased, the total number of new unit sales decreased, resulting in a domestic sales decline of 8% from the previous fiscal year. In overseas operations, despite the increase in unit sales brought about by the strengthening of agent support and promotion of new market development in continuation of our efforts in FY2016, sales declined by 6% due to a decrease in the number of medium-sized units sold and a change in selling price. Regarding collaboration with our consolidated subsidiary Link-Belt Cranes, L.P., LLLP in North America, we will further promote cooperation in sales, marketing, development, and procurement.

Fiscal 2018 Strategies and Initiatives

Considering the sluggish domestic capital spending caused by hiking of material prices, difficulty in procurement of parts, and risk of world trade contraction due to prolongation of protection tradeism, it is expected that uncertainty in the global market environment will continue. From now, we will promote synergies by accelerating speedy new product development and improving quality, enhancing customer satisfaction by strengthening cooperation with overseas agents, and strengthening collaboration with SHI Group companies including Link-Belt Cranes, L.P., LLLP, as well as promote efficient use of resources so that we can build a competitive business structure as we used to do.

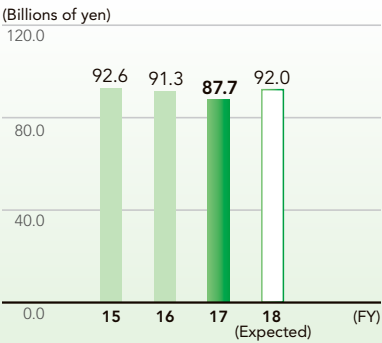
Industrial Machinery



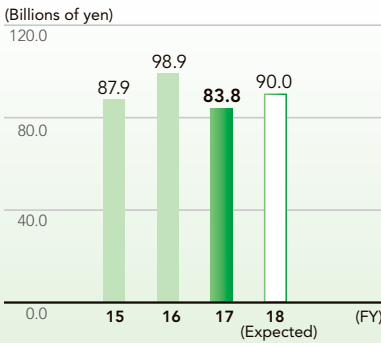
Main Products	Major Applications/Markets
Cyclotrons for medical use	Medical equipment
Cyclotrons for research use	Research
Coating systems	LCDs
Forging presses	Automobiles, Iron and steel, Non-ferrous metals
Material handling machinery	Iron and steel, Electric power, Shipbuilding, Port logistics
Logistics & handling systems	Logistics
Turbines	Power generation
Pumps	Oil refineries, Petrochemical facilities

Boron neutron capture therapy (BNCT) system

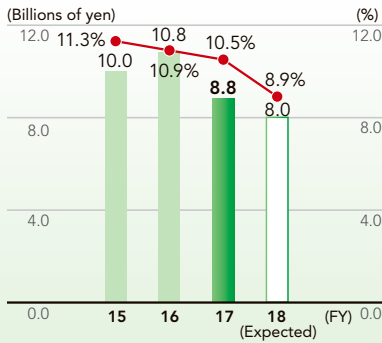
Orders



Net Sales



Operating Income/ Operating Income Ratio



Forging Presses

Market Environment

In the automotive industry, investment is revitalizing driven by steady US and Chinese automobile production and the necessity of introducing new parts to respond to the transition to new energy vehicles. In the domestic market, investment for survival is being carried out with the aim of securing market share, as well as investment to reform manufacturing methods for higher competitiveness is taking place.

Fiscal 2017 Review and Key Topics

In the global market, we received orders for multiple units collectively that are used to enhance production capacity to meet increased demand for weight-saving parts and units that are introduced to reform manufacturing methods. In addition, we received orders from several customers aiming to expand market share of their drive system parts.

Fiscal 2018 Strategies and Initiatives

Continuing to aim for higher customer satisfaction, we will enhance our servicing capabilities. In particular, in order to contribute to customers’ stable operation, we will work on preventive maintenance such as against breakdown. Additionally, we are developing and marketing the new FPZ Series of forging presses based on the concepts of stable, suitable, and comfortable. Our goal is to contribute to a better forging work environment and to expand our business.



Crankshaft forging line



Medical Equipment

Market Environment

The domestic and overseas markets are generally firm for cyclotron systems for PET, which are used to manufacture radioactive pharmaceuticals for diagnoses related mainly to cancer, brain function, and other issues. Also, in terms of cutting-edge treatment, there is a growing interest in proton and heavy-ion cancer treatment systems in Asia, Europe, and North America.

Fiscal 2017 Review and Key Topics

In the diagnosis field, we received orders for cyclotron systems for PET to be used in the Philippines for the first time. In the treatment field, we are working on the development of high-speed scanning technology to respond to treatment of respiratory movement organs with proton therapy systems, as well as on the expansion of orders for our injectors in response to the increased demand for heavy-ion therapy systems. Regarding boron neutron capture therapy (BNCT), which destroys cancer cells after the uptake of boron compound, we conducted the first clinical trial on BNCT using a cyclotron in the world. Now, we are working on development to obtain medical equipment approval as soon as possible.

Fiscal 2018 Strategies and Initiatives

We will expand the business of PET cyclotron systems to domestic and overseas markets, actively responding to the demand from domestic research institutions and overseas hospitals centered on clinical treatment, and further to domestic and overseas drug delivery institutions. We will develop high-performance cyclotrons and drug synthesis equipment and actively respond to not only Japan but also China, emerging countries, and the US market.

In the field of proton and heavy-ion injectors, we will work on overseas expansion, mainly in Asia, and actively engage in the development of a BNCT system aiming for its early medical equipment approval.

Material Handling Systems  
Sumitomo Heavy Industries Material Handling Systems Co., Ltd.

Market Environment

In material handling systems, demand for refurbishment of aging facilities in the steelmaking and energy sectors is steady, and planned investments are being implemented. In the logistics system, there is strong demand for automation in the logistics field due to the serious labor shortage. In automated parking lots, although demand related to the Olympic Games has dwindled, redevelopment plans at main terminal stations in the center of Tokyo and surrounding areas have moved into full swing.

Fiscal 2017 Review and Key Topics

In material handling systems, we attained a higher domestic order volume than expected from the shipbuilding industry, and we were also able to receive orders for projects that help demonstrate our superiority by strengthening the competitiveness of models for ports and other markets. To manufacture products more efficiently, we installed two large-scale cranes in our Niihama Factory in order to respond to recent demand for larger products. In logistics systems, our new product, the Magic Rack® high-density storage system, earned a good reputation and we received orders from major beverage manufacturers and third-party logistics businesses. Inquiries are strong and we expect many orders.

We increased the number of deliveries by receiving orders for large facilities and other systems to maintain the top market share in the automated parking lot business, thanks to the product capabilities supporting the fastest loading and unloading speed.

Fiscal 2018 Strategies and Initiatives

In this business, we set a business vision of “Deliver the best customer service and products in the material handling domain to become the top domestic material handling systems manufacturer” under Medium-Term Management Plan 2019. We will steadily develop measures to reinforce our service business and aim to strengthen product competitiveness by concentrating on the development and commercialization of automation technology as a solution to labor shortages, which is a common issue in each industry.

Turbines and Pumps  
Shin Nippon Machinery Co., Ltd.

Market Environment

In the power generation business, as attention is focused on reducing global CO<sub>2</sub> emissions and stricter environmental regulations are becoming apparent, expectations for renewable energy are still high and investment plans for electric power projects compatible with energy mixes in each country are anticipated. In the oil and gas business, excessive capacity is contributing to a downtrend in investment. However, petroleum distillation reform projects are likely in Asia as well as new petroleum distillation and petrochemical projects in the Middle East, North America, and Korea.

Fiscal 2017 Review and Key Topics

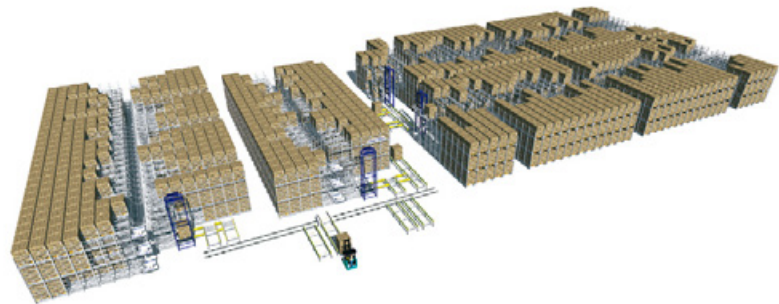
In the power generation business, overseas order volume declined from the previous year due to delays in acquiring environmental approvals and licenses for plant construction and intensified competition with competitors. In the oil and gas business, plans for petroleum distillation reform projects are in progress mainly in India and South Korea. Small projects for renewal, remodeling, and capacity enhancement increased in Singapore, the Philippines, Malaysia, and Japan, enabling us to attain higher order volume than in the previous fiscal year.

Fiscal 2018 Strategies and Initiatives

In the power generation business, we aim to expand orders in the overseas private power generating segment and the power selling segment by developing new markets and sustaining and adding to our loyal customer base, mainly in Southeast Asia, harnessing our accumulated operational experiences. In the oil and gas business, we look to increase orders from petroleum distillation and petrochemical industries through marketing promotions and our strengths in turbine and pump packages compliant with API standards.



Steam turbine



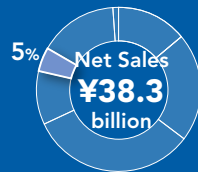
Magic Rack®



Goliath shipping crane for shipyards



# Ships



Main Products	Major Applications/Markets
Ships	Marine transportation



Aframax Tanker Seacharm

# Environmental Facilities & Plants

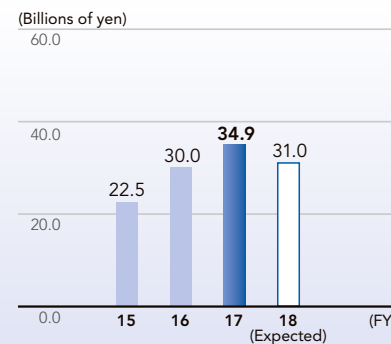


Main Products	Major Applications/Markets
Power generation facilities	Electric utilities, Paper manufacturing, Steelmaking, Cement, Food processing plants, Paper and pulp, Chemicals, Electricity and electronics, Machinery
Industrial wastewater treatment systems	
Water and sewage treatment systems	Government agencies
Landfill leachate treatment systems	
Air pollution control plants	Electric utilities, Iron and steel industry
Chemical process equipment & plants	Petrochemical plants
Pressure vessels, Mixing vessels	Oil refining, Petrochemical industries
Steel structures	Iron and steel industry
Food processing machinery	Food processing industry

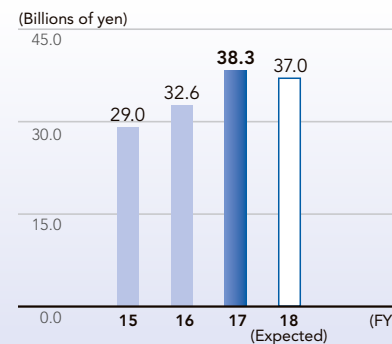


Biomass power generation plant  
(Delivered to Summit Handa Power Corporation)

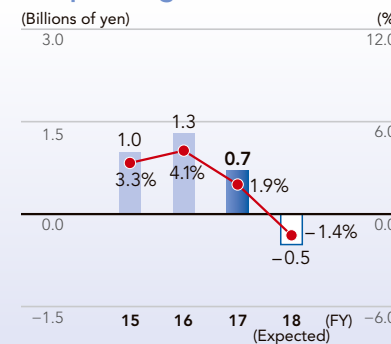
## ► Orders



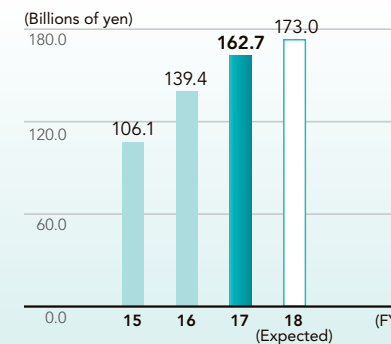
## ► Net Sales



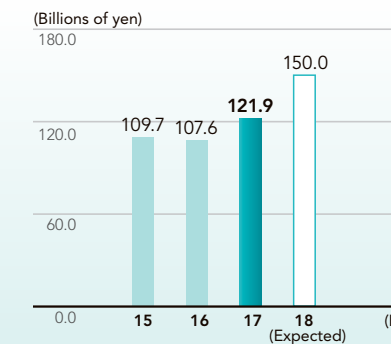
## ► Operating Income/ Operating Income Ratio



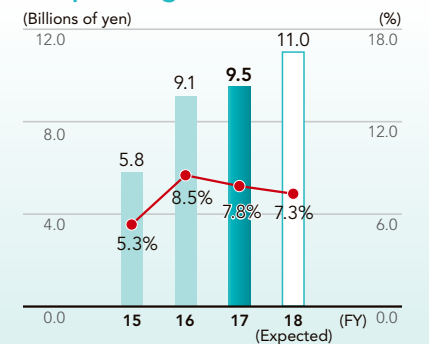
## ► Orders



## ► Net Sales



## ► Operating Income/ Operating Income Ratio



## Ships

Sumitomo Heavy Industries Marine & Engineering Co., Ltd.

## Market Environment

In the shipping market, although the dry bulk sector had hit bottom, tankers remained at a historical low level, and signs of market recovery are yet to be seen. Considering geopolitical factors such as the Middle East and Africa, the market situation of tankers is getting more uncertain.

In the shipbuilding industry, oversupply was temporarily relaxed due to the bankruptcy of some overseas shipyards. However, consideration of a few negative factors such as a large number of newly built vessels which are expected to be delivered, the uncertain shipping market situation and countermeasures regarding sulfur oxide (SOx) emissions regulations effective from 2020 has discouraged ship-owners from ordering new vessels since the beginning of 2018.

## Fiscal 2017 Review and Key Topics

Amidst the extremely severe order-receiving environment in FY2017, we celebrated the 10th anniversary of our European branch in Athens, Greece, where most ship-owners set up a base. We actively promoted sales of Aframax tankers in both the European and Asian markets. As a result, we succeeded in receiving three orders for

newly built vessels and secured about two and half years' worth of work to be carried out as of the beginning of FY2018. We also completed the construction of five vessels, two more than the previous year. By continuing productivity enhancement activities including the application of the Toyota Production System and the profitability improvement of individual shipbuilding projects, profit has increased on a full-year basis for three straight years.

## Fiscal 2018 Strategies and Initiatives

Imports and consumption of crude oil in emerging countries continue to increase, but due to multiple factors such as the US crude oil export policy, geopolitical factors of the Middle East and crude oil price mechanism, there is a growing sense of uncertainty regarding marine transportation of oil around the world. On the other hands, ballast water treatment and exhaust gas regulations triggered an increase in the scrapping of existing tonnage, which outnumbered the result of the previous year even at the middle of the year. The scrapping of vessels is expected to increase in the future, contributing to the elimination of the vessel oversupply situation. In this market situation, we will develop new designs that quickly adapt to diversifying transport routes, customer requirements, and new environmental regulations to enhance our product capabilities and accelerate initiatives to receive orders to achieve positive results.

## Energy Plants

## Market Environment

In Japan's domestic power market, there is robust activity in power generation businesses that utilized the Feed-in Tariff (FIT) scheme launched in 2012, and in addition to projects utilizing domestic biomass as fuel, there are an increasing number of larger projects under planning and construction that are utilizing imported biomass as fuel. While the 5th Strategic Energy Plan decided by the Cabinet this fiscal year positioned renewable energy including biomass as main power, the FIT-driven market is expected to shrink because the purchase price and certification amount is gradually expected to decline at the government intends to reduce the public burden for supporting the scheme.

Outside Japan, demand for power plants is strong due to potential electricity shortages in emerging countries and the power plant market using circulating fluidized bed (CFB) boilers is expected to expand in India and Southeast Asia.

## Fiscal 2017 Review and Key Topics

For the CFB boiler power plant market, we delivered

two CFB boilers utilizing the FIT scheme to Japanese customers. While Japanese utility companies are engaged in biomass power generation to reduce CO<sub>2</sub>, plans for dedicated biomass combustion power generation, in addition to coal co-firing, are under contemplation. In FY2017, we received four new orders from such utility companies as well as existing customers.

In June 2017, we acquired the CFB boiler business of Amec Foster Wheeler plc and established a new company, Sumitomo SHI FW Energie B.V. (SFW).



Biomass power generation plant  
(Delivered to Mombetsu Biomass Electric Power Co., Ltd.)



Fiscal 2018 Strategies and Initiatives

While paying close attention to changes in the Japanese market environment, we aim to continuously receive orders by offering highly efficient biomass power plant technology. In addition, we will optimize organizational functions including SFW acquired in 2017, and expand our system to establish a global presence by taking advantage of various achievements in and outside Japan.

We will contribute to the reduction of customers' power generation cost and provide sustainable energy solutions through stable combustion of biomass and low rank fuels.

Water and Wastewater Treatment Plants  
Sumitomo Heavy Industries Environment Co., Ltd.

Market Environment

The government and public sector market for wastewater treatment systems is stable overall due to demand for replacement and repair of aging facilities, but the competition remains fierce. Meanwhile, the public-private partnership business has become a major business opportunity in the growing market. The domestic private sector market for wastewater treatment systems is stable overall, supported by demand for replacement and repair of aging facilities and investment demand to reduce costs and increase production capacity. Competition with rivals remains fierce and a tough condition continues.

Fiscal 2017 Review and Key Topics

In the government and public sector, we were able to receive orders for large projects, etc., for the Tokyo

metropolitan area, but due to the small number of long-term operation and maintenance contracts, order volume declined from the previous year. In private sector wastewater treatment systems, we worked to strengthen our solution proposal capabilities for meeting customer needs and were eventually able to receive orders for biogas power generation type anaerobic wastewater treatment systems using plum seasoning waste liquid, which also contributes to the reduction of processing costs for plum seasoning waste liquid generated during *umeboshi* processing. In addition, with the aim of strengthening the integrated operation of the plant business and service business, we integrated on April 1, 2017 Sumiju Environmental Engineering Co., Ltd., a wholly owned subsidiary that performs service business (operation management and repair) for existing facilities.

Fiscal 2018 Strategies and Initiatives

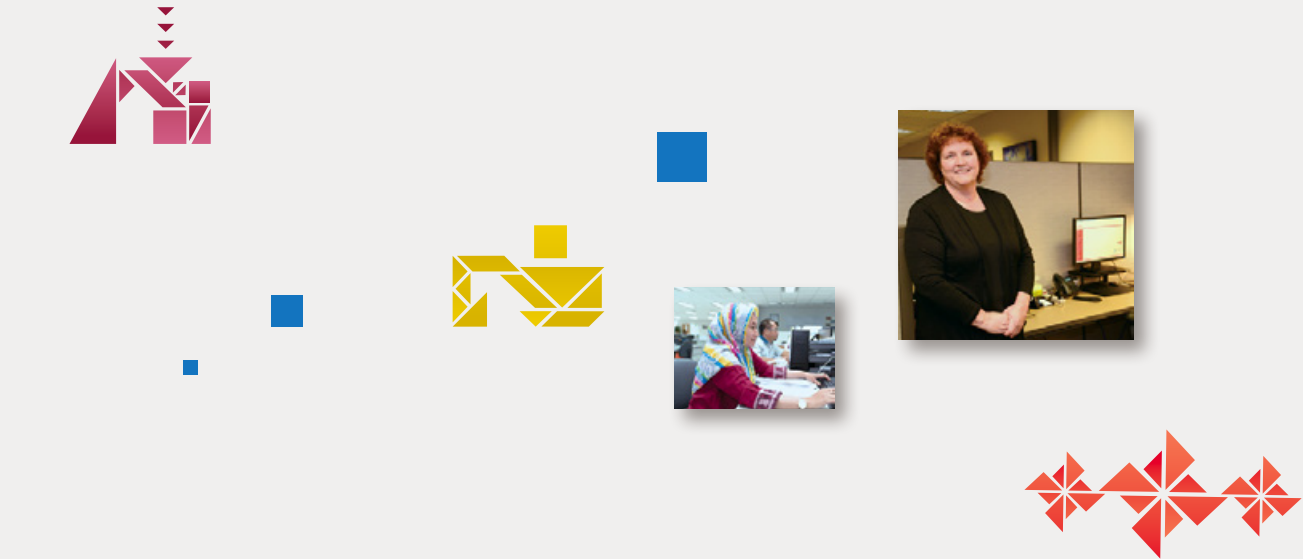
In government and public sector business, we will keep concentrating on growing orders for our unit products, while advancing methodically with initiatives in areas such as the public-private partnership business and plant design-and-build projects. In private sector business, we will keep concentrating on growing orders for our wastewater treatment systems required along with the investment for increasing production capacity and reducing costs in such industries as steel, while working to expand orders by strengthening our solution proposal capabilities for meeting customer needs, offering such proposals as renovation of aging facilities to the food or chemical industries.



Wastewater treatment system  
(Comprehensive chemical wastewater treatment plant)



Micras® wastewater treatment system



Base Supporting the SHI Group

Base Supporting the SHI Group

Directors, Corporate Auditors, and Executive Officers . . . . .	40
Message from the External Directors . . . . .	42
Corporate Governance . . . . .	43
Compliance Activities . . . . .	46
Risk Management Activities . . . . .	47



# Directors, Corporate Auditors, and Executive Officers

## Board of Directors



**Yoshinobu Nakamura**  
Representative Director and Chairman of the Board

Apr. 1975 Joined the Company  
Jun. 2002 Senior Vice President, General Manager of Laser System Division  
Jun. 2003 General Manager of Precision Machinery Group  
Jun. 2004 Executive Vice President  
Oct. 2004 General Manager of Mechatronics Division  
Jun. 2005 Director  
Apr. 2007 Representative Director and President & CEO  
Apr. 2013 Representative Director and Chairman of the Board (current)



**Shunsuke Betsukawa**  
Representative Director, President and CEO

Apr. 1978 Joined the Company  
Apr. 2007 Senior Vice President, General Manager of Corporate Finance, Accounting & Administration Group  
Apr. 2009 General Manager of Corporate Planning and Development Department  
Jun. 2009 Director and Senior Vice President  
Apr. 2010 Director and Executive Vice President  
Apr. 2011 Representative Director, CFO and General Manager of Export Administration Department  
Apr. 2012 Senior Executive Vice President  
Apr. 2013 Representative Director, President and CEO (current)



**Yoshiyuki Tomita**  
Representative Director and Executive Vice President

Apr. 1981 Joined the Company  
Apr. 2011 Vice President, General Manager of Research & Development Center, Corporate Technology Operations Group  
Jun. 2012 Director  
Apr. 2014 Senior Vice President, General Manager of Corporate Technology Operations Group (current)  
Apr. 2016 Executive Vice President (current)  
Apr. 2018 Representative Director (current)



**Toshiharu Tanaka**  
Director and Executive Vice President

Apr. 1983 Joined the Company  
Apr. 2005 Principal Engineer of Planning & Control Department, Quantum and Advanced Equipment Center, Precision Equipment Group  
Apr. 2006 General Manager of Planning & Control Department, Quantum Equipment Division  
Apr. 2010 Chief Staff Manager of Corporate Planning & Development Department  
Apr. 2011 General Manager of Precision Equipment Group  
Apr. 2013 Senior Vice President  
Jun. 2013 Director (current)  
Apr. 2014 General Manager of Overseas Sales Department, Power Transmission & Controls Group  
Oct. 2014 General Manager of Power Transmission & Controls Group (current)  
Apr. 2015 Executive Vice President (current)



**Tetsuya Okamura**  
Director and Executive Vice President

Apr. 1980 Joined the Company  
Mar. 2008 Managing Director & CEO of Demag Ergotech GmbH  
Apr. 2012 Senior Vice President of the Company  
Apr. 2018 Executive Vice President (current)  
Jun. 2018 Director (current)



**Hideo Suzuki**  
Director and Executive Vice President

Apr. 1982 Joined the Company  
Apr. 2014 Senior Vice President  
Apr. 2018 Executive Vice President (current)  
Jun. 2018 Director (current)



**Eiji Kojima**  
Director and Senior Vice President

Apr. 1984 Joined the Company  
Nov. 2013 General Manager of Mechatronics Division  
Apr. 2016 Senior Vice President (current)  
Jul. 2016 General Manager of Energy & Environment Group (current)  
Jun. 2017 Director (current)



**Shinji Shimomura**  
Director and Executive Vice President

Apr. 1982 Joined the Company  
Apr. 2012 Director of Sumitomo (S.H.I.) Construction Machinery Co., Ltd.  
Apr. 2013 Executive Managing Director of Sumitomo (S.H.I.) Construction Machinery Co., Ltd.  
Apr. 2014 Senior Executive Director of Sumitomo (S.H.I.) Construction Machinery Co., Ltd., Vice President of the Company  
Apr. 2015 Senior Vice President, Representative Director and President & CEO of Sumitomo (S.H.I.) Construction Machinery Sales Co., Ltd. (current)  
Apr. 2016 Representative Director and President & CEO of Sumitomo (S.H.I.) Construction Machinery Co., Ltd. (current)  
Jun. 2016 Director of the Company (current)  
Apr. 2018 Executive Vice President (current)



**Susumu Takahashi**  
External Director

Feb. 2004 Counselor of The Japan Research Institute, Limited  
Aug. 2007 Vice Chairman of The Japan Research Institute, Limited  
Jun. 2011 Chairman of The Japan Research Institute, Limited  
Apr. 2014 External Director of the Company (current)  
Apr. 2018 Chairman Emeritus of The Japan Research Institute, Limited (current)



**Hideo Kojima**  
External Director

Mar. 1980 Registered as a certified public accountant (current)  
May 1995 Representative Partner of Ota-Showa Auditors Office  
May 2000 Vice Chairman of Century Ota Showa & Co.  
May 2004 General Manager of International Division, Tokyo office, Shin Nihon & Co.  
May 2006 Deputy Chief Executive Officer of Shin Nihon & Co.  
Sep. 2010 Senior Advisor of Ernst & Young ShinNihon LLC  
Jun. 2011 External Corporate Auditor of Alpine Electronics, Inc.  
External Corporate Auditor of the Company  
Established Hideo Kojima CPA Office (current)  
External Corporate Auditor of Mitsubishi UFJ Financial Group, Inc.  
Jun. 2013 External Director of the Company (current)  
Jun. 2015 External Director (Audit and Supervisory Committee Member) of Alpine Electronics, Inc. (current)  
Jun. 2016

## Corporate Auditors



**Yuji Takaishi**  
Standing Corporate Auditor

Apr. 1977 Joined the Company  
Apr. 2007 Senior Vice President, General Manager of Human Resources Department  
Jun. 2007 Director  
Apr. 2010 Executive Vice President and General Manager of Plastics Machinery Division  
Apr. 2012 General Manager of Corporate Planning & Development Department  
Apr. 2013 Representative Director, General Manager of Export Administration Department  
Apr. 2014 General Manager of Corporate Planning Group  
Apr. 2015 Regional General Manager of Kansai Office  
Jun. 2016 Corporate Auditor (current)



**Jun Nogusa**  
Standing Corporate Auditor

Apr. 1979 Joined the Company  
Jun. 2018 Corporate Auditor (current)



**Takeo Wakae**  
External Corporate Auditor

Apr. 1983 Registered as attorney-at-law (current)  
Apr. 1992 Civil conciliation commissioner at Tokyo District Court (current)  
Apr. 2003 Vice President of Daiichi Tokyo Bar Association (fiscal year 2003)  
Jun. 2012 External Corporate Auditor of the Company (current)  
Apr. 2014 Executive Director of Japan Federation of Bar Associations (fiscal year 2014)



**Masaichi Nakamura**  
External Corporate Auditor

Mar. 1987 Registered as a certified public accountant (current)  
Aug. 2008 Managing Director of Ernst & Young ShinNihon LLC  
Jul. 2014 Representative Partner and Vice President of Ernst & Young ShinNihon LLC  
Representative Director of Ernst & Young Business Initiative Co., Ltd.  
Sep. 2016 Established Masaichi Nakamura CPA Office (current)  
Jun. 2017 External Corporate Auditor of the Company (current)

## Executive Officers

President	Shunsuke Betsukawa	CEO
Executive Vice President	Yoshiyuki Tomita	General Manager of Export Administration Department; General Manager of Corporate Technology Operations Group
Executive Vice President	Toshiharu Tanaka	General Manager of Power Transmission & Controls Group
Executive Vice President	Tetsuya Okamura	General Manager of Industrial Equipment Division
Executive Vice President	Hideo Suzuki	General Manager of Corporate Finance, Accounting & Administration Group
Executive Vice President	Shinji Shimomura	Representative Director and President & CEO of Sumitomo (S.H.I.) Construction Machinery Co., Ltd.; Representative Director and President & CEO of Sumitomo (S.H.I.) Construction Machinery Sales Co., Ltd.
Senior Vice President	Hiroo Morita	General Manager of Human Resources Group; Chairman of the Board of Sumitomo Heavy Industries (China), Ltd.; Chairman of Sumitomo Heavy Industries (Shanghai) Management, Ltd.; Representative Director and President & CEO of Sumitomo Heavy Industries Business Associates, Ltd.
Senior Vice President	Kazuo Hiraoka	General Manager of Plastics Machinery Division
Senior Vice President	Tatsuya Endo	Representative Director and President & CEO of Sumitomo Heavy Industries Material Handling Systems Co., Ltd.; General Manager of Ehime Works
Senior Vice President	Taiji Tsuchiya	General Manager of Precision Equipment Group
Senior Vice President	Eiji Kojima	General Manager of Energy & Environment Group
Senior Vice President	Hiroshi Arito	Representative Director and President & CEO of Nihon Spindle Manufacturing Co., Ltd.
Senior Vice President	Hideshi Shimamoto	General Manager of Ship & Marine Division; Representative Director and President & CEO of Sumitomo Heavy Industries Marine & Engineering Co., Ltd.
Senior Vice President	Morihiro Kondo	General Manager of Corporate Planning Group
Senior Vice President	Junichi Murakami	Representative Director and President & CEO of Sumitomo Heavy Industries Ion Technology Co., Ltd.
Senior Vice President	Kyoichi Manabe	Representative Director and President & CEO of Sumitomo Heavy Industries Environment Co., Ltd.
Vice President	Toshihiko Chijiwa	General Manager of Technology Research Center, Corporate Technology Management Group
Vice President	Shaun Dean	General Manager of Global HQ, Power Transmission & Controls Group; Managing Director and CEO of Sumitomo (SHI) Cyclo Drive Germany GmbH; President of PTC EMEA
Vice President	Yasunobu Kazumi	Executive Managing Director, Corporate Officer of China Business Division, Sumitomo (S.H.I.) Construction Machinery Co., Ltd.
Vice President	Tatsuro Araki	General Manager of Gearbox Business Unit, Power Transmission & Controls Group; Representative Director and President & CEO of Sumitomo Heavy Industries Gearbox Co., Ltd.



# Message from the External Directors

In the SHI Group, two external directors—one is an expert in economics and management and the other is in finance and accounting—are in charge of overseeing the Group’s management. Here are the current issues and prospects of the SHI Group seen from their respective standpoints.

## For consistent governance reforms

Initiatives for Japanese corporate governance reforms have advanced rapidly in recent years. From now on, how to penetrate the idea of reform within the organization and to establish it is called into question. In addition, Japanese companies are also required to undertake the task of reforming their way of working. Specific initiatives such as correcting long work hours and promoting the exercise of leave privileges are progressing rapidly. Here again, however, how we share the vision for reforming ways of working across the entire Group and how we build a corporate culture that will eventually lead to an improvement in productivity is also questioned.

We are making progress on initiatives for governance reforms, and are taking the lead in reforming ways of working. The challenge for the future is to integrate these reforms into a medium-term management plan that aims to strengthen profitability, thereby changing our corporate culture and radically strengthening the company structure. We are also required to fulfill accountability for these efforts to the stakeholders. I will continue to contribute as an external director toward our constant reform.

**Susumu Takahashi**  
External Director

Chairman Emeritus,  
The Japan Research Institute,  
Limited  
Appointed as a private sector  
member of the government’s  
Economic and Financial Advisory  
Council in January 2013 and  
as External Director of the  
Company in June 2014.



## To achieve sustainable growth

In June this year, the revised Corporate Governance Code (CGC) was announced for the purpose of achieving sustainable growth. The title of the revised CGC is “For ensuring sustainable company growth and improving medium- to long-term corporate values” and several redactions to the role of external directors were added in it.

We are currently implementing Medium-Term Management Plan 2019 and the policy—becoming a high-profit company and actively pursuing M&A and business alliances—which was formulated to achieve its goals is largely responsible for our sustainable growth in the future. In the revised CGC, the following two items, which seem to affect the execution of the above policy, were added: (1) the Board of Directors has an important responsibility for the selection and removal of the CEO and (2) it is necessary to develop an environment for effective use of external directors including securing a sufficient number to perform those roles and responsibilities in the Board of Directors.

Amidst these great changes in the environment surrounding corporate management and governance, I would like to reaffirm and fulfill the expanding role of external director in achieving sustainable growth of the Company.

**Hideo Kojima**  
External Director

Certified Public Accountant  
Appointed External Corporate  
Auditor of the Company in June  
2011 and as External Director of  
the Company in June 2015.



# Corporate Governance

Sumitomo Heavy Industries (SHI) believes that the essence of corporate governance lies in the establishment of a system that enables efficient and transparent management. Exerting continuous efforts to enhance corporate governance helps the Group achieve higher enterprise value and gain high respect and confidence from all its stakeholders.

## Corporate Governance Basic Policy of Sumitomo Heavy Industries, Ltd.

Chapter 1	General Provisions
Chapter 2	Securing the Rights and Equal Treatment of Shareholders <ul style="list-style-type: none"><li>▶ Securing the equal treatment of shareholders</li><li>▶ General Meeting of Shareholders</li><li>▶ Basic strategy for capital policy</li><li>▶ Strategic shareholdings</li><li>▶ Related party transactions</li></ul>
Chapter 3	Appropriate Cooperation with Stakeholders Other Than Shareholders <ul style="list-style-type: none"><li>▶ Ethics code</li><li>▶ Approach to environmental problems</li><li>▶ Whistleblowing</li><li>▶ Ensuring diversity in the Company, including the active participation of women</li></ul>
Chapter 4	Ensuring Appropriate Information Disclosure and Transparency <ul style="list-style-type: none"><li>▶ Basic policy on information disclosure</li></ul>
Chapter 5	Responsibilities of the Board of Directors, etc. <ul style="list-style-type: none"><li>▶ Roles and responsibilities of the Board of Directors</li><li>▶ Effectiveness of the Board of Directors</li><li>▶ Roles and responsibilities of corporate auditors and the Board of Corporate Auditors</li><li>▶ Outside officers</li><li>▶ The Nomination Committee and the Compensation Committee</li><li>▶ Training for directors and corporate auditors</li></ul>
Chapter 6	Dialogue with Shareholders <ul style="list-style-type: none"><li>▶ Policies on constructive dialogue with shareholders</li></ul>

For the purpose of promoting SHI’s dialogue with its investors, including shareholders, SHI shall establish Policies on Constructive Dialogue with Shareholders.

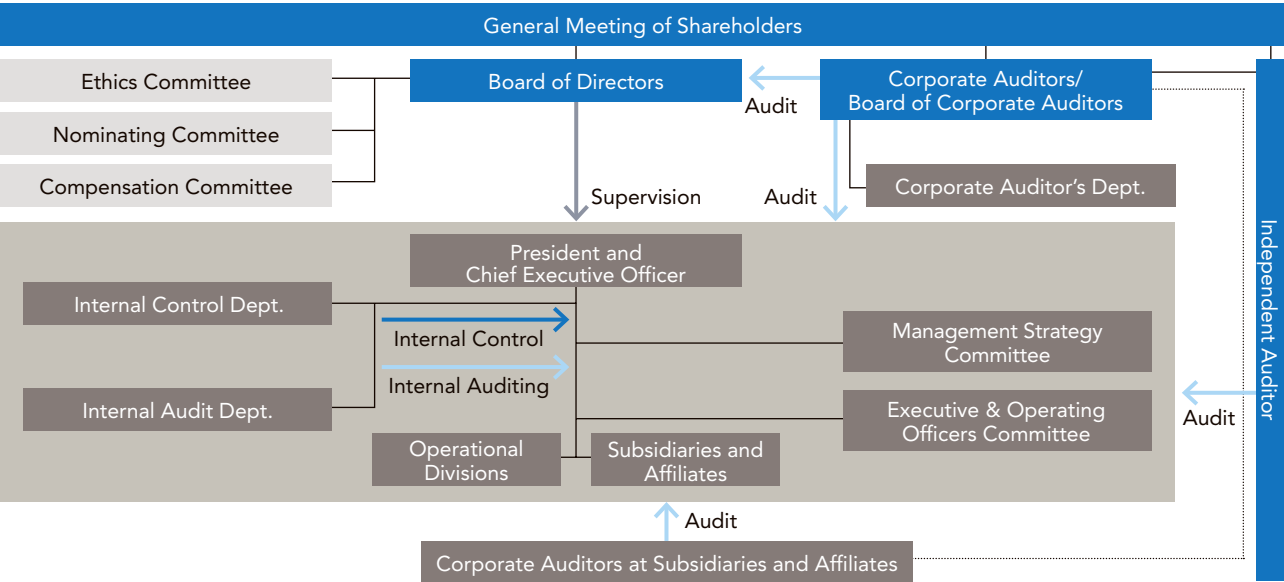
Corporate Governance System

Sumitomo Heavy Industries (SHI) has adopted the company with a board of corporate auditors system and, within this framework, introduced an executive officer system to separate the business execution and supervision functions of corporate management.

The Company has a Board of Directors, comprising 10 directors, of whom two are external directors whose role is to supervise management from an independent standpoint and are in charge of appro-

priately reflecting the stakeholders’ perspective.

The Board of Corporate Auditors is comprised of four corporate auditors, including two external corporate auditors. The external corporate auditors have advanced specialist knowledge and a wealth of experience in various fields and the standing corporate auditors have specialist knowledge and a wealth of experience of SHI management. They will utilize these and provide highly effective audits.



Board of Directors

The Board of Directors deliberates not only on matters stipulated under the Japanese Corporate Law, but also on important management issues in a preemptive manner. Also, the Company’s Articles of Incorporation stipulate that the Company must have no more than 12 directors.

Executive & Operating Officers Committee

The Executive & Operating Officers Committee, which is comprised mainly of executive officers, meets on a regular basis to oversee consolidated business results and to follow up on the implementation status of management policies.

Management Strategy Committee

The Company has also established the Management Strategy Committee, comprising executive officers assigned to the Company’s Head Office, as an advisory body to the President and CEO. This committee deliberates on important matters, including those to be submitted to the Board of Directors, and, consequently, reports the results of any deliberation to the Company’s President and CEO.

Corporate Auditors and the Board of Corporate Auditors

The Company’s corporate auditors audit the execution of duties by directors and executive officers from the perspectives of legality and appropriateness. At the same time, corporate auditors of the Company and its subsidiaries and affiliates jointly hold regular meetings to exchange audit-related information and reinforce auditing functions covering the entire SHI Group. The Company has appointed a lawyer and a certified public accountant as external corporate auditors to reinforce the overall system for checking compliance and corporate accounting. Also, the Company has established the Corporate Auditor’s Department with staff directly supporting this Board of Corporate Auditors.

Nominating Committee and Compensation Committee

The Nominating Committee makes recommendations to the Board of Directors with regard to candidates for directors. Four of the current six members of the Compensation Committee have been externally appointed. More specifically, as an advisory committee to the Board of Directors, the Compensation Committee determines a level of director remuneration that reflects the Company’s business performance while ensuring transparency and ethical appropriateness in remuneration decision processes.

External Directors and External Corporate Auditors

The Company has appointed two external directors and two external corporate auditors. Sumitomo Heavy Industries (SHI) ensures that all of its external directors have no risk of conflicts of interest with the Company’s general shareholders and has reported them as independent officers to the Tokyo Stock Exchange on which the Company is listed.

Title	Name	Reason for Appointment	Attendance at Meetings of the Board of Directors/ Board of Corporate Auditors
External Director	Susumu Takahashi	Susumu Takahashi possesses a high level of insight into economic and management matters. In addition, he has broad practical experience within private corporations and government organizations. Based on this insight and experience, Mr. Takahashi, as an external director, objectively and independently directs the management of the Company by providing advice on ways in which the Company can achieve sustainable growth and increase corporate value.	Mr. Takahashi attended 14 of 15 Board of Directors meetings in FY2017.
External Director	Hideo Kojima	Hideo Kojima is a certified public accountant and a specialist in finance and accounting with many years of practical experience. Based on this insight and experience, Mr. Kojima, as an external director, has objectively and independently directed the management of the Company by providing advice on ways in which the Company can achieve sustainable growth and increase corporate value.	Mr. Kojima attended 15 of 15 Board of Directors meetings in FY2017.
External Corporate Auditor	Takeo Wakae	As a lawyer, Takeo Wakae boasts a wealth of experience and has skillful insight through the law. Based on this experience and insight, he has independently and objectively audited the effectiveness of the Company’s management through his role as external auditor.	Mr. Wakae attended 15 of 15 Board of Directors meetings in FY2017. Mr. Wakae attended 13 of 13 Board of Corporate Auditors meetings in FY2017.
External Corporate Auditor	Masaichi Nakamura	Masaichi Nakamura is a certified public accountant and a specialist in finance and accounting with many years of practical experience. Based on this insight and experience, he can objectively and independently audit the effectiveness of the Company’s management through his role as external auditor.	Mr. Nakamura attended 11 of 11 Board of Directors meetings in FY2017. Mr. Nakamura attended 9 of 9 Board of Corporate Auditors meetings in FY2017. (Appointed as an external corporate auditor on June 29, 2017.)

Compensation of Directors and Corporate Auditors

The maximum amount of compensation paid to directors shall not exceed ¥40.0 million per month pursuant to the resolution of SHI’s Ordinary General Meeting of Shareholders ratified in June 2006. The Company has adopted a director compensation scheme that is linked to SHI’s operating results. Individual director remuneration is determined by the Board of Directors on advice from the

Compensation Committee regarding applicable standards that reflect SHI’s performance.

The maximum amount of compensation paid to corporate auditors shall not exceed ¥7.5 million per month pursuant to the June 2005 resolution of SHI’s Ordinary General Meeting of Shareholders. Remuneration paid to individual corporate auditors is determined through a process of deliberation among corporate auditors.

Classification	Amount of Compensation (Millions of yen)	Amount by Type of Compensation (Millions of yen)	Number of Eligible Officers
		Annual Compensation Amount	
Directors (excluding external directors)	320	320	9
Corporate auditors (excluding external corporate auditors)	69	69	2
External officers	38	38	5

Note: There were eight directors, two corporate auditors, and four external officers as of the end of the fiscal year under review. Included in the figures presented in the table above are the number of officers and compensation amounts paid for the period between April 2017 and June 2018 to one director who retired as of the close of the Company’s 121st Ordinary General Meeting of Shareholders held on June 29, 2017 and one external officer. (Accordingly, the aggregate number of eligible officers for the business term under review was nine directors, two corporate auditors (excluding external corporate auditors), and five external officers.)



## Compliance Activities

### Basic Concept

The SHI Group calls for its officers and employees to comply with laws and corporate ethics and always act with discernment. The basic action guidelines as summarized in the Ethics Code are required to be put into practice. We also have compiled a Compliance Manual that summarizes detailed remarks such as various rules to be observed by officers and employees as well as the Sumitomo Business Spirit and Ethics Code.

In addition, the president of the Company sends the message "Safety and compliance take precedence over all" to all Group employees through many opportunities such as distributed items and briefing sessions for employees.

### Whistleblowing System

We have a whistleblowing system called the SHI Group Ethics Hotline that allows officers and employees of the Company and affiliated companies to report to or consult with the Ethics Committee Secretariat concerning incidences that violate or may violate laws and internal rules. Since 2017, in Japan alone, we have been operating external hotlines that can be used in common by all Group employees to facilitate reporting and consultation.

### Promotion of Compliance Education

In order to maintain and improve awareness of compliance, the following, multilayered education and training system has been developed and carried out annually.

<b>Level-Specific Education:</b>	Eligible persons include newly hired employees, newly appointed assistant managers, managers, and officers.
<b>Workplace-Specific Education:</b>	In our compliance education, employees at each workplace are divided into small groups for discussion and make presentations so that they become thoroughly familiar with what compliance means to them.
<b>e-learning:</b>	In addition to compliance, safety and harassment are also taken up as subjects of education and all Group employees take a confirmation test conducted across Group companies. From FY2018, CSR was also added as an education subject. e-learning is also deployed to overseas affiliated companies, with all Chinese affiliates introducing e-learning in 2016 and major ASEAN affiliates in 2018.
<b>Function-Specific Education:</b>	In addition to education for employees newly assigned to the Sales Division, we started providing education on misconduct in 2017 to employees belonging to sales-related divisions, with division heads and other eligible persons as lecturers.

### Pledge of Compliance

To ensure the execution of business activities with awareness of compliance, we require managers of each company to submit the pledge of compliance to the president of each company every year.

### Compliance Promoting System

We set up the Ethics Committee, chaired by the president, to formulate compliance policies of the Group, grasp the occurrence of compliance problems, and give guidance for prevention.

Compliance policies and other rules decided by the Ethics Committee are being developed through the Compliance Promoting System (see page 47).

The Internal Control Department serves as the secretariat of the Ethics Committee and is responsible for developing plans, implementing them, and monitoring their progress to promote compliance of the entire Group. Each of the groups, manufacturing works, and subsidiaries has its own internal control organization (staffed with the lead internal control promoter and internal control promoters) to promote compliance in each unit in collaboration with the Internal Control Department. In 2018, we revised the SHI Group Compliance Regulation and applied it to all domestic subsidiaries so that they implement plans and measures on compliance more comprehensively as a group.

## Risk Management Activities

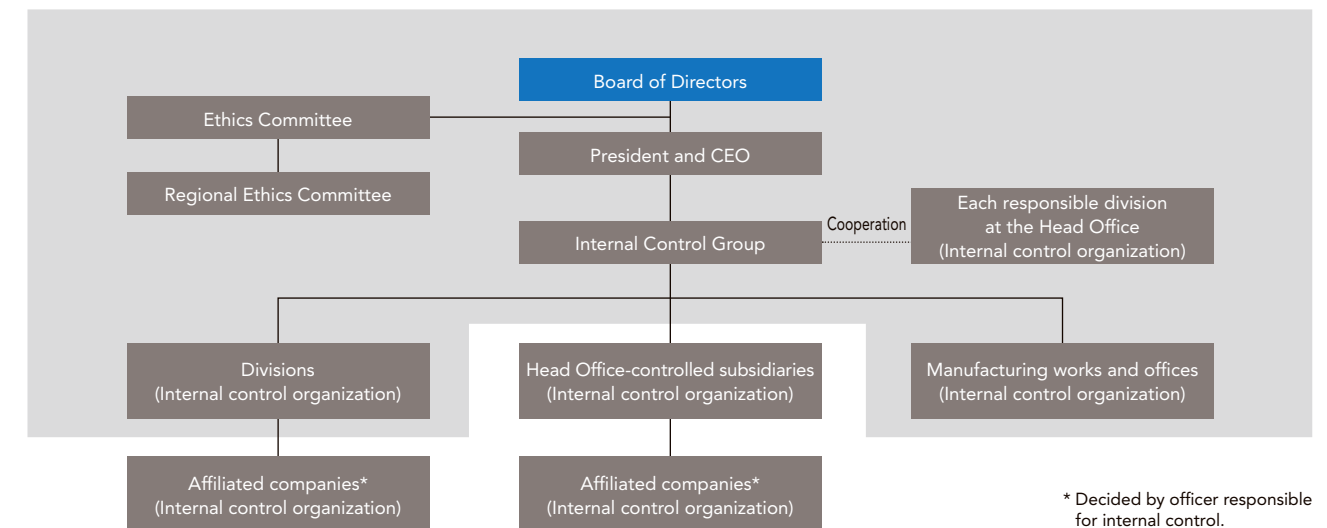
The SHI Group divides risks into two categories, business risk that may be posed in the course of business activities and operational risk that may be posed through the execution of daily operations, and the risks of each category are being addressed in each division. We designate such risks that have a significant impact on the Group as priority risk items and address them in an organizational and systematic manner.

In an emergency, we immediately report to the top management in accordance with the "Information communication principle in emergency situations" and take appropriate measures in a timely manner.



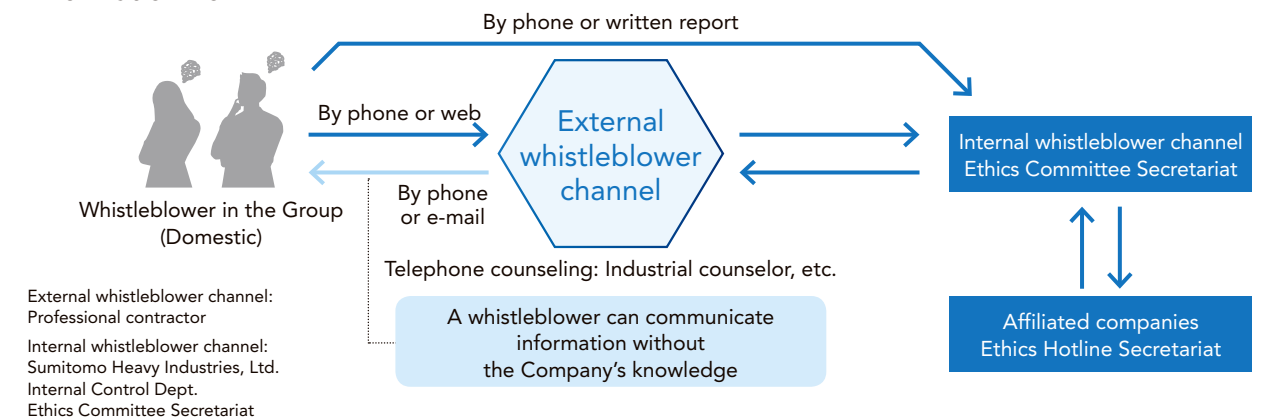
Scene from a training course for newly assigned assistant managers (2017)

### Compliance Promoting System



### The SHI Group Ethics Hotline (whistleblowing system)

#### Information flow



# CSR

## CSR Mid-Term Plan

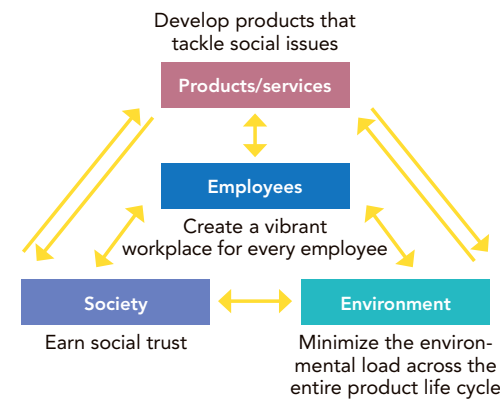
### 1. Our Basic Philosophy of CSR

The SHI Group engages in CSR based on the Sumitomo Business Spirit and our business principles.

We are committed to realizing a sustainable society by working to solve social issues and raise corporate value, not only through good relationships with society and environmental preservation but also through our products and services.

### 2. CSR Mid-term Plan and Its Progress

The SHI Group has been actively promoting CSR in fiscal 2017 by establishing the CSR Mid-term Plan which is linked to the medium-term management plan and identifying four priority areas: products/services, environment, society and employees. The overview of our CSR and progress in fiscal 2017 are as follows:



Sector	Purpose	Activities	Our goals	Index	Progress in FY2017
Products/services	Develop products that tackle social issues	Dialogue with business divisions	· Hold meetings on tackling social issues through products/services with 7 divisions	(Example of turbine for power generation) · The amount of power generated from biomass power generation facilities · The amount of power generated from power generation facilities for emerging countries	· Held meetings with 9 operational divisions · Created a catch phrase that describes the social contribution of products ○ · Identified relevance to SDGs · Set indicators to measure the progress of CSR · Proposed CSR activities to business managers
		Improving product quality	· Achieving the rework cost of each business division	· Rework cost ratio	○ · Achieved 108%
		Compliance with/shortening delivery deadlines	· Production lead time Shorten by 30% compared to fiscal 2016	· Amount by which production lead times for target processes of each division are reduced	△ · Production lead time 63% achievement toward the Company's goal
Environment	Minimize the environmental load across the entire product life cycle	Reducing CO <sub>2</sub> emissions	· During production/ product transport in Japan · Reduce CO <sub>2</sub> emissions by 1% compared to fiscal 2016	· During production: CO <sub>2</sub> emissions per unit of sales compared to fiscal 2016 · During product transport: CO <sub>2</sub> emissions per transport weight compared to fiscal 2016 · During product use: Disclosure of the total amount of reduction	· During production: 101% · During product transport: 96% · During product use: Disclosed the total amount of reduction of 332,000 tons —Expanded the scope of environmental risk assessment —Prepared for transition to the 2015 version of ISO14001
Society	Earn social trust	Promoting clean procurement	· Establish CSR procurement guidelines · Held a seminar for suppliers · Survey key suppliers on the implementation status of CSR	· Issuance of the CSR procurement guidelines · Number of suppliers provided with a seminar · Number of divisions that collected surveys	○ · Issued and disclosed on Company website · 296 companies · 7 divisions
		Internal/external dissemination of CSR	· Publish integrated reports · Series article in SHI Group magazine · Send email magazine	· Publish · Publish in series · Send as scheduled	○ · Published integrated reports · Published series article in Group magazine · Sent email magazine as scheduled
		Supporting and contributing to local communities	· Develop the basis of regional cooperation (concluding a disaster prevention agreement, etc.) · Reduce regional disparities in activities	· Number of sites with no disaster prevention agreement concluded · Number of sites with no blood donor/cleaning implemented	△ · Disaster prevention agreement concluded by 1 new site; currently under discussion by 1 site · Regional activities implemented by 2 new sites

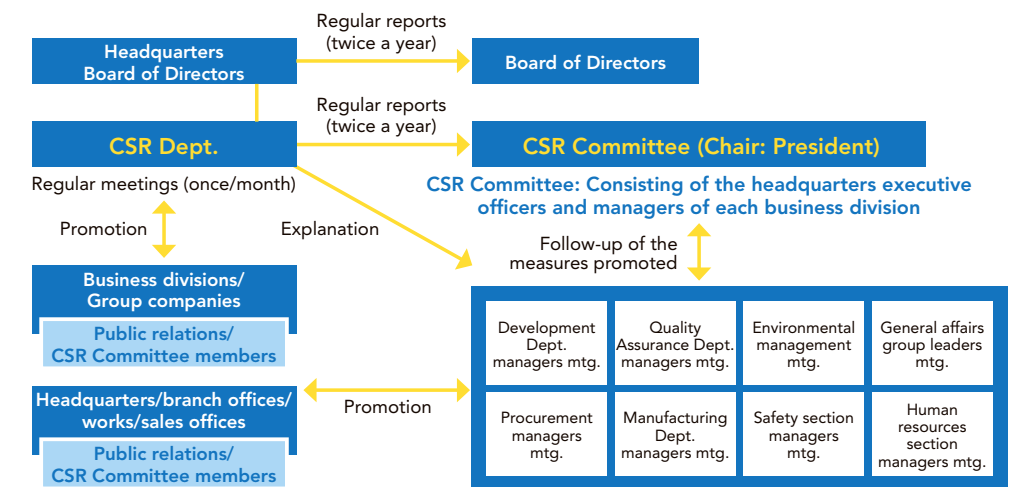
Sector	Purpose	Activities	Our goals	Index	Progress in FY2017
Employees	Create a vibrant workplace for every employee	Create a workplace with zero accidents and both physically and mentally healthy employees	· Establish a safety management level for the occurrence of a major disaster that is likely to occur once in 100 years	· Number of accidents accompanied with lost worktime (4 days or more/Japan)	△ · 10 accidents against the target 9 accidents
			· Establish a health management system	· Number of evaluation items the Certified Health and Productivity Management Organization Recognition Program accomplished	△ · Established a "health declaration" · A promotion system between the three parties of labor unions, management and health insurance providers is under development
	Promoting diversity		· Promote the active participation of women	· Ratio of female employees (non-consolidated) · Number of female managers (non-consolidated)	○ · Formulated female assistant manager's training and training plan by supervisors for the purpose of developing manager candidates · Received the Kurumin mark
			· Promote work-life balance	· The total number of working hours per year (consolidated)	○ · 2,030 target hours · 2,024 actual hours

### CSR Promotion System

Our CSR activities are being promoted mainly by the CSR Department.

The CSR Department regularly reports to the Board of Directors, CSR Committee and other relevant bodies on the overall CSR Mid-term Plan. Also, the CSR Department is working to raise awareness of CSR among business division managers who are also members of existing meetings such as the development division managers meeting by explaining to them the CSR trends and objectives of each division to ensure that CSR activities integrated with business activities are promoted.

The CSR Promotion Office and the headquarters business units work in collaboration to promote and check the progress of CSR objectives by using the existing meetings relevant to each objective.



### Dialogue with Employees

### Sharing thoughts about making a contribution to tackling social issues through products/services

To help our employees better understand the objectives of CSR, the CSR Department sequentially organizes dialogues between employees for each business division as part of the activities of "products/services," which is one of the four priority areas.

The theme of these dialogues is to think about what kinds of social issues are relevant to the business that they are engaged in. These dialogues help employees to develop pride in the business that they are engaged in and understand the purpose of their work by giving them an opportunity to identify the relevance of their business to social issues (SDGs), set indicators to measure contribution to tackling social issues and create a catch phrase to describe their business.



Employees discussing with each other



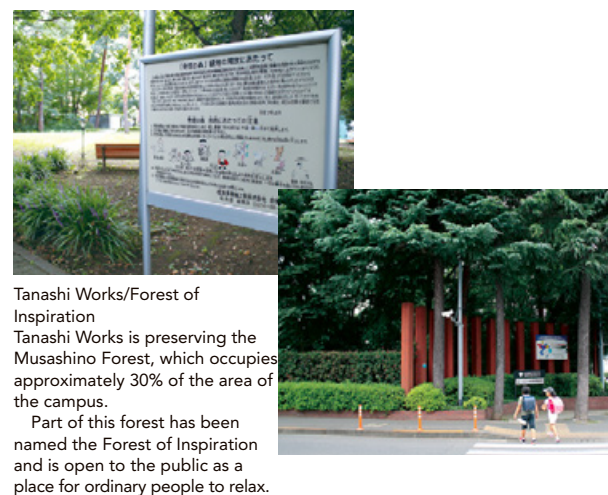
## Environment

We are promoting environmental management with the awareness that businesses have the social responsibility to protect the global environment and to engage in economic activities that are oriented toward recycling. In particular, we consider it necessary to reduce the environmental burden throughout the entire product life cycle and will concentrate more on reducing CO<sub>2</sub> emissions.

### SHI Group Environmental Policy

#### Environmental Philosophy

The SHI Group contributes to the realization of a sustainable society by holding fast to the Sumitomo Business Spirit and taking action throughout all its business activities to protect the global environment.



Tanashi Works/Forest of Inspiration  
Tanashi Works is preserving the Musashino Forest, which occupies approximately 30% of the area of the campus.  
Part of this forest has been named the Forest of Inspiration and is open to the public as a place for ordinary people to relax.

#### Environmental Policy

The SHI Group is actively engaged in activities based on the Environmental Philosophy.

- Prevent environmental pollution
- Comply with laws and regulations
- Contribute to the achievement the of a low-carbon society
- Protect biodiversity
- Reinforce and constantly improve the environmental management system
- Realize a recycling society

### Transition of the Environmental Policy

The Environmental Committee was established in 1992 and since then the SHI Group has been promoting compliance and environmental protection in local communities. Moreover, in November 1999, we established the SHI Group Environmental Policy to clarify the basic policy for activities and to expand environmental management across the Group as a whole, including overseas facilities. In May 2017, we revised the above policy to address long-term CSR objectives, basic governance policy, and the ISO 14001 revision.

### Priority Issues

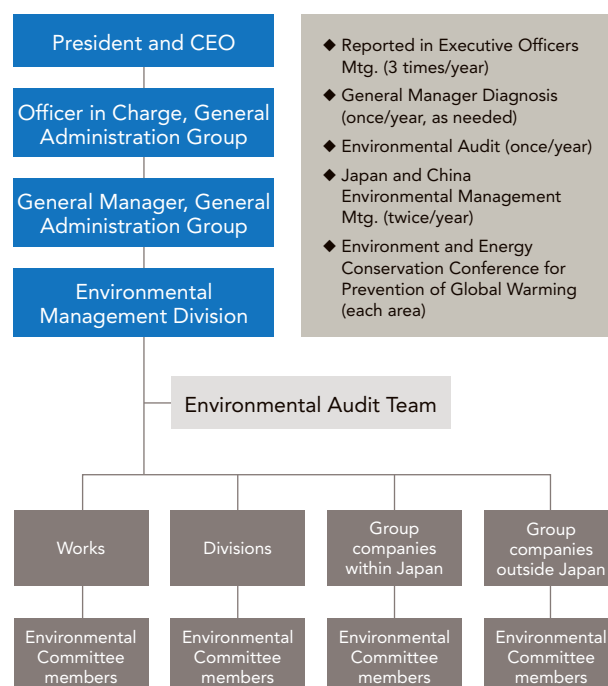
The SHI Group has formulated a medium-term environmental plan every three years since fiscal 2005 to achieve our environmental policy and enhance environmental management.

In our 5th Medium-Term Environmental Plan (FY2017–FY2019), we set the following four items as global priority issues and are promoting activities.

Particularly for fiscal 2018, we started focusing on ascertaining and disclosing reduction of a great proportion of CO<sub>2</sub> emissions that are expected from product use (known as avoided emissions), to address “2. Reduction of CO<sub>2</sub> emissions throughout the entire product life cycle.”

1. Strengthening of environmental risk management
2. Reduction of CO<sub>2</sub> emissions throughout the entire product life cycle
3. Reduction of environmental burden associated with business activities
4. Conservation of biodiversity

### Environmental Management System



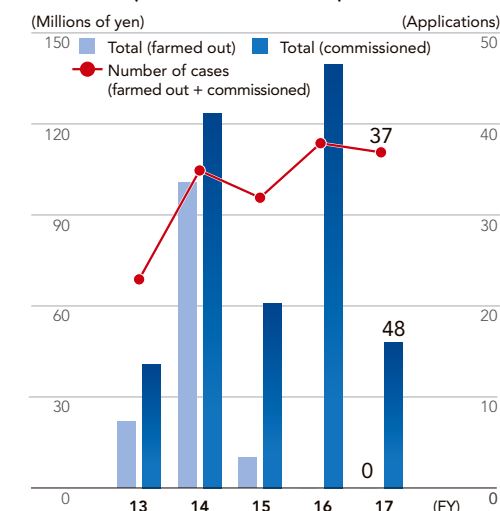
## Human Resources

### Industry-University Cooperation

The SHI Group believes that collaborative research with universities as well as research institutions also contributes to society.

We promote collaborative research, information exchange, and human resource exchange by, for example, signing a collaborative agreement with universities and research institutions in Japan and overseas to meet appropriately high-level requirements by society and customers. We will continue to make efforts to form networks in a wide range of industry-university cooperation to promote open innovation.

#### Collaborative research & commissioned research (domestic and overseas)



### Efforts on Human Rights

We are implementing the PDCA cycle shown below to promote human rights initiatives.

#### P Policy and guideline for ensuring human rights

The SHI Group declared “Respect the personality and human rights of all people” in its Ethics Code and set it as a code of conduct for all employees. We compiled a compliance manual and business card-sized portable ethics cards and distributed them to all Group employees to enhance their awareness and ensure non-discriminatory working environments that respect people with diverse values.

In order to prevent employees from being isolated due to various public and private issues, we set up the Group’s common ethics consultation channel outside the Company to provide consultation services and made its existence widely known. We also have various other systems such as EAP (Employee Assistance Program).

#### D Education and training

We provide education and training to employees to ensure the above system works as expected.

In harassment education conducted using e-learning, we take up actual cases and employees learn what the right responses should be. In education conducted in a workshop format, there is compliance training related to such cases as data tampering, training targeted to managers and line managers for realizing their own unconscious discrimination, and so on.

#### C Confirmation of status & A Consideration of action plans for next year

As a confirmation of the results of policies concerning human rights, we conduct an employee survey every second year and compliance awareness survey every year. The difference between divisions are compared and the result is fed back to each division.

Taking realistic problems into consideration, we will endeavor to create an organization that is sensitive to human rights.

# Employees

## Diversity Promotion

### Diversity as a strength: SHI Group's diversity promotion

The Corporate Mission Statement of the SHI Group includes the following: "We will aim to become a machinery manufacturer that continues to provide excellent products and services to the world." To continue to fulfill this mission, we believe it will be essential to have an organizational foundation that allows diverse personnel to participate while drawing on their unique personal qualities.

First of all, we set the active participation of women as one of our important business policies and top management will take the lead in promoting three main approaches: raising awareness, changing systems, and improving environments. In 2018, we were awarded the Kurumin\* mark.

We will continue to promote the creation of a pleasant, rewarding workplace.

\* Kurumin: A nickname given to the child-rearing support company certified by the Ministry of Health, Labour and Welfare based on the Act on Advancement of Measures to Support Raising Next-Generation Children

### Our goals

- 1 **Increase the number of women newly employed**  
(Raise the ratio of women among new graduate hires above 20%)
- 2 **Double the number of female managers**  
(Compared to the data of 2015, to be achieved until 2020)
- 3 **Increase the ratio of female employees from 8% to 12%**  
(Compared to the data of 2015, to be achieved until 2020)

### Career development promotion for female employees

- ▶ Hosting a forum for opinion exchanging between female employees and officers (50 participants in FY2018)
- ▶ Workshops for female employees
- ▶ Support for career development including collective training for women prior to promotion to managerial positions, opportunities for career consulting, and training plans created by their superiors
- ▶ Provision of return-to-work support seminars after maternity leave and superior's consultation



### Improving environments

- ▶ Maternity workwear
- ▶ Distribution of handbook summarizing how to balance work and parenting to be used for both subordinates and superiors
- ▶ Hosting of Family Day



### Changing systems

- ▶ Work from home (conducted partly on a trial basis)
- ▶ Enhanced support system for balancing work with childcare & nursing care (acquired Kurumin mark)



### Raising awareness

- ▶ Provision of information on diversity management using e-mail magazines and internal newsletters
- ▶ Manager and level-specific training for diversity management
- ▶ Promotion of male employees' childcare leave

## Safety Initiatives

Under the basic principle of safety first, we developed the Third Action Plan (2017–2019) for the Safety and Sanitation Reform Basic Plan, and all employees working for the Group are promoting safety and health activities. We aim to create a comfortable workplace where all employees can work safely and securely by fostering a health and safety corporate culture through initiatives on safety and hygiene issues.

While working on the security of machinery and equipment in particular, a priority issue in the government's 13th Labor Accident Prevention Plan, we are actively engaged in providing education on safety and health as well as realistic safety training experiences.

## Health Management

The Group is promoting health management activities that aim to strategically enhance employees' health management from a management perspective, based on the idea that the enhancement and maintenance of employees' health is an investment that will improve corporate profitability in the future. As part of the activities to address health management issues presented by the Ministry of Economy, Trade and Industry, we are trying to ensure better health through sports events as well as facilitate communication with each other.



Factory ekiden sports meet  
(at Yokosuka Works)

## Human Resource Development

Under the Sumitomo Business Spirit, we encourage human resource development in line with the SHI Group's management philosophy.

We have a human resource development system in which, on the basis of OJT backed by a goal management system, employees can acquire necessary skills and knowledge through learning and experience by attending various level-specific and specialized training, thus growing as Group employees.

There is also a program in operation that requires employees to attend career training at the time of promotion so that they can create a career vision by themselves and grow steadily. The program also offers an opportunity for managers to learn management skills to encourage their subordinates to grow.

We will promote human resource development so that employee growth will lead to the creation of new customer value and eventually bring about the Group's sustainable growth.

### SHI Group Training System

Hierarchical level	Experience / Allocation of subject	Head Office-controlled activities										Business-unit activities			
		Stratified human resource development		Specialized human resource development							Training of business leaders	Expertise education	Others		
		Training of business leaders	Stratified education	Global business training	Strengthening of knowledge and skills	Accounting and HR	Each division			Management quality					
Executive officers / managers	Succession plan HR hearing / Group human resource mtg. Transfer & development plan (development planning mtg. held for each business unit) HR interview / Management by objectives (assignment)	Assessment training	ASBS				Purchasing Division managers mtg. Sales Division managers mtg. Service Division managers mtg. Manufacturing Division managers mtg. Design Division managers mtg.			CIPO training	Project management training	Quality Control Division managers mtg. (Newly assigned manager training course available) MBB	BB	Business skill training	Coaching
		SBS	Newly assigned line manager training Newly assigned manager-qualified training	Mid-career new employee training	Language education (English, Chinese, etc.)	Education before overseas assignment Overseas dispatch (study abroad, etc.)	e-learning Correspondence education subsidy	Accounting / HR training					GB		
Member			Newly assigned 1st grade function training Newly assigned 2nd grade function training	Foremen training	3-year introduction education Introduction training				Purchasing education New sales employee training	Production engineer education	VE training	Expertise engineering education (intermediate) Expertise engineering education (practical) Expertise engineering education (beginner)	Basic engineering education Newly fixed employee training		Specific technology education New employee training

#### Training of business leaders

ASBS: Advanced Sumitomo Heavy Industries Business School  
SBS: Sumitomo Heavy Industries Business School

#### Management quality

MBB: Master Black Belt Training  
BB: Black Belt Training  
GB: Green Belt Training  
WB: White Belt Training

#### Development design

CIPO training: Chief Intellectual Property Officer Training  
VE training: Value Engineering Training



# Eleven-Year Summary and Key Financial Data

Sumitomo Heavy Industries, Ltd. and Consolidated Subsidiaries  
For the years ended March 31

	Millions of yen										
	FY2007	FY2008	FY2009	FY2010	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017
<b>Summary of Income (for the year):</b>											
Net sales	¥660,769	¥642,918	¥516,165	¥548,015	¥624,100	¥585,871	¥615,271	¥667,099	¥700,838	¥674,328	¥ 791,025
R&D expenses	9,908	10,047	8,187	7,445	9,343	9,835	10,718	11,415	12,299	11,276	14,805
Operating income	77,790	56,940	28,254	45,803	47,135	31,288	34,329	45,998	50,568	48,431	69,921
EBITDA (Note 1)	91,578	75,260	47,979	63,744	64,955	49,570	52,946	62,279	70,289	68,742	92,925
Ordinary income	75,469	50,275	26,333	44,253	44,619	30,997	33,000	45,113	49,131	48,274	67,466
Profit attributable to owners of parent	42,974	13,649	13,280	27,926	19,492	5,865	17,891	24,348	33,133	33,613	34,660
<b>Cash Flows (for the year):</b>											
Cash flows from operating activities	¥ 29,096	¥ 34,676	¥ 57,513	¥ 36,521	¥ 23,309	¥ 2,660	¥ 63,661	¥ 62,170	¥ 18,315	¥ 38,158	¥ 71,111
Cash flows from investing activities	(41,250)	(35,924)	(13,954)	(23,513)	(22,672)	(19,660)	(27,622)	(14,112)	(15,350)	(25,852)	(37,810)
Free cash flows (Note 2)	(12,154)	(1,248)	43,559	13,008	638	(17,000)	36,039	48,058	2,965	12,306	33,301
Cash flows from financing activities	(5,238)	15,625	(26,686)	(22,020)	19,879	(11,428)	(9,498)	(36,889)	(23,789)	(17,809)	(10,146)
Cash and cash equivalents at the end of year	29,879	42,414	61,452	51,700	72,376	46,476	76,418	90,324	68,625	61,017	85,503
<b>Financial Position (at year-end):</b>											
Total assets	¥678,634	¥657,436	¥610,087	¥626,829	¥691,841	¥647,724	¥724,182	¥786,027	¥782,859	¥796,484	¥ 895,569
Interest-bearing debt	89,567	110,339	87,660	67,833	96,522	98,547	107,433	83,644	68,232	60,460	64,181
Net interest-bearing debt (Note 3)	59,311	65,654	25,149	15,347	23,149	50,732	29,607	(8,779)	(2,572)	(3,360)	(24,052)
Total net assets	246,371	238,697	254,153	269,380	282,145	292,826	331,059	365,101	382,817	409,171	444,964
<b>Amounts per Share of Common Stock: (unit: yen) (Note 4)</b>											
Profit (Note 5)	¥ 71.19	¥ 22.62	¥ 22.01	¥ 45.87	¥ 31.75	¥ 9.56	¥ 29.17	¥ 39.71	¥ 54.06	¥ 54.85	¥ 282.83
Total net assets	392.80	378.78	404.73	435.10	454.43	470.69	532.28	587.37	614.51	650.47	3,517.33
Cash dividends	10.00	6.00	4.00	8.00	10.00	8.00	7.00	12.00	16.00	16.00	85.00
<b>Financial Indexes: (unit: %)</b>											
Operating income ratio	11.8	8.9	5.5	8.4	7.6	5.3	5.6	6.9	7.2	7.2	8.8
EBITDA ratio	13.9	11.7	9.3	11.6	10.4	8.5	8.6	9.3	10.0	10.2	11.7
R&D expenses ratio to net sales	1.5	1.6	1.6	1.4	1.5	1.7	1.7	1.7	1.8	1.7	1.9
Return on assets (ROA)	6.7	2.0	2.1	4.5	3.0	0.9	2.5	3.1	4.2	4.2	3.9
Return on equity (ROE)	19.5	5.9	5.6	10.9	7.1	2.1	5.8	7.1	9.0	8.7	8.4
Stockholders' equity ratio	34.9	34.8	40.0	42.6	40.3	44.6	45.1	45.8	48.1	50.0	48.1
Interest-bearing debt ratio	13.2	16.8	14.4	10.8	14.0	15.2	14.8	10.6	8.7	7.6	7.2
D/E ratio (times)	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.1
ROIC (Note 6)	14.0	9.6	4.8	7.8	7.4	4.9	4.8	6.5	7.6	7.3	10.3
<b>Investment in Plant and Equipment and Others:</b>											
Capital expenditures (Note 7)	¥ 28,180	¥ 31,753	¥ 24,465	¥ 14,292	¥ 19,682	¥ 29,888	¥ 20,329	¥ 20,670	¥ 23,721	¥ 27,539	¥ 30,432
Depreciation and amortization	13,788	18,320	19,725	17,941	17,820	18,282	18,617	16,281	19,720	20,311	23,003

Notes: 1. EBITDA (Earnings before Interest, Taxes, Depreciation and Amortization) = Operating income + Depreciation and amortization  
2. Free cash flows = Cash flows from operating activities + Cash flows from investing activities  
3. Net interest-bearing debt = Interest-bearing debt – (Cash and time deposits + Short-term investment)  
4. The Company carried out a 5-to-1 reverse stock split for its common shares with an effective date of October 1, 2017. Amounts per share of common stock was calculated, under the assumption that such share consolidation was conducted at the beginning of the year ended March 31, 2018.  
5. Net income per share of common stock is based on the weighted average number of shares outstanding in each year.  
6. ROIC (Return on invested capital) =  $\frac{(\text{Operating income} + \text{Interest and dividends received}) \times (1 - \text{Effective tax rate}^*)}{(\text{FY average of stockholders' equity} + \text{FY average of interest-bearing debt})}$  \* Effective tax rate = 45% until FY2013, 40% for FY2014, 35% from FY2015  
7. Capital expenditures are capitalized and recorded as assets.

## Seven-Year Non-Financial Key Data

Evaluation item (middle classification)		Evaluation item (small classification)	2011	2012	2013	2014	2015	2016	2017
E	Climate change, Air pollution	CO <sub>2</sub> emissions (domestic) (10,000 tons-CO <sub>2</sub> )	11.06	9.76	9.65	10.22	10.75	10.80	11.04
		Energy productivity (domestic) (Millions of yen/CO <sub>2</sub> -t)	4.71	4.81	4.67	4.86	4.68	4.68	4.91
		Volume of waste disposed (domestic) (ton)	33,576	29,211	25,985	26,547	31,066	29,345	26,008
	Water resource	Water consumption (1,000 m <sup>3</sup> )							
		Domestic	1,269	1,153	1,129	1,099	1,146	1,143	1,166
		Overseas	293	373	337	304	248	245	239
S	Employment	Number of employees (consolidated)	18,139	18,245	17,936	18,061	18,491	19,321	21,017
		Managers (%)							
		Ratio of female employees	1.4	1.4	1.4	1.5	1.4	1.5	1.5
		Regular recruitment (%)							
		Ratio of female employees	7.0	7.0	8.0	12.5	12.7	10.1	25.8
		Number of foreign-registered employees	—	68	65	50	61	160	248
	Working practices	Number of foreign-registered managers	5	5	5	6	6	6	6
		Number of foreign-registered employees newly employed	3	5	14	11	14	6	2
		Working hours	2,103	2,060	2,091	2,086	2,074	2,054	2,039
		Number of nursing care leave users	2	1	0	0	0	2	3
		Number of annual paid leave days	22	22	22	22	22	22	22
		Number of annual paid leave days taken	14.2	14.8	14.8	14.9	14.8	15.7	15.9
	Occupational health and safety (non-consolidated)	Number of disabled people employed	48	53	57	57	56	53	62
		Employment ratio of disabled people (%)	1.94	2.17	2.14	2.14	2.04	1.97	2.44
		Number of childcare leave users							
		Male	0	0	1	0	4	3	9
		Female	5	6	12	8	11	12	6
		Return-to-work ratio after taking childcare leave (%)	100	100	100	100	100	100	100
	Support and contribution to society (non-consolidated)	Industry-university collaborative research* <sup>2</sup> (Millions of yen)	—	—	41	124	61	140	48
		Social contribution expenditures (Millions of yen)	86	60	43	50	50	86	69
G	Compliance	Number of cases reported to Ethics Hotline							
		Non-consolidated	24	22	26	23	26	28	16
		Domestically consolidated	31	45	39	43	44	39	54
		Number of employees completing compliance education by e-learning							
		Domestically consolidated	8,030	8,358	9,162	9,314	9,408	9,800	9,815
		Overseas	—	—	—	—	—	868	1,059
		Number of managers submitting Pledge of Compliance							
		Domestically consolidated	—	—	—	—	2,479	2,490	2,436
		Number of compliance awareness survey respondents							
		Non-consolidated	2,356	2,400	2,490	2,501	2,490	2,471	2,466
		Domestically consolidated	4,853	5,738	6,150	6,348	6,513	6,475	7,252
		Overseas	—	—	—	—	—	—	—

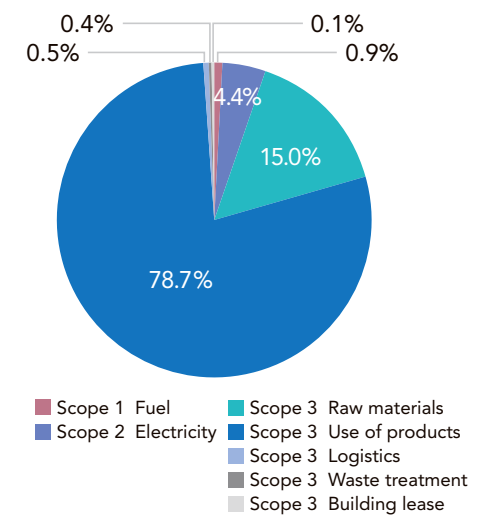
\*1. Detailed environmental data is published on the web.  
 \*2. Total of commissioned and farmed-out studies

### Life Cycle CO<sub>2</sub> Emissions (FY2017)

#### Domestic and overseas CO<sub>2</sub> emissions

		Overseas	Domestic
Scope 1	Fuel	18,168	18,484
Scope 2	Electricity	57,951	91,921
Scope 3	Raw materials		313,671
	Use of products		1,641,750
	Logistics		9,841
	Waste treatment		8,405
	Building lease		1,820
Grand total			2,085,892

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



### Product-Related CO<sub>2</sub> Reduction Amount

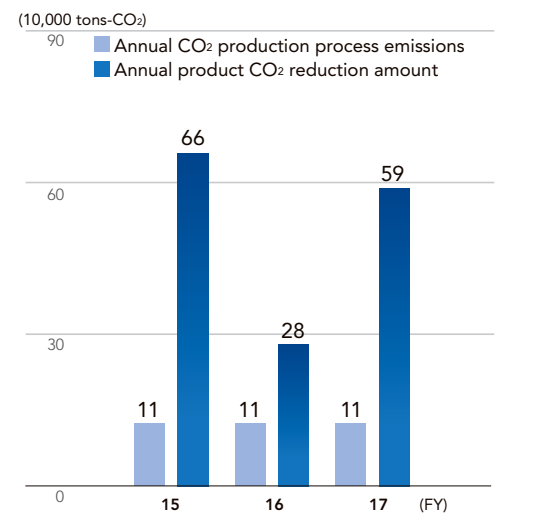
#### Product-related CO<sub>2</sub> reduction amount (major products delivered in FY2017)

Sector	CO <sub>2</sub> reduction		Calculation base	Product
	10,000 tons/year	10,000 tons/life cycle (based on design standard)		
Energy-related	47.6	1,428.0	Reduction & high efficiency due to biomass power generation	CFB boiler, turbine
Transportation-related	4.3	107.1	Improved fuel efficiency and propulsion capability achieved in new models, etc.	Aframax tanker
Industrial machinery and others	6.8	75.6	Improved fuel efficiency, energy saving, regenerative energy use, high efficiency achieved in new models, etc.	Hydraulic excavator, forklift, plastic injection molding machine, precision vacuum pump, diffuser, mixer, etc.
Total	58.7	1,610.6		

#### CO<sub>2</sub> reduction amount due to biomass power generation (accumulated in 1999 to 2017)

Energy-related products  
**5,160,000 tons-CO<sub>2</sub>**

#### CO<sub>2</sub> emissions in production processes and product-related CO<sub>2</sub> reduction amount in the previous 3 years





# Consolidated Financial Statements

[Financial Section]

1 Methods for Preparing the Consolidated Financial Statements

(1) The consolidated financial statements of Sumitomo Heavy Industries, Ltd. (SHI) have been prepared in accordance with the “Regulation on Terminology, Forms, and Preparation Methods of Consolidated Financial Statements” (Ministry of Finance Order No. 28 of 1976).

2 Audit Certification

The consolidated financial statements of SHI for the current consolidated fiscal year (from April 1, 2017 to March 31, 2018) and the previous consolidated fiscal year (from April 1, 2016 to March 31, 2017) have been audited by KPMG AZSA LLC pursuant to the provisions of Article 193-2, paragraph (1) of the Financial Instruments and Exchange Act.

3 Efforts to Ensure the Adequacy of the Consolidated Financial Statements

SHI has been making efforts to ensure the adequacy of the consolidated financial statements. More concretely, SHI joined the Financial Accounting Standards Foundation and attends seminars in order to enhance the understanding of the accounting standards and develop a system that enables it to adapt to the changes in accounting standards.

## Consolidated Balance Sheets

	Millions of yen	
	March 31, 2017	March 31, 2018
<b>ASSETS</b>		
<b>Current assets</b>		
Cash and deposits	¥ 63,820	*1 ¥ 88,233
Notes and accounts receivable—trade	242,459	*2 269,409
Finished goods	69,092	65,953
Work in process	*3 65,029	*3 67,619
Raw materials and supplies	28,616	33,828
Deferred tax assets	15,321	13,253
Other	27,045	30,597
Allowance for doubtful accounts	(3,735)	(4,055)
Total current assets	507,648	564,837
<b>Non-current assets</b>		
Property, plant and equipment		
Buildings and structures	*1 157,091	*1 162,382
Accumulated depreciation	(106,883)	(109,157)
Buildings and structures, net	50,209	53,225
Machinery, equipment and vehicles	172,720	187,575
Accumulated depreciation	(121,222)	(131,279)
Machinery, equipment and vehicles, net	51,499	56,296
Land	*1, *4 107,762	*1, *4 107,826
Construction in progress	3,098	5,260
Other	49,577	53,035
Accumulated depreciation	(34,404)	(36,047)
Other, net	15,173	16,988
Total property, plant and equipment	227,741	239,596
Intangible assets		
Goodwill	1,982	18,030
Other	13,261	32,319
Total intangible assets	15,243	50,349
Investments and other assets		
Investment securities	*5 24,168	*5 20,243
Long-term loans receivable	5,143	4,466
Deferred tax assets	11,407	9,777
Other	*5 10,300	*5 11,824
Allowance for doubtful accounts	(5,164)	(5,524)
Total investments and other assets	45,853	40,786
Total non-current assets	288,837	330,731
<b>Total assets</b>	<b>¥ 796,484</b>	<b>¥ 895,569</b>

	Millions of yen	
	March 31, 2017	March 31, 2018
<b>LIABILITIES</b>		
<b>Current liabilities</b>		
Notes and accounts payable—trade	¥147,318	*2 ¥184,227
Short-term loans payable	36,711	33,516
Current portion of long-term loans payable	*1 1,481	*1 7,801
Commercial Papers	5,000	—
Income taxes payable	8,904	5,726
Advances received	32,182	42,540
Provision for construction warranties	9,609	13,478
Provision for loss on construction contracts	*3 2,732	*3 5,451
Provision for loss on business	979	228
Other	45,669	54,754
Total current liabilities	290,585	347,720
<b>Non-current liabilities</b>		
Bonds payable	10,000	20,000
Long-term loans payable	*1 7,268	2,864
Provision for loss on business transfers	115	115
Provision for loss on product liability claims	44	40
Net defined benefit liability	44,853	40,466
Deferred tax liabilities for land revaluation	*4 20,942	*4 20,730
Other	13,505	18,670
Total non-current liabilities	96,728	102,885
<b>Total liabilities</b>	<b>387,313</b>	<b>450,605</b>
<b>NET ASSETS</b>		
<b>Shareholders’ equity</b>		
Share capital	30,872	30,872
Capital surplus	25,267	25,267
Retained earnings	289,587	314,296
Treasury shares	(915)	(1,000)
Total shareholders’ equity	344,810	369,434
<b>Accumulated other comprehensive income</b>		
Valuation difference on available-for-sale securities	4,128	5,406
Deferred gains or losses on hedges	320	925
Revaluation reserve for land	*4 41,289	*4 40,831
Foreign currency translation adjustments	13,824	17,565
Remeasurements of defined benefit plans	(5,770)	(3,153)
Total accumulated other comprehensive income	53,791	61,574
<b>Non-controlling interests</b>	<b>10,570</b>	<b>13,956</b>
<b>Total net assets</b>	<b>409,171</b>	<b>444,964</b>
<b>Total liabilities and net assets</b>	<b>¥796,484</b>	<b>¥895,569</b>

## Consolidated Statements of Income and Consolidated Statements of Comprehensive Income

## Consolidated Statements of Income

	Millions of yen	
	For the year ended March 31, 2017	For the year ended March 31, 2018
<b>Net sales</b>	¥674,328	¥791,025
<b>Cost of sales</b>	*1, *2 518,046	*1, *2 598,285
<b>Gross profit</b>	156,282	192,740
<b>Selling, general and administrative expenses</b>	*2, *3 107,852	*2, *3 122,819
<b>Operating profit</b>	48,431	69,921
<b>Non-operating income</b>		
Interest income	457	559
Dividend income	1,642	993
Other	5,217	3,777
Total non-operating income	7,315	5,329
<b>Non-operating expenses</b>		
Interest expenses	1,320	1,023
Foreign exchange losses	753	1,032
Patent related expenses	794	801
Other	4,605	4,928
Total non-operating expenses	7,472	7,784
<b>Ordinary profit</b>	48,274	67,466
<b>Extraordinary income</b>		
Gain from amortization of past service costs	*4 1,038	—
Gain on step acquisitions	*5 941	—
Total extraordinary income	1,979	—
<b>Extraordinary losses</b>		
Loss on litigation-related settlement	—	*7 14,480
Impairment loss	*6 2,955	*6 294
Total extraordinary losses	2,955	14,774
<b>Profit before income taxes</b>	47,298	52,692
Income taxes—current	13,835	13,737
Income taxes—deferred	(434)	1,505
<b>Total income taxes</b>	13,401	15,241
<b>Profit</b>	33,897	37,451
<b>Profit attributable to non-controlling interests</b>	284	2,791
<b>Profit attributable to owners of parent</b>	¥ 33,613	¥ 34,660

## Consolidated Statements of Comprehensive Income

	Millions of yen	
	For the year ended March 31, 2017	For the year ended March 31, 2018
<b>Profit</b>	¥33,897	¥37,451
<b>Other comprehensive income</b>		
Valuation difference on available-for-sale securities	1,773	1,277
Deferred gains or losses on hedges	448	621
Revaluation reserve for land	—	7
Foreign currency translation adjustments	(7,945)	4,701
Remeasurements of defined benefit plans	3,893	2,595
Share of other comprehensive income of entities accounted for using equity method	(63)	6
Total other comprehensive income	(1,894)	9,207
<b>Comprehensive income</b>	¥32,003	¥46,657
<b>Comprehensive income attributable to</b>		
Comprehensive income attributable to owners of parent	¥31,929	¥42,908
Comprehensive income attributable to non-controlling interests	74	3,749



## Consolidated Statements of Changes in Equity

For the year ended March 31, 2017

	Millions of yen				
	Shareholders' equity				Total shareholders' equity
	Share capital	Capital surplus	Retained earnings	Treasury shares	
Balance at the beginning of the period	¥30,872	¥25,354	¥265,588	¥(861)	¥320,953
Changes of items during the period					
Dividends of surplus			(9,806)		(9,806)
Profit attributable to owners of parent			33,613		33,613
Purchase of treasury shares				(55)	(55)
Disposal of treasury shares			0	1	1
Reversal of revaluation reserve for land			192		192
Change in ownership interest of parent due to transactions with non-controlling interests		(88)			(88)
Net changes of items other than shareholders' equity					
Total changes of items during the period	—	(88)	23,999	(54)	23,857
Balance at the end of the period	¥30,872	¥25,267	¥289,587	¥(915)	¥344,810

	Millions of yen							
	Accumulated other comprehensive income						Non-controlling interests	Total net assets
	Valuation difference on available-for-sale securities	Deferred gains or (losses) on hedges	Revaluation reserve for land	Foreign currency translation adjustments	Remeasurements of defined benefit plans	accumulated other comprehensive income		
Balance at the beginning of the period	¥2,355	¥(121)	¥41,481	¥21,558	¥(9,607)	¥55,667	¥ 6,197	¥382,817
Changes of items during the period								
Dividends of surplus								(9,806)
Profit attributable to owners of parent								33,613
Purchase of treasury shares								(55)
Disposal of treasury shares								1
Reversal of revaluation reserve for land								192
Change in ownership interest of parent due to transactions with non-controlling interests								(88)
Net changes of items other than shareholders' equity	1,772	441	(192)	(7,735)	3,837	(1,876)	4,373	2,498
Total changes of items during the period	1,772	441	(192)	(7,735)	3,837	(1,876)	4,373	26,355
Balance at the end of the period	¥4,128	¥ 320	¥41,289	¥13,824	¥(5,770)	¥53,791	¥10,570	¥409,171

For the year ended March 31, 2018

	Millions of yen				
	Shareholders' equity				Total shareholders' equity
	Share capital	Capital surplus	Retained earnings	Treasury shares	
Balance at the beginning of the period	¥30,872	¥25,267	¥289,587	¥ (915)	¥344,810
Changes of items during the period					
Dividends of surplus			(10,417)		(10,417)
Profit attributable to owners of parent			34,660		34,660
Purchase of treasury shares				(86)	(86)
Disposal of treasury shares			1	1	2
Reversal of revaluation reserve for land			465		465
Change in ownership interest of parent due to transactions with non-controlling interests					
Net changes of items other than shareholders' equity					
Total changes of items during the period	—	—	24,709	(84)	24,624
Balance at the end of the period	¥30,872	¥25,267	¥314,296	¥(1,000)	¥369,434

	Millions of yen							
	Accumulated other comprehensive income						Non-controlling interests	Total net assets
	Valuation difference on available-for-sale securities	Deferred gains or (losses) on hedges	Revaluation reserve for land	Foreign currency translation adjustments	Remeasurements of defined benefit plans	accumulated other comprehensive income		
Balance at the beginning of the period	¥4,128	¥320	¥41,289	¥13,824	¥(5,770)	¥53,791	¥10,570	¥409,171
Changes of items during the period								
Dividends of surplus								(10,417)
Profit attributable to owners of parent								34,660
Purchase of treasury shares								(86)
Disposal of treasury shares								2
Reversal of revaluation reserve for land								465
Change in ownership interest of parent due to transactions with non-controlling interests								—
Net changes of items other than shareholders' equity	1,278	605	(458)	3,742	2,616	7,783	3,386	11,168
Total changes of items during the period	1,278	605	(458)	3,742	2,616	7,783	3,386	35,792
Balance at the end of the period	¥5,406	¥925	¥40,831	¥17,565	¥(3,153)	¥61,574	¥13,956	¥444,964

## Consolidated Statements of Cash Flows

	Millions of yen	
	For the year ended March 31, 2017	For the year ended March 31, 2018
<b>Cash flows from operating activities</b>		
Profit before income taxes	¥ 47,298	¥ 52,692
Depreciation	20,311	23,003
Gain from amortization of past service costs	(1,038)	—
Gain on step acquisitions	(941)	—
Loss on litigation-related settlement	—	14,480
Impairment loss	2,955	294
Interest and dividend income	(2,098)	(1,552)
Interest expenses	1,320	1,023
Increase (decrease) in provision	1,593	4,178
Decrease (increase) in notes and accounts receivable—trade	(18,158)	(3,776)
Decrease (increase) in inventories	(5,242)	(7,610)
Increase (decrease) in notes and accounts payable—trade	1,011	16,475
Other	3,462	3,934
Subtotal	50,473	103,141
Interest and dividend income received	3,703	1,553
Interest expenses paid	(1,330)	(981)
Amount paid for litigation-related settlement	—	(15,381)
Amount paid for compensatory damages	(1,745)	—
Income taxes paid	(12,944)	(17,221)
Net cash provided by operating activities	38,158	71,111
<b>Cash flows from investing activities</b>		
Purchase of property, plant and equipment and intangible assets	(24,592)	(29,914)
Proceeds from sale of property, plant and equipment and intangible assets	1,055	1,552
Purchase of shares of subsidiaries resulting in change in scope of consolidation	(2,559)	(14,547)
Purchase of shares of subsidiaries and associates	(2,964)	(44)
Proceeds from sale of shares of subsidiaries and associates	—	3,911
Proceeds from sale of investment securities	927	159
Net decrease (increase) in short-term loans receivable	119	6
Payments of loans receivable	(11)	(373)
Collection of loans receivable	3,551	2,289
Other	(1,379)	(850)
Net cash used in investing activities	(25,852)	(37,810)
<b>Cash flows from financing activities</b>		
Net increase (decrease) in short-term loans payable	(3,831)	(3,740)
Net increase (decrease) in commercial papers	5,000	(5,000)
Proceeds from long-term loans payable	1,292	3,563
Repayments of long-term loans payable	(7,596)	(1,709)
Proceeds from issuance of bonds	—	10,000
Cash dividends paid	(9,796)	(10,410)
Dividends paid to non-controlling interests	(46)	(606)
Other	(2,833)	(2,245)
Net cash used in financing activities	(17,809)	(10,146)
<b>Effect of exchange rate change on cash and cash equivalents</b>	(2,105)	1,260
<b>Net increase (decrease) in cash and cash equivalents</b>	(7,608)	24,414
<b>Cash and cash equivalents at the beginning of the period</b>	68,625	61,017
<b>Increase in cash and cash equivalents from newly consolidated subsidiaries</b>	—	66
<b>Increase in cash and cash equivalents resulting from merger</b>	—	6
<b>Cash and cash equivalents at the end of the period</b>	¥ 61,017	¥ 85,503

## Notes to the Consolidated Financial Statements

## (Basis of Preparation)

## 1 Basis of presenting consolidated financial statements

## (1) Basis of accounting

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

The accounts of foreign consolidated subsidiaries are prepared in accordance with either International Financial Reporting Standards or U.S. generally accepted accounting principles, with adjustments for the specified four items as applicable.

The accompanying consolidated financial statements for Sumitomo Heavy Industries, Ltd. (SHI) and its subsidiaries (collectively, the Company) have been reformatted and translated into English from the ones prepared in accordance with Japanese GAAP and filed with the appropriate Local Finance Bureau of the Ministry of Finance as required by the Financial Instruments and Exchange Act.

## (2) Transactions eliminated on consolidation

All significant intercompany accounts and transactions have been eliminated in consolidation. Unrealized gains arising from transactions with equity-accounted investees are eliminated against the investment to the extent of SHI's interest in the investee. Unrealized losses are eliminated in the same way as unrealized gains, but only to the extent that there is no evidence of impairment.

## 2 The scope of consolidation

## (1) Number of consolidated subsidiaries—130 companies

Major consolidated subsidiaries: Shin Nippon Machinery Co., Ltd.

Sumitomo Heavy Industries Gearbox Co., Ltd.  
Sumitomo (S.H.I.) Construction Machinery Co., Ltd.  
Sumitomo (S.H.I.) Construction Machinery Sales Co., Ltd.  
Sumitomo Heavy Industries Ion Technology Co., Ltd.  
Sumitomo Heavy Industries Environment Co., Ltd.  
Sumitomo Heavy Industries PTC Sales Co., Ltd.  
Sumitomo Heavy Industries Material Handling Systems Co., Ltd.  
Sumitomo Heavy Industries Process Equipment Co., Ltd.  
Sumitomo Heavy Industries Marine & Engineering Co., Ltd.  
Nihon Spindle Manufacturing Co., Ltd.  
Sumitomo Heavy Industries Construction Crane Co., Ltd.  
LBX Company, LLC  
LBCE Holdings, Inc.  
PT Sumitomo S.H.I. Construction Machinery Indonesia  
SCM (America), Inc.  
Sumitomo Heavy Industries (Vietnam) Co., Ltd.  
Sumitomo Industrias Pesadas do Brasil Ltda.  
Sumitomo Machinery Corporation of America  
Sumitomo (SHI) Cyclo Drive Germany GmbH  
Sumitomo (SHI) Demag Plastics Machinery GmbH  
Sumitomo SHI FW Energie B.V.  
Sumitomo (S.H.I.) Construction Machinery (Tangshan) Co., Ltd.  
Sumitomo Heavy Industries (China), Ltd.  
Sumitomo Heavy Industries (Tangshan), Ltd.  
Sumitomo (SHI) Cyclo Drive China, Ltd.

From the current consolidated fiscal year, Sumitomo SHI FW Energie B.V. and its 17 subsidiaries are included in the scope of consolidation upon acquired by SHI, and Persimmon Technologies Corporation and one more company are similarly included because they have become material to the Company. In addition, Sumiju Environmental Engineering, Inc. and other three companies that were dissolved upon the merger, and Hansen Transmissions Ltd, United Kingdom in which the liquidation had completed, were excluded from the scope of consolidation.



(2) Name of major non-consolidated subsidiaries

Major non-consolidated subsidiary: Kyokuto Seiki Co., Ltd.  
(Reasons for exclusion from the scope of consolidation)  
All of the non-consolidated subsidiaries are small-scale companies and their aggregated total assets, net sales, and profit or loss (amount commensurate with equity interests) and retained earnings (amount commensurate with equity interests) do not have a material effect on SHI's Consolidated Financial Statements.

3 The application of the equity method

(1) The number of non-consolidated subsidiaries accounted for using the equity method: nil

(2) The number of affiliated companies accounted for using the equity method: 1

Company name: Sumitomo NACCO Forklift Co., Ltd.  
(Change in the affiliated companies accounted for using the equity method)  
JP Steel Plantech Co. was excluded from the affiliated companies accounted for using the equity method because the Company sold its shares in that company.

(3) The non-consolidated subsidiaries (including Kyokuto Seiki Co., Ltd.) and affiliated companies (including Mizu Kankyo Chiba K.K.) not accounted for using the equity method are excluded from the scope of application of the equity method because their respective profit or loss and retained earnings have an immaterial effect on SHI's Consolidated Financial Statements and are insignificant as a whole.

4 The fiscal years of consolidated subsidiaries

Among the consolidated subsidiaries, the closing date of 85 overseas subsidiaries (other than Nihon Spindle Cooling Towers Sdn. Bhd. and one more company) is December 31, and their financial statements prepared as of December 31 or for the year ended December 31 are used for the preparation of SHI's Consolidated Financial Statements.  
Material transactions that arose during the period between their closing date and the closing date of SHI's consolidated financial statements have been adjusted as necessary for the purposes of the consolidated financial statements.  
The closing date of other consolidated subsidiaries is March 31, which is consistent with SHI.

5 Accounting policies

(1) Basis of and methods for valuation of significant assets

- (i) Securities
  - (a) Bonds held to maturity  
The amortized cost method (The straight-line depreciation method)
  - (b) Available-for-sale securities  
Securities with market value  
The market value method, for example, based on market prices at the end of the consolidated fiscal year (Valuation difference is reported as a component of shareholders' equity, and the cost of sales is calculated using the moving-average method.)  
Securities without market value  
The cost method based on the moving-average method
- (ii) Derivatives  
The market value method
- (iii) Inventories
  - (a) Works in process  
Mainly the cost method based on the specific identification method  
(Carrying amounts in the balance sheet are after the consideration of write-down to reflect decreased profitability.)
  - (b) Finished goods, raw materials and supplies  
Mainly the cost method based on the weighted average method  
(Carrying amounts in the balance sheet are after the consideration of write-down to reflect decreased profitability.)

(2) Methods for depreciation of significant depreciable assets

- (i) Property, plant and equipment (excluding leased assets)  
The straight-line method is adopted.  
Depreciable lives of major assets are as shown below:
  - Buildings and structures: 10 to 50 years
  - Machinery, equipment and vehicles: 5 to 12 years
- (ii) Intangible assets (excluding leased assets)  
The straight-line method is adopted.  
Depreciable lives of in-house software are based on the useful life estimated by the Company (five years).

- (iii) Leased assets  
The straight-line method is adopted for leased assets for financial lease transactions without transfer of ownership, in which the lease period is considered as depreciable life and the residual value is zero.  
For the finance lease transactions without transfer of ownership, the lease transactions that are immaterial and were commenced prior to March 31, 2008 are accounted for as ordinary rental transactions.

(3) Basis of accounting for significant provisions

- (i) Allowance for doubtful accounts  
The allowance is provided based on historical bad debts losses from general accounts receivables. For doubtful accounts receivable and claims provable in bankruptcy, claims provable in rehabilitation and other, the required allowance is determined at the amount estimated to be uncollectible on an individual basis.
- (ii) Provision for construction warranties  
In order to provide for free repair work expenditures after delivery of finished goods, the required allowance is provided for based on historical data.
- (iii) Provision for loss on construction contracts  
For undelivered construction works at the end of the consolidated fiscal year that are highly likely to generate losses subsequent to the fiscal year, if the losses can be reliably estimated, the estimated amount of losses is recognized as provision for loss on construction contracts.
- (iv) Provision for loss on business  
The estimated amount of losses that is expected to be generated in the future for the contracts maintained by affiliated companies with their sales agents is recognized as provision for loss on business.
- (v) Provision for loss on business transfers  
The estimated amount of losses that is expected to be generated in the future as a result of transferring the resort development business is recognized as provision for loss on business transfers.
- (vi) Provision for loss on product liability claims  
The estimated amount of losses on product liability claims that is expected to be generated in the future from the crane business of overseas subsidiaries is recognized as a provision for loss on product liability claims.

(4) Methods for accounting retirement benefits

- (i) Method of attributing expected retirement benefits  
For retirement benefit obligations, the benefit formula basis is used to calculate the expected retirement benefits up to the term elapsed for the end of the consolidated fiscal year.
- (ii) Method of amortization of actuarial difference and past service costs  
Past service costs are amortized following the straight-line method over a period within the historical average remaining service period of employees.  
Actuarial difference is amortized proportionally from the following year of the incurrence of actuarial difference using the straight-line method over a period within the average remaining service period of employees at the time of incurrence of actuarial difference.

**(5) Method of significant hedge accounting****(i) Method of hedge accounting**

The Company adopts deferred hedge accounting. However, for interest swap transactions that meet the requirements for simplified accounting treatment, the Company adopts such simplified accounting treatment.

If forward exchange contracts meet the requirements for allocation, the Company adopts the allocation accounting method.

**(ii) Hedge instruments and hedged items**

Forward exchange contracts: Foreign currency-denominated accounts receivable, foreign currency-denominated accounts payable and forecast transaction

Interest swap transactions: Loans

**(iii) Hedge policy**

Under the “Market Risk Management Policy” stipulated by the Board of Directors, the Company’s objective for hedging transactions is to mitigate foreign currency and interest rate fluctuation risks and makes it a rule not to execute speculative transactions.

**(iv) Method of assessing hedge effectiveness**

The Company compares the aggregated fluctuation from cash flow or market condition of the hedged items against aggregated fluctuation from cash flow or market condition of the hedged instruments every six months, and assesses hedge effectiveness based on the fluctuation. The Company, however, does not assess the hedge effectiveness of interest swap transactions for which it is subject to simplified accounting treatment.

**(6) Basis of recognition of material revenues and expenses**

For construction works, for which the progress can be reliably estimated by the end of the consolidated fiscal year, the Company adopts the percentage-of-completion method (with the output method by compositely aggregating estimated total man-hours require for each stage of project constructions and man-hours consumed during the estimated construction period to estimate a progress rate or the cost to cost method). For other construction works, the Company adopts the completed-contract method.

**(7) Method and period of amortization of goodwill**

Goodwill is amortized using the straight-line method over a period of up to 20 years. However, any insignificant amount of goodwill is amortized in full upon its recognition.

**(8) Cash and cash equivalents in the consolidated statements of cash flows**

Cash and cash equivalents consists of cash on hand, immediately available cash, and short-term investments that are highly liquid, have an insignificant risk of changes in value with maturities of three months or less.

**(9) Other significant matters for preparation of consolidated financial statements****(i) Accounting for the consumption taxes**

The consumption tax and local consumption tax are accounted for on a tax-exclusive basis.

**(ii) Application of the consolidated tax payment system**

SHI and some of its consolidated subsidiaries follow the consolidated tax payment system.

**(iii) Net assets**

Under the Japanese laws and regulations, the entire amount paid for new shares is required to be designated as common share. However, a company may, by a resolution of the Board of Directors, designate an amount not exceeding one-half of the price of the new shares as additional paid-in capital, which is included in capital surplus.

Under the Japanese Corporate Law (“the Law”), in case where a dividend distribution of surplus is made, the smaller of an amount equal to 10% of the dividend or the excess, if any, of 25% of common share over the total of additional paid-in-capital and legal earnings reserve must be set aside as additional paid-in-capital or legal earnings reserve. Legal earnings reserve is included in retained earnings in the accompanying consolidated balance sheets.

Under the Law, generally legal earnings reserve and additional paid-in capital could be used to eliminate or reduce a deficit by a resolution of the shareholders’ meeting.

Under the Law, all additional paid-in-capital and all legal earnings reserve may be transferred to other capital surplus and retained earnings, respectively, which are potentially available for dividends.

The maximum amount allowed to be distributed as dividend is determined based on SHI’s non-consolidated financial statements in accordance with the Japanese laws and regulations.

**(iv) Research and development (“R&D”) expense**

R&D expenditures are expensed as incurred.

**(Standards and Guidance Not Yet Adopted)**

The following guidance have been issued but not yet adopted.

**1 • “Implementation Guidance on Tax Effect Accounting” (ASBJ (Accounting Standards Board of Japan) Guidance No. 28, February 16, 2018)****• “Implementation Guidance on Recoverability of Deferred Tax Assets” (ASBJ Guidance No. 26 (revised 2018), February 16, 2018)****(1) Overview**

The above guidance was revised with regard to the treatments of taxable temporary differences for investments in subsidiaries within the context of non-consolidated financial statements, and to clarify the treatments in determining recoverability of deferred tax assets in a company categorized as ‘Type 1’ according to the guidance.

**(2) Effective date**

Effective from the beginning of the fiscal year ending March 31, 2019.

**(3) Effects of the application of the standards**

SHI and its consolidated domestic subsidiaries are currently in the process of determining the effects of these new standards on the consolidated financial statements.

**2 • “Accounting Standard for Revenue Recognition” (ASBJ Statement No. 29, March 30, 2018)****• “Implementation Guidance on Accounting Standard for Revenue Recognition” (ASBJ Guidance No. 30, March 30, 2018)****(1) Overview**

The International Accounting Standards Board (IASB) and the U.S. Financial Accounting Standards Board (FASB) jointly developed a comprehensive accounting standard for revenue recognition and published “Revenue from Contracts with Customers” (IASB’s IFRS 15 and FASB’s Topic 606) in May 2014. Given the situation that IFRS 15 applies to an annual reporting period beginning on or after January 1, 2018 and Topic 606 applies to an annual reporting period after December 15, 2017, a comprehensive accounting standard for revenue recognition was developed and issued with an implementation guidance by the ASBJ.

For the accounting standard for revenue recognition, the ASBJ introduced the fundamental principles of IFRS 15 from the standpoint of comparability among company’s financial statements, which is to ensure the consistent application of IFRS 15 and, if there are any considerations required for the practices in Japan, alternative treatment will be added without compromising comparability.

**(2) Effective date**

Effective from the beginning of the fiscal year ending March 31, 2022.

**(3) Effects of the application of the standards**

SHI and its consolidated domestic subsidiaries are currently in the process of determining the effects of these new standards on the consolidated financial statements.



## (Changes of Presentation Methods)

### 1 Consolidated Balance Sheets

“Goodwill,” which was included in “Other” of “Intangible assets” for the previous consolidated fiscal year has been separately presented in the current consolidated fiscal year because it is material in terms of amount. The consolidated financial statements for the previous consolidated fiscal year have been reclassified to reflect this change.

As a result, ¥15,243 million presented in “Other” of “Intangible assets” in the Consolidated Balance Sheets for the previous consolidated fiscal year has been reclassified into ¥1,982 million of “Goodwill” and ¥13,261 million of “Other.”

### 2 Consolidated Statements of Income

“Share of profit of entities accounted for using the equity method” of “Non-operating income” which was separately presented in the previous consolidated fiscal year has been presented in “Other” of “Non-operating income” for the current consolidated fiscal year because it is immaterial in terms of amount. The consolidated financial statements for the previous consolidated fiscal year have been reclassified to reflect this change.

As a result, ¥2,428 million presented in “Share of profit of entities accounted for using the equity method” of “Non-operating income” in the Consolidated Statement of Income for the previous consolidated fiscal year has been reclassified into “Other.”

“Expenses relating to contractual delivery delays” of “Non-operating expenses” which was separately presented in the previous consolidated fiscal year has been presented in “Other” of “Non-operating expenses” for the current consolidated fiscal year because it is immaterial in terms of amount. The consolidated financial statements for the previous consolidated fiscal year have been reclassified to reflect this change.

As a result, ¥982 million presented in “Expenses relating to contractual delivery delays” of “Non-operating expenses” in the Consolidated Statement of Income for the previous consolidated fiscal year has been reclassified into “Other.”

## (Notes to Consolidated Balance Sheets)

### \*1 Collateralized assets and secured obligations

The assets offered as collateral are presented below.

	Millions of yen	
	March 31, 2017	March 31, 2018
Cash and deposits	¥ —	¥ 12
Buildings and structures	802	826
Land	140	154
Total	¥942	¥992

Secured obligations are presented below.

	Millions of yen	
	March 31, 2017	March 31, 2018
Current portion of long-term loans payable	¥18	¥10
Long-term loans payable	9	—
Total	¥28	¥10

### \*2 Notes due at the end of the year

Notes due at the end of the consolidated financial year are accounted for as of the clearing dates.

As the last day of the current year was on a bank holiday, the following notes due at the end of the consolidated financial year have been included in the balance at the end of year.

	Millions of yen	
	March 31, 2017	March 31, 2018
Notes receivable—trade	¥—	¥4,160
Notes payable—trade	—	1,870

### \*3 Presentation of inventories and provision for loss on construction contracts

Inventories and the provision for loss on construction contracts relating to construction contracts that are highly likely to incur losses have been presented separately and have not been offset. The amount of the provision for loss on construction contracts related to inventories is presented below.

	Millions of yen	
	March 31, 2017	March 31, 2018
Provision for loss on construction contracts related to inventories	¥1,145	¥513

### \*4 Revaluation of land

Land for business use is revalued pursuant to the Act on Revaluation of Land (Act No. 34 of March 31, 1998) and the Act for Partial Amendment of the Act on Revaluation of Land (Act No. 19 of March 31, 2001).

For revaluation difference, the amount corresponding to the tax on such revaluation difference has been recognized as “Deferred tax liabilities for land revaluation” under the Act for Partial Amendment of the Act on Revaluation of Land (Act No. 24 of March 31, 1999), and the amount from which Deferred tax liabilities for land revaluation are deducted has been recognized as “Revaluation reserve for land” in net assets.

#### • Method of revaluation

While revaluation has been done by making reasonable adjustments to the value of the property tax stipulated in Article 2, item (iii) of the Order for Enforcement of the Act of on Revaluation of Land (Cabinet Order No. 119 of March 31, 1998), revaluation has at times been done based on the appraised values by real estate appraisers stipulated in item (v) of said Article.

#### • Date of revaluation

March 31, 2002

	Millions of yen	
	March 31, 2017	March 31, 2018
Difference between the market value of revalued land at the end of the year and the book value after revaluation	¥(18,743)	¥(18,104)

### \*5 Securities of non-consolidated subsidiaries and affiliated companies are as follows.

	Millions of yen	
	March 31, 2017	March 31, 2018
Investment securities (equity)	¥9,270	¥3,458
Investments in capital	670	879

For presentation purposes, investments in capital have been included in “Other” of “Investments and other assets.”

### 6 Loan commitment line agreements

The Company has the loan commitment line agreements with 12 banks to finance operating funds.

Balances of undrawn loan commitment lines under those agreements are presented below.

	Millions of yen	
	March 31, 2017	March 31, 2018
Total loan commitment lines	¥36,000	¥36,000
Balance of drawn loan commitment lines	—	—
Undrawn loan commitment lines	¥36,000	¥36,000

## 7 Guaranteed liabilities

The Company guarantees loans and other liabilities of companies other than the consolidated companies from banks and financial institutions.

	March 31, 2017		Millions of yen March 31, 2018
Sumitomo Mitsui Finance and Leasing Company, Ltd. (Purchase guarantee, etc. in connection with the lease agreement)	¥ 9,849	Sumitomo Mitsui Finance and Leasing Company, Ltd. (Purchase guarantee, etc. in connection with the lease agreement)	¥11,638
Fuyo General Lease Co., Ltd. (Purchase guarantee, etc. in connection with the lease agreement)	2,091	IBJ Leasing Company, Limited (Purchase guarantee, etc. in connection with the lease agreement)	2,235
IBJ Leasing Company, Limited (Purchase guarantee, etc. in connection with the lease agreement)	916	Fuyo General Lease Co., Ltd. (Purchase guarantee, etc. in connection with the lease agreement)	1,624
ITOCHU CONSTRUCTION MACHINERY CO., LTD. (Purchase guarantee, etc. in connection with the lease agreement)	273	ITOCHU CONSTRUCTION MACHINERY CO., LTD. (Purchase guarantee, etc. in connection with the lease agreement)	275
Shutoken Leasing Co., Ltd. (Purchase guarantee, etc. in connection with the lease agreement)	254	Shutoken Leasing Co., Ltd. (Purchase guarantee, etc. in connection with the lease agreement)	243
Another 16 transactions (Purchase guarantee, etc. in connection with the lease agreement)	485	Another 14 transactions (Purchase guarantee, etc. in connection with the lease agreement)	410
<b>Total</b>	<b>¥13,866</b>	<b>Total</b>	<b>¥16,424</b>

The amounts for the previous year include foreign currency-denominated liabilities of CNY473 million (¥7,927 million) and NTD10 million (¥38 million), and the amounts for the current year include foreign currency-denominated liabilities of CNY649 million (¥11,239 million) and NTD5 million (¥17 million).

## (Notes to Consolidated Statements of Income)

### \*1 Provision for loss on construction contracts included in the cost of sales

	For the year ended March 31, 2017	For the year ended March 31, 2018
	¥2,116	¥5,770

### \*2 R&D expenses included in general and administrative expenses and production cost for the period

	For the year ended March 31, 2017	For the year ended March 31, 2018
	¥11,349	¥14,945

### \*3 Major items of selling, general and administrative expenses

	For the year ended March 31, 2017	For the year ended March 31, 2018
Salaries and allowances	¥39,704	¥44,603
R&D expenses	11,276	14,805
Retirement benefit expenses	3,187	2,789
Provision for loss on business	(2,492)	(702)
Provision of allowance for doubtful accounts and bad debts expenses	3,196	811

**\*4** Represents gain from past service costs associated with the amendments to the retirement allowance regulations for employees transferred to other entities on a secondment basis who are treated as suspended from work for the Company.

**\*5** Generated from additional acquisition of shares in Hitachi Sumitomo Heavy Industries Construction Crane Co., Ltd. (currently Sumitomo Heavy Industries Construction Cranes Co., Ltd.).

### \*6 Impairment loss

#### For the year ended March 31, 2017

The Company recognized impairment loss for the following groups of assets.

Purpose of use	Category	Location	Millions of yen Amount
Business assets	Buildings and others	Niihama City, Ehime and others	¥1,554
Business assets	Machinery, equipment and others	Belgium	1,381
Idle assets	Buildings	Kurashiki City, Okayama	20

For the above-mentioned assets, the Company recognized impairment loss because it was not possible to recover the investments due to decreased profitability.

The Company determined impairment loss for each business segment and idle assets not expected to be used in the future, and grouped them by individual property.

Recoverable amounts are calculated based on the underlying net selling value or value in use. Net selling value has been calculated based on the amount of disposal values less costs of disposal. Value in use has been calculated by discounting future cash flow by 8%.

#### For the year ended March 31, 2018

The Company recognized impairment loss for the following groups of assets.

Purpose of use	Category	Location	Millions of yen Amount
Business assets	Buildings and others	Niihama City, Ehime and others	¥289
Idle assets	Buildings	Yokosuka City, Kanagawa	5

For the above-mentioned assets, the Company recognized impairment loss because it was not possible to recover the investments due to decreased profitability.

The Company determined impairment loss for each business segment and idle assets not expected to be used in the future, and grouped them by individual property.

Recoverable amounts are calculated mainly by net selling value and are calculated based on the amount of disposal values less costs of disposal.

**\*7** Represents the settlement money and related losses associated with the settlement of the litigation over the incinerated ash melting facility between SHI and Kyoto City in December 2017.



## (Notes to Consolidated Statements of Comprehensive Income)

## 1 Reclassification adjustment and tax effect relating to other comprehensive income

	Millions of yen	
	For the year ended March 31, 2017	For the year ended March 31, 2018
Valuation difference on available-for-sale securities		
Amount accrued during the year	¥ 2,781	¥ 1,837
Reclassification adjustment	(318)	(63)
Before tax effect adjustment	2,463	1,774
Tax effect	(690)	(497)
Valuation difference on available-for-sale securities	1,773	1,277
Deferred gains or losses on hedges		
Amount accrued during the year	(213)	947
Reclassification adjustment	803	67
Before tax effect adjustment	589	1,014
Tax effect	(141)	(393)
Deferred gains or losses on hedges	448	621
Revaluation reserve for land		
Tax effect	—	7
Foreign currency translation adjustments		
Amount accrued during the year	(7,829)	4,701
Reclassification adjustment	(116)	—
Foreign currency translation adjustments	(7,945)	4,701
Remeasurements of defined benefit plans		
Amount accrued during the year	4,917	3,628
Reclassification adjustment	830	605
Before tax effect adjustment	5,747	4,233
Tax effect	(1,855)	(1,638)
Remeasurements of defined benefit plans, net of tax	3,893	2,595
Share of other comprehensive income of entities accounted for using the equity method		
Amount accrued during the year	(59)	10
Reclassification adjustment	(4)	(4)
Share of other comprehensive income of entities accounted for using the equity method	(63)	6
Total other comprehensive income	¥(1,894)	¥ 9,207

## (Notes to Consolidated Statements of Changes in Equity)

For the year ended March 31, 2017

## 1 Type and total number of issued shares and treasury shares

	Thousand shares			
	Number of shares at the beginning of the year	Increase during the year	Decrease during the year	Number of shares at the end of the year
Issued shares				
Common share	¥614,527	¥—	¥—	¥614,527
Total	¥614,527	¥—	¥—	¥614,527
Treasury shares				
Common share	¥ 1,648	¥96	¥ 2	¥ 1,742
Total	¥ 1,648	¥96	¥ 2	¥ 1,742

Notes: 1 The increase in common share of treasury shares by 96 thousand shares was due to requests for repurchase of shares less than one unit.  
2 The decrease in common share of treasury shares by of 2 thousand shares was due to the sale of shares less than one unit.

## 2 Dividends

## (1) Amounts of dividends paid

(Resolution)	Type of share	Total amount of dividends (Millions of yen)	Amount of dividend per share (Yen)	Record date	Effective date
Annual general meeting of shareholders held on June 29, 2016	Common share	¥5,516	¥ 9	March 31, 2016	June 30, 2016
Meeting of the Board of Directors held on October 31, 2016	Common share	4,290	7	September 30, 2016	December 1, 2016
Total		¥9,806	¥—		

## (2) Dividends recorded during the year, but effective in the next fiscal year

(Resolution)	Type of share	Source for payment of dividends	Total amount of dividends (Millions of yen)	Amount of dividend per share (Yen)	Record date	Effective date
Annual general meeting of shareholders held on June 29, 2017	Common share	Retained earnings	¥5,515	¥9	March 31, 2017	June 30, 2017

For the year ended March 31, 2018

## 1 Type and total number of issued shares and treasury shares

	Thousand shares			
	Number of shares at the beginning of the year	Increase during the year	Decrease during the year	Number of shares at the end of the year
Issued shares				
Common share	¥614,527	¥—	¥491,622	¥122,905
Total	¥614,527	¥—	¥491,622	¥122,905
Treasury shares				
Common share	¥ 1,742	¥52	¥ 1,427	¥ 367
Total	¥ 1,742	¥52	¥ 1,427	¥ 367

Notes: 1 The decrease in total issued shares of common share by 491,622 thousand shares was due to the consolidation of shares closed effective October 1, 2017.  
2 The increase in common share of treasury shares by 52 thousand shares was due to requests for repurchase of shares less than one unit.  
3 The decrease in common share of treasury shares by 1,427 thousand shares comprised decrease of 1 thousand shares due to the sale of shares less than one unit and decrease of 1,426 thousand shares due to the consolidation of shares effective October 1, 2017.

## 2 Dividends

### (1) Amounts of dividends paid

(Resolution)	Type of share	Total amount of dividends (Millions of yen)	Amount of dividend per share (Yen)	Record date	Effective date
Annual general meeting of shareholders held on June 29, 2017	Common share	¥ 5,515	¥ 9	March 31, 2017	June 30, 2017
Meeting of the Board of Directors held on October 31, 2017	Common share	4,902	8	September 30, 2018	December 1, 2017
Total		¥10,417	¥—		

Note: The share consolidation of five shares of common share into one share was effective on October 1, 2017. The amount of dividend per share represents actual amount of dividends prior to such consolidation of shares.

### (2) Dividends recorded during the year, but effective in the next fiscal year

(Resolution)	Type of share	Source for payment of dividends	Total amount of dividends (Millions of yen)	Amount of dividend per share (Yen)	Record date	Effective date
Annual general meeting of shareholders held on June 28, 2018	Common share	Retained earnings	¥5,514	¥45	March 31, 2018	June 29, 2018

## (Notes to Consolidated Statements of Cash Flows)

### \*1 Reconciliations between the cash and cash equivalents and cash and deposits presented in the Consolidated Balance Sheets

	Millions of yen	
	For the year ended March 31, 2017	For the year ended March 31, 2018
Cash and deposits	¥63,820	¥88,233
Time deposits with term of over 3 months to maturity	(2,803)	(2,729)
Cash and cash equivalents	¥61,017	¥85,503

## 2 Major components of assets and liabilities of the companies newly included in the scope of consolidation as a result of acquisition of shares

### For the year ended March 31, 2017

SHI consolidated the newly acquired subsidiary, Hitachi Sumitomo Heavy Industries Construction Crane Co., Ltd. (currently known as Sumitomo Heavy Industries Construction Cranes Co., Ltd.). The following summarizes the recognized amount of assets acquired and liabilities assumed, and net cash outflow arising from the acquisition of the subsidiary at the acquisition date.

	Millions of yen
Current assets	¥ 24,309
Non-current assets	2,461
Goodwill	1,243
Current liabilities	(11,757)
Non-current liabilities	(195)
Non-controlling interests	(5,038)
Gain on step acquisitions	(941)
Investment value accounted for using the equity method prior to obtaining control	(7,409)
Price at which SHI acquired shares	2,672
Cash and cash equivalents	(764)
Net of acquisition cost	¥ 1,908

### For the year ended March 31, 2018

SHI consolidated the newly acquired subsidiary, Sumitomo SHI FW Energie B.V. The following summarizes the recognized amount of assets acquired and liabilities assumed, and net cash outflow arising from the acquisition of the subsidiary at the acquisition date.

	Millions of yen
Current assets	¥ 22,908
Non-current assets	17,379
Goodwill	12,645
Current liabilities	(24,446)
Non-current liabilities	(4,537)
Non-controlling interests	(979)
Foreign currency translation adjustments	(132)
Price at which SHI acquired shares	22,838
Cash and cash equivalents	(8,291)
Net of acquisition cost	¥ 14,547

## (Lease Transactions)

### 1 As lessee

#### (1) Finance lease transactions without transfer of ownership

Although finance lease transactions without transfer of ownership carried out before March 31, 2008 have been accounted for by using the accounting treatment for ordinary lease transactions, no further disclosure has been made because those transactions are immaterial.

#### (2) Operating lease transactions

Lease payments

	Millions of yen	
	March 31, 2017	March 31, 2018
Due within one year	¥1,236	¥1,464
Due after one year	1,926	3,150
Total	¥3,162	¥4,614

### 2 As lessor

#### (1) Finance lease transactions without transfer of ownership

Although finance lease transactions without transfer of ownership carried out before March 31, 2008 have been accounted for by using the accounting treatment for ordinary lease transactions, no further disclosure has been made because those transactions are immaterial.

#### (2) Operating lease transactions

For operating lease transactions, no further disclosure has been made because those transactions are immaterial.



## (Financial Instruments)

### 1 Financial instruments

#### (1) Policy to cope with financial instruments

As a general machinery manufacturer, the Company engages in the business of manufacturing, selling and distributing various machines and systems including gear reducers and transmissions, and finances necessary operating and equipment funds through bank loans and issue of corporate bonds. Temporary surplus funds are limited to investment in highly stable and short-term financial assets. Derivatives are used to hedge the risks described below and the Company has a policy to refrain from entering into any speculative transactions.

#### (2) Details of financial instruments and their risks

Notes and accounts receivable—trade, and long-term loans receivable are exposed to customers' credit risks. Although foreign currency-denominated trade accounts receivable generated from global expansion of business operations are exposed to foreign exchange fluctuation risks, the Company hedges net position of foreign currency-denominated trade accounts receivables and trade accounts payable by utilizing forward exchange contracts to maintain those positions at a certain range of percentages. Reports on hedge ratios and unhedged positions are submitted to the Board of Directors in a timely manner.

Investment securities consist of shares in the companies with which the Company has a business relationship and which are exposed to market price fluctuation risks.

Most notes and accounts payable—trade are due within one year. Some of them, which relate to imports of raw materials and are denominated in foreign currencies, are exposed to foreign exchange fluctuation risks and are hedged by utilizing forward exchange contracts.

Loans and bonds are principally intended to finance operating funds and equipment funds necessary for business transactions. For some of the long-term loans payable, the Company utilizes derivative transactions (interest rate swap transactions) as hedge instruments for each individual contract. As interest swaps transaction satisfies the requirements for simplified accounting treatment, assessment of the effectiveness is not carried out. Foreign currency-denominated loans are exposed to foreign exchange fluctuation risks.

Derivative transactions consist of forward exchange contracts designed for hedge transactions in preparation for foreign exchange fluctuation risks for foreign currency-denominated trade accounts receivable and payable and forecast transactions, and interest rate swap transactions designed to hedge fluctuation risks involving interests payable on loans and foreign exchanges. For details of hedge accounting instruments and hedged transactions, hedge policy, and methods of assessment of the effectiveness, please refer to "Method of significant hedge accounting" in "Accounting policies" above.

#### (3) Risk management structure for financial instruments

##### (i) Management of credit risk

Credit risk is the risk of a counterparty failing to meet its contractual obligation.

For domestic transactions and export transactions in excess of certain levels of amounts, the Company endeavors to mitigate its concerns about recoverability of trade accounts receivable, for example, by conducting credit examinations prior to accepting orders. In addition, each business division manages due dates and balances of trade accounts receivable for each counterparty in accordance with the credit management regulations, thereby trying to identify concerns about recoverability as early as practicable.

In using derivative transactions, the Company enters into transactions only with highly rated financial institutions to mitigate counterparty risks.

The Company maintains term deposits only with highly rated financial institutions with which the Company has loan transactions to mitigate repayment risks. Therefore, the Company is subject to an insignificant level of credit risks.

##### (ii) Management of market risk

Market risk is the risk that changes in market prices (such as foreign exchange rates, interest rates, equity price) may affect the Company's income or the values of its holding of financial instruments.

The Company hedges net positions of foreign currency-denominated trade accounts receivable and payable in accordance with the Market Risk Management Policy which stipulates, among others, hedge ratio and unhedged volume of foreign exchange transactions, and submits a report on how those positions are hedged to the Board of Directors on a monthly basis. Major consolidated subsidiaries with foreign currency-denominated trade accounts receivable and payable also manage their foreign exchange fluctuation risks through currency hedging in accordance with the exchange hedging policy which stipulates, among others, hedge ratio or unhedged volume of foreign exchange transactions.

Moreover, the Company monitors interest expenses on loans and submits a report to the Board of Directors in a timely manner. The Company utilizes interest rate swap transactions to control interest expense fluctuation risks.

For investment securities, the Company monitors market values and financial conditions of issuers in a timely manner. The Company also reviews its holdings position taking the relationships with its business partners into consideration.

SHI and its major consolidated subsidiaries have a policy to utilize derivative transactions for the sole purpose of hedging the foreign exchange and interest fluctuation risks mentioned above and reconciles balances with each counterparty on a monthly basis.

##### (iii) Management of liquidity risk for financing

Liquidity risk is the risk that the Company may encounter difficulty in meeting the obligations associated with its liabilities which are settled by delivering cash or other assets.

The Company introduces the cash management systems for major consolidated subsidiaries, under which the Company centrally manages the Company's funds. The Company prepares and updates financing plans on a timely basis based on reports from the business divisions and major affiliated companies and manages the liquidity risk.

### 2 Market values for financial instruments

Carrying amount and market value of financial instruments on the consolidated balance sheets and their difference are presented below. The following table does not include financial instruments that are not practicable to identify market value (See Note 2).

#### March 31, 2017

	Carrying amount	Market value	Difference
Millions of yen			
(1) Cash and deposits	¥ 63,820	¥ 63,820	¥ —
(2) Notes and accounts receivable—trade	242,459	241,002	(1,457)
(3) Investment securities	12,444	12,444	—
(4) Long-term loans receivable	5,143	4,323	(819)
Total	¥323,866	¥321,589	¥(2,276)
(1) Notes and accounts payable—trade	¥147,318	¥147,318	¥ —
(2) Short-term loans payable	36,711	36,711	—
(3) Bonds payable	10,000	10,032	32
(4) Long-term loans payable	8,749	8,831	82
Total	¥202,779	¥202,893	¥ 115
Derivative transactions <sup>(*)</sup>	¥ 560	¥ 471	¥ (89)

(\*)1 Receivables and payables generated from derivative transactions are presented on a net basis, and net payables are presented in bracket ( ).

## March 31, 2018

	Millions of yen		
	Carrying amount	Market value	Difference
(1) Cash and deposits	¥ 88,233	¥ 88,233	¥ —
(2) Notes and accounts receivable—trade	269,409	267,321	(2,089)
(3) Investment securities	14,322	14,322	—
(4) Long-term loans receivable	4,466	3,877	(589)
Total	¥376,430	¥373,752	¥(2,678)
(1) Notes and accounts payable—trade	¥184,227	¥184,227	¥ —
(2) Short-term loans payable	33,516	33,516	—
(3) Bonds payable	20,000	20,069	69
(4) Long-term loans payable	10,665	10,732	66
Total	¥248,408	¥248,544	¥ 136
Derivative transactions <sup>(★1)</sup>	¥ 2,033	¥ 2,020	¥ (14)

(★1) Receivables and payables generated from derivative transactions are presented on a net basis, and net payables are presented in bracket ( ).

Note 1: Method of calculation of market values of financial instruments and matters regarding securities and derivative transactions

Assets

## (1) Cash and deposits

The carrying amount of the cash and deposits is approximate the market value because of its short term in nature.

## (2) Notes and accounts receivable—trade

Market value of notes and accounts receivable are calculated at present value obtained by discounting the amounts of receivables after categorizing each receivable by duration, by interest rate that reflects the duration to maturity and credit risk.

## (3) Investment securities

Investment securities consist of share, and their market value is based on prices on exchanges they are listed or traded.

## (4) Long-term loans receivable

Market value of long-term loans receivable is calculated at present value obtained by discounting future cash flows by interest rates, such as yields on government bonds/notes or other appropriate indices, plus credit spread.

Liabilities

## (1) Notes and accounts payable—trade, and (2) Short-term loans payable

The carrying amount of the notes and accounts payable—trade and short-term loans payable are approximate the market values because of its short term in nature.

## (3) Bonds payable

Market value of bonds issued by SHI is calculated at present value obtained by discounting total amount of principals and interests by interest rate that reflects the durations of those bonds to maturity and credit risk.

## (4) Long-term loans payable

Market value of long-term loans payable is calculated at present value obtained by discounting total amount of principals and interests by interest rates assumed at the time of new similar borrowing.

## Derivative transactions

Refer to notes to “Derivative transactions.”

Note 2: Carrying amounts of financial instruments on consolidated balance sheets that are not practicable to identify market value are as below.

	Millions of yen	
Category	March 31, 2017	March 31, 2018
Shares of subsidiaries and associates	¥9,270	¥3,458
Unlisted shares	2,449	2,458
Equity securities	5	5

Those financial instruments have not been included in “(3) Investment securities” because they have no active market price and it is not practicable to identify their market value.

Note 3: Amount of financial assets expected to be redeemed after the end of year

## March 31, 2017

	Millions of yen		
	Within 1 year	Over 1 year but within 5 years	Over 5 years
Cash and deposits	¥ 63,820	¥ —	¥ —
Notes and accounts receivable—trade	236,288	6,142	28
Long-term loans receivable	4	5,132	6
Total	¥300,113	¥11,274	¥35

## March 31, 2018

	Millions of yen		
	Within 1 year	Over 1 year but within 5 years	Over 5 years
Cash and deposits	¥ 88,233	¥ —	¥ —
Notes and accounts receivable—trade	261,365	7,956	87
Long-term loans receivable	26	4,435	6
Total	349,624	¥12,391	93

Note 4: Amount of bonds payable and long-term loans payable to be repaid after the end of year

## March 31, 2017

	Millions of yen					
	Within 1 year	Over 1 year but within 2 years	Over 2 years but within 3 years	Over 3 years but within 4 years	Over 4 years but within 5 years	Over 5 years
Bonds payable	¥ —	¥ —	¥10,000	¥—	¥—	¥—
Long-term loans payable	1,481	7,212	57	—	—	—
Total	¥1,481	¥7,212	¥10,057	¥—	¥—	¥—

## March 31, 2018

	Millions of yen					
	Within 1 year	Over 1 year but within 2 years	Over 2 years but within 3 years	Over 3 years but within 4 years	Over 4 years but within 5 years	Over 5 years
Bonds payable	¥ —	¥10,000	¥ —	¥—	¥10,000	¥—
Long-term loans payable	7,801	598	164	—	2,102	—
Total	¥7,801	¥10,598	¥164	¥—	¥12,102	¥—



## (Securities)

## 1 Available-for-sale securities

March 31, 2017

Millions of yen			
Category	Carrying amount on the consolidated balance sheets	Acquisition cos	Difference
Securities for which carrying amount on the consolidated balance sheets is in excess of acquisition cost			
Shares	¥10,340	¥4,695	¥5,645
Securities for which carrying amount on the consolidated balance sheets is not in excess of acquisition cost			
Shares	2,104	2,244	(140)
Total	¥12,444	¥6,939	¥5,505

Note: Shares of subsidiaries and associates (carrying amount on the consolidated balance sheets: ¥9,270 million), unlisted shares (carrying amount on the consolidated balance sheets: ¥2,449 million) and equity securities (carrying amount on the consolidated balance sheets: ¥5 million) are not included in "Available-for-sale securities" in the table above, as those shares have no active market price and it is not practicable to identify their market value.

March 31, 2018

Millions of yen			
Category	Carrying amount on the consolidated balance sheets	Acquisition cos	Difference
Securities for which carrying amount on the consolidated balance sheets is in excess of acquisition cost			
Shares	¥12,094	¥4,628	¥7,466
Securities for which carrying amount on the consolidated balance sheets is not in excess of acquisition cost			
Shares	2,228	2,415	(187)
Total	¥14,322	¥7,043	¥7,279

Note: Shares of subsidiaries and associates (carrying amount on the consolidated balance sheets: ¥3,458 million), unlisted shares (carrying amount on the consolidated balance sheets: ¥2,458 million) and equity securities (carrying amount on the consolidated balance sheets: ¥5 million) are not included in "Available-for-sale securities" in the table above, as those shares have no active market price and it is not practicable to identify their market value.

## 2 Available-for-sale securities sold during the year

For the year ended March 31, 2017

Millions of yen			
Type	Amount sold	Total amount of selling profits	Total amount of selling losses
Shares	¥846	¥421	¥0

For the year ended March 31, 2018

Millions of yen			
Type	Amount sold	Total amount of selling profits	Total amount of selling losses
Shares	¥159	¥63	¥—

## (Derivative Transactions)

## 1 Derivative transactions to which hedge accounting is not applied

Foreign currency-related transactions

March 31, 2017

Millions of yen				
Category	Type	Contract amount	Over 1 year	Valuation gains (losses)
Off-market transactions	Forward exchange contracts			
	Selling			
	USD	¥17,636	¥—	¥ (76)
	EUR	4,372	—	51
	GBP	111	—	4
	THB	91	—	(13)
	Buying			
	USD	867	—	4
	EUR	15	—	0
	Currency swap transactions			
	Receivable in US dollars and payable in Brazilian real	229	229	186
	Receivable in US dollars and payable in Chilean peso	175	—	0
Total		¥23,496	¥229	¥155

Note: Methods of calculation of market value

Forward exchange contracts: calculated using forward exchange rates.

Swap transactions: calculated using the amounts presented by financial institutions with which the Company has a swap contract.

March 31, 2018

Millions of yen				
Category	Type	Contract amount	Over 1 year	Valuation gains (losses)
Off-market transactions	Forward exchange contracts			
	Selling			
	USD	¥23,414	¥—	¥487
	EUR	6,035	—	124
	IDR	266	—	13
	CNY	172	—	4
	GBP	157	—	(2)
	THB	104	—	(7)
	AUD	1	—	0
	Buying			
	USD	565	—	1
Total		¥30,714	¥—	¥620

Note: Method of calculation of market value

Forward exchange contracts: calculated using forward exchange rates.

## 2 Derivative transactions to which hedge accounting is applied

### (1) Foreign currency-related transactions

March 31, 2017

					Millions of yen
Method of hedge accounting	Type	Major hedged items	Contract amount	Over 1 year	Market value
Basic accounting method	Forward exchange contracts				
	Selling				
	USD	Accounts receivable—trade	¥33,857	¥15,760	¥432
	EUR		296	—	(2)
	Buying				
	USD	Accounts payable—trade	3,697	507	(24)
	EUR		430	82	(7)
	CNY		108	—	7
Apportionment of forward exchange contracts	Forward exchange contracts				
	Selling				
	USD	Accounts receivable—trade	1,891	—	(48)
	EUR		9	—	0
Total			¥40,289	¥16,350	¥357

Note: Method of calculation of market value  
Forward exchange contracts: calculated using forward exchange rates.

March 31, 2018

Method of hedge accounting		Type	Major hedged items	Millions of yen		
				Contract amount	Over 1 year	Market value
Basic accounting method	Forward exchange contracts					
	Selling					
	USD	Accounts receivable—trade	¥32,520	¥14,417	¥1,522	
	SEK		2,595	1,530	70	
	EUR		828	53	5	
	Buying					
	USD		6,120	3,648	(137)	
	SEK	Accounts payable—trade	1,410	—	(50)	
	EUR		1,195	153	9	
	CHF		127	—	(5)	
	CNY		22	—	1	
Apportionment of forward exchange contracts	Forward exchange contracts					
	Selling					
	USD	Accounts receivable—trade	192	—	0	
	EUR		4	—	0	
	Buying					
	JPY	Accounts payable—trade	287	—	(1)	
Total				¥45,300	¥19,801	¥1,413

Note: Method of calculation of market value  
Forward exchange contracts: calculated using forward exchange rates.

### (2) Interest-related transactions

March 31, 2017

Method of hedge accounting	Type	Major hedged items	Millions of yen		
			Contract amount	Over 1 year	Market value
Simplified accounting treatment of interest swaps	Interest rate swap transactions payable at fixed rate and receivable at floating rate	Long-term loans payable	¥3,828	¥3,828	¥(41)
Total			¥3,828	¥3,828	¥(41)

Note: Method of calculation of market value  
Swap transactions: calculated using the amounts presented by financial institutions with which the Company has a swap contract.

March 31, 2018

Method of hedge accounting	Type	Major hedged items	Millions of yen		
			Contract amount	Over 1 year	Market value
Simplified accounting treatment of interest swaps	Interest rate swap transactions payable at fixed rate and receivable at floating rate	Long-term loans payable	¥3,810	¥3,800	¥(13)
Total			¥3,810	¥3,800	¥(13)

Note: Method of calculation of market value  
Swap transactions: calculated using the amounts presented by financial institutions with which the Company has a swap contract.

### (Retirement Benefits)

#### 1 Outline of the retirement benefit plans adopted

SHI and its major domestic consolidated subsidiaries have adopted a combination of the lump-sum retirement allowance plan and the defined contribution pension plan, while certain overseas consolidated subsidiaries have defined benefit-type plans.

A retirement benefit trust has been created for SHI's lump-sum retirement allowance plans.

The lump-sum retirement allowance plans are maintained by certain consolidated subsidiaries. The calculation for net defined benefit liability and retirement benefit costs is based on the simplified method.

#### 2 Defined benefit plans (excluding the plans to which the simplified method is applied)

##### (1) Movements in retirement benefit obligations

	Millions of yen	
	For the year ended March 31, 2017	For the year ended March 31, 2018
Balance at the beginning of the year	¥90,268	¥88,897
Service cost	3,549	3,354
Interest cost	1,272	1,250
Actuarial loss (gain)	1,658	870
Benefits paid	(4,860)	(4,038)
Past service costs	(1,038)	—
Increase due to change from the simplified method to the principle method	—	698
Increase due to merger	—	52
Decrease due to deconsolidation	—	(328)
Other	(1,953)	101
Balance at the end of the year	¥88,897	¥90,855



**(2) Movements in plan assets**

	Millions of yen	
	For the year ended March 31, 2017	For the year ended March 31, 2018
Balance at the beginning of the year	¥42,182	¥47,797
Expected return on plan assets	1,434	1,649
Actuarial (loss) gain	5,142	4,768
Contributions paid by the employer	1,117	1,467
Benefits paid	(891)	(1,219)
Other	(1,187)	(529)
Balance at the end of the year	¥47,797	¥53,934

**(3) Reconciliations from retirement benefit obligations and plan assets to net defined benefit liability (asset)**

	Millions of yen	
	March 31, 2017	March 31, 2018
Funded retirement benefit obligations	¥ 66,494	¥ 66,698
Plan assets	(47,797)	(53,934)
	18,697	12,764
Unfunded retirement benefit obligations	22,403	24,158
Total net defined benefit liability	¥ 41,099	¥ 36,921
Defined benefit asset	¥ (21)	¥ (12)
Defined benefit liability	41,120	36,934
Total net defined benefit liability	¥ 41,099	¥ 36,921

**(4) Retirement benefit expenses**

	Millions of yen	
	For the year ended March 31, 2017	For the year ended March 31, 2018
Service cost	¥ 3,549	¥ 3,354
Interest cost	1,272	1,250
Expected return on plan assets	(1,434)	(1,649)
Net actuarial loss amortization	1,740	187
Past service costs amortization	(1,062)	78
Other	193	46
Total retirement benefit expenses	¥ 4,259	¥ 3,266

Note: ¥1,038 million of gain from amortization of past service costs has been recognized in extraordinary income as a result of the amendment to the retirement allowance regulations for employees who are transferred to other entities on a secondment basis and treated as suspended from work for the Company during the previous year.

**(5) Remeasurements of defined benefit plans**

Items recognized in remeasurements of defined benefit plans (before tax effect) are as follows.

	Millions of yen	
	For the year ended March 31, 2017	For the year ended March 31, 2018
Past service costs	¥ (24)	¥ (110)
Actuarial gains and losses	5,224	4,140
Other	547	203
Total	¥5,747	¥4,233

**(6) Accumulated remeasurements of defined benefit plans**

Items recognized in accumulated remeasurements of defined benefit plans (before tax effect) are as follows.

	Millions of yen	
	March 31, 2017	March 31, 2018
Past service costs that are yet to be recognized	¥ 74	¥ (120)
Actuarial gains and losses that are yet to be recognized	(9,436)	(5,000)
Total	¥(9,361)	¥(5,120)

**(7) Plan assets**

(i) Major components of plan assets

Percentages by major category of total plan assets is as follows.

	%	
	March 31, 2017	March 31, 2018
Shares	80	67
Cash and deposits	4	1
Other	16	31
Total	100	100

Note: Total plan assets include the retirement benefit trust created for SHI's lump-sum retirement allowance plan. The retirement benefit trust included is 52% (¥24,848 million) and 51% (¥27,605 million) of total plan assets for the previous year and the current year respectively.

(ii) Method of setting a long-term expected rate of return on plan assets

In order to determine a long-term expected rate of return on plan assets, present and predicted allocation of plan assets, and present and expected long-term rate of return on various assets comprising plan assets are considered.

**(8) The basis of actuarial assumptions**

Basis for major actuarial assumptions

	%	
	For the year ended March 31, 2017	For the year ended March 31, 2018
Discount rate	0.0 to 5.4	0.0 to 5.4
Long-term expected rate of return on plan assets	0.0 to 8.0	0.0 to 8.0

**3 Defined benefit plans to which the simplified method is applied****(1) Movements in net defined benefit liability**

	Millions of yen	
	For the year ended March 31, 2017	For the year ended March 31, 2018
Balance at the beginning of the year	¥3,537	¥3,733
Decrease due to change from the simplified method to the principle method	—	(327)
Retirement benefit expenses	653	637
Benefit paid	(390)	(458)
Contributions paid by the employer	(67)	(70)
Other	0	—
Balance at the end of the year	¥3,733	¥3,514

**(2) Reconciliations from retirement benefit obligations and plan assets to net defined benefit liability**

	Millions of yen	
	March 31, 2017	March 31, 2018
Funded retirement benefit obligations	¥ 857	¥ 879
Plan assets	(857)	(897)
	1	(18)
Unfunded retirement benefit obligations	3,732	3,532
Total net defined benefit liability	¥3,733	¥3,514
Defined benefit asset	¥ —	¥ (18)
Defined benefit liability	3,733	3,532
Total net defined benefit liability	¥3,733	¥3,514

**(3) Retirement benefit expenses**

Retirement benefit expenses calculated using the simplified method: ¥653 million for the previous year  
¥637 million for the current year

**4 Defined contribution plans**

The amounts required to be contributed to the defined contribution plans of SHI and its consolidated subsidiaries are ¥728 million for the previous year, and ¥855 million for the current year, respectively.

**(Tax Effect Accounting)****1 Major components of deferred tax assets and deferred tax liabilities**

	Millions of yen	
	March 31, 2017	March 31, 2018
Deferred tax assets		
Accrued bonuses	¥ 3,159	¥ 3,364
Amount exceeding the limit on deductible allowance for doubtful accounts	845	1,155
Provision for construction warranties	2,655	2,729
Net defined benefit liability	14,572	13,523
Unrealized profit on inventories	1,718	1,893
Loss on valuation of investment securities	1,707	1,698
Excess of depreciation	1,077	1,296
Net operating loss carryforwards	3,098	5,205
Loss on valuation of inventories	4,710	2,353
Impairment loss	2,543	2,263
Provision for loss on construction contracts	887	1,766
Other	8,073	5,998
Subtotal	45,043	43,244
Valuation allowance	(8,715)	(10,473)
Total	36,328	32,771
Deferred tax liabilities		
Reserve for reduction entry	(35)	(31)
Unrealized gains on full market value valuation of consolidated subsidiaries	(2,850)	(2,850)
Extra depreciation in overseas subsidiaries	(3,765)	(2,580)
Retained earnings of overseas subsidiaries	(2,732)	(3,381)
Intangible assets identified by business combinations	—	(3,081)
Valuation difference on available-for-sale securities	(1,364)	(1,892)
Deferred gains or losses on hedges	(115)	(415)
Other	(350)	(492)
Total	(11,211)	(14,723)
Net deferred tax assets	¥ 25,118	¥ 18,048

*Change of presentation method*

“Provision for loss on construction contracts” included in “Other” for the previous year is separately listed in the table above for the current year because it has become material. In order to reflect this change of presentation method, the notes for the previous year have been reclassified. As a result, ¥8,960 million of “Other” for the previous year has been reclassified into ¥887 million of “Provision for loss on construction contracts” and ¥8,073 million of “Other.”

2 SHI and its consolidated domestic companies are subject to corporate, inhabitants' and enterprise taxes, which, in the aggregate show a statutory tax rate in Japan of approximately 30.9% for the years ended March 31, 2017 and 2018, respectively. Major items causing the differences between the statutory effective tax rate and the effective income tax rate after application of tax effect accounting are as follows.

	March 31, 2017	March 31, 2018	%
Statutory effective tax rate	30.9	30.9	
(adjustments)			
Items not deductible permanently, such as entertainment expenses	0.6	0.6	
Inhabitant tax on a per capita basis	0.5	0.5	
Items not taxable permanently, such as dividend income	(0.8)	0.3	
Valuation allowance	0.8	3.8	
Tax credit	(1.7)	(2.5)	
Share of profit of entities accounted for using equity method	(1.6)	(0.3)	
Gain on step acquisitions	(0.6)	—	
Retained earnings of overseas subsidiaries	(1.0)	1.2	
Tax rate differences of overseas subsidiaries	1.0	(7.0)	
Amortization of goodwill	0.1	0.8	
Other	0.1	0.6	
Effective income tax rate after application of tax effect accounting	28.3	28.9	

*Change of presentation method*

"Amortization of goodwill" included in "Other" for the previous year is separately listed in the table above for the current year because it becomes material. In order to reflect this change of presentation method, the notes for the previous year have been reclassified. As a result, 0.2% of "Other" for the previous year has been reclassified into 0.1% of "Amortization of goodwill" and 0.1% of "Other."

### 3 Revisions to the amounts of deferred tax assets and liabilities due to changes in the tax rates

On December 22, 2017, the U.S. tax reform bill was signed into law to decrease the federal corporation income tax rate from 35% to 21% effective from January 1, 2018. As a result, deferred tax assets and deferred tax liabilities of the U.S subsidiaries as of the end of the current year have been calculated using the statutory effective tax rate based on the revised tax rate.

The effect of this tax rate revision is immaterial.

## (Business Combination)

### Business combination through acquisition

The Board of Directors of SHI on March 2, 2017 resolved the execution of a share transfer agreement to acquire the shares in a renewable energy generator company FW Energie B.V. (having its head office in the Netherlands; "FW") from Foster Wheeler LLC (a U.S. based company), a group company of Amec Foster Wheeler plc ("AFW," a U.K. based company) in order to make FW a subsidiary. The share transfer was completed on June 23, 2017.

#### (1) Outline of the acquisition

(i) Name and nature of business of the acquired entity

Name of the acquired entity: FW Energie B.V.

Nature of business: A holding company of the subsidiary engaged in the manufacture and sale of circulating fluidized bed (CFB) boilers.

(ii) Main reason for the business combination

Acquisition of the CFB boiler business technologies and knowhow held by AFW will make it possible for the Company to provide more advanced technologies and expand its business more globally.

(iii) Acquisition date

June 23, 2017

(iv) Legal form of business combination

Acquisition of shares

(v) Company name after the business combination

Sumitomo SHI FW Energie B.V.

(vi) Percentage of the voting rights acquired

Percentage of voting rights held shortly before the business combination: —%

Percentage of voting rights acquired on the business combination date: 100.0%

Percentage of voting rights after acquisition: 100.0%

(vii) Major grounds leading to the selection of the acquiring entity

Due to the fact that SHI acquired the shares in cash.

#### (2) Financial performance period of the acquired company included in the consolidated financial statements

From June 24, 2017 to December 31, 2017

#### (3) Acquisition cost of the acquired company and breakdown by kind of consideration

	Millions of yen
Consideration for acquisition: Cash	¥22,838
Acquisition cost:	22,838

#### (4) Details and amount of major acquisition-related expenses

Advisory fees and other: ¥607 million

#### (5) Amount of goodwill generated, cause of generation, and method and period of amortization

(i) Amount of goodwill generated

¥12,645 million

(ii) Cause of generation

Generated from difference between net assets acquired and liabilities assumed, and acquisition cost.

(iii) Method and period of amortization

To be amortized equally over 20 years



(6) The major components of assets acquired and liabilities assumed on the date of acquisition

	Millions of yen
Current assets	¥22,908
Non-current assets	17,379
Total assets	¥40,287
Current liabilities	¥24,446
Non-current liabilities	4,537
Total liabilities	¥28,983

(7) Amount allocated to intangible assets other than goodwill and component by major type, and weighted average amortization period

Type	Amount (Millions of yen)	Weighted average amortization period (Years)
Technical assets	¥10,091	20.0
Trademark rights	2,814	20.0
Customer relationships	1,036	12.5
Total	¥13,941	—

(8) If the business combination has been completed at the beginning of the current year, the estimated financial effects on the consolidated statement of income for the current year would be as follows.

	Millions of yen
Net sales	¥15,179
Operating profit	43
Ordinary profit	295
Profit before income taxes	295
Loss attributable to owners of parent	(140)

Method of calculating estimated financial effects

The estimated financial effects are the differences between net sales and profit/loss information calculated assuming that the business combination has been completed at the beginning of the current year, and net sales and profit/loss information in SHI’s consolidated statements of income. The amount of amortization is calculated assuming that good-will is recognized at the beginning of the current year.

This note has not been audited.

(Asset Retirement Obligations)

No further disclosure is made as those obligations are immaterial in terms of amount.

(Segment Information)

[Segment Information]

1 Summary of reporting segments

(1) Method for determining reporting segments

The reporting segments of the Company are based on the business units for which financial information is separately available and are periodically reviewed by the Board of Directors to determine allocation of management resources and assess their operating performance.

(2) Type of finished goods and services belonging to each reporting segment

The Company formulates domestic and global strategies for its products and services handled by the head office and each consolidated subsidiary and develops business activities. Thus, the reporting segments consist of the following six segments for each of the products and services handled by the head office and each consolidated subsidiary: “Machinery Components,” “Precision Machinery,” “Construction Machinery,” “Industrial Machinery,” “Ships,” and “Environmental Facilities & Plants.”

Businesses	Main finished goods
Machinery Components	Power transmission and control equipment
Precision Machinery	Plastics machinery, film forming machines, semiconductor production equipment, laser processing systems, cryogenic equipment, precision positioning equipment, precision forgings, control components, defense equipment, machine tools
Construction Machinery	Hydraulic excavators, mobile cranes, road machinery
Industrial Machinery	Ion accelerators, medical machines and equipment, forging press machines, material handling systems, logistics systems, automated parking systems, turbines, pumps
Ships	Ships
Environmental Facilities & Plants	Private power generation facilities, boilers, industrial waste treatment facilities, air pollution control equipment, water and sewage treatment systems, process equipment, pressure vessels, mixing vessels, air-conditioning equipment, food processing machinery

2 Method of calculating net sales, profits or losses, assets and other items of each reporting segment

Method of accounting treatment of the business segments reported is almost identical to the descriptions in “Notes to the consolidated financial statements.”

Internal sales and transfers among the segments are based on market prices.

### 3 Information on the amounts of sales, profits or losses, assets and other items by reporting segment

#### For the year ended March 31, 2017

	Reporting Segments									Adjustments (Note 2)	Carrying amount on the consolidated financial statements (Note 3)
	Machinery Components	Precision Machinery	Construction Machinery	Industrial Machinery	Ships	Environmental Facilities & Plants	Total	Other (Note 1)	Total		
Sales											
Sales to external customers	¥ 98,648	¥145,745	¥182,504	¥ 98,913	¥32,611	¥107,613	¥666,034	¥ 8,294	¥674,328	¥ —	¥674,328
Inter-segment sales	2,050	1,489	10	1,206	12	1,384	6,150	3,340	9,490	(9,490)	—
Total	100,698	147,234	182,514	100,119	32,623	108,997	672,184	11,634	683,818	(9,490)	674,328
Segment profit	9,118	14,590	1,426	10,772	1,321	9,100	46,327	2,015	48,342	89	48,431
Segment assets	102,503	160,264	228,126	79,249	58,487	82,084	710,714	56,098	766,812	29,672	796,484
Other items											
Depreciation	4,151	3,895	8,525	1,632	652	947	19,802	509	20,311	—	20,311
Investments to companies accounting for using the equity method	—	1,884	—	3,518	—	—	5,402	—	5,402	—	5,402
Increase in tangible and intangible assets	4,754	6,329	7,639	4,409	1,655	1,880	26,666	874	27,539	—	27,539

Notes: 1 “Other” is the business segment which is not included in the reporting segments, and contains real estate business, software-related business and other businesses.

2 Adjustments are as follows.

(1) Adjustments of segment profit (¥89 million) include inter-segment eliminations of ¥89 million.

(2) Adjustments of segment assets (¥29,672 million) include assets of ¥29,672 million relating to surplus investment funds (cash and deposits) and long-term investment funds (investment securities) of SHI.

3 Segment profits have been adjusted to operating profit in the consolidated statements of income.

#### For the year ended March 31, 2018

	Reporting Segments									Adjustments (Note 2)	Carrying amount on the consolidated financial statements (Note 3)
	Machinery Components	Precision Machinery	Construction Machinery	Industrial Machinery	Ships	Environmental Facilities & Plants	Total	Other (Note 1)	Total		
Sales											
Sales to external customers	¥109,396	¥169,405	¥260,457	¥83,790	¥38,291	¥121,885	¥783,224	¥ 7,801	¥791,025	¥ —	¥791,025
Inter-segment sales	2,040	478	44	1,417	8	2,060	6,047	3,771	9,817	(9,817)	—
Total	111,436	169,883	260,501	85,207	38,299	123,945	789,271	11,572	800,843	(9,817)	791,025
Segment profit	11,847	19,462	17,448	8,810	742	9,531	67,840	2,067	69,907	14	69,921
Segment assets	124,198	187,212	236,296	75,817	61,199	133,883	818,605	50,609	869,215	26,354	895,569
Other items											
Depreciation	4,228	4,529	9,428	1,718	810	1,727	22,439	564	23,003	—	23,003
Amortization of goodwill	—	417	414	111	—	335	1,277	—	1,277	—	1,277
Investments to companies accounting for using the equity method	—	2,386	—	—	—	—	2,386	—	2,386	—	2,386
Increase in tangible and intangible assets	5,555	10,973	9,400	4,095	1,772	31,635	63,430	862	64,292	—	64,292

Notes: 1 “Other” is the business segment which is not included in the reporting segments, and contains real estate business, software-related business and other businesses.

2 Adjustments are as follows.

(1) Adjustments of segment profit (¥14 million) include inter-segment eliminations of ¥14 million.

(2) Adjustments of segment assets (¥26,354 million) include assets of ¥26,354 million relating to surplus investment funds (cash and deposits) and long-term investment funds (investment securities) of SHI.

3 Segment profits have been adjusted to profit in the consolidated statements of income.

#### [Related Information]

#### For the year ended March 31, 2017

#### 1 Information by finished goods and services

No further disclosure is made because the finished goods and services categories are identical to those in the reporting segments.

#### 2 Information by region

##### (1) Sales

Millions of yen				
Japan	United States	China	Others	Total
¥339,123	¥109,630	¥50,177	¥175,398	¥674,328

Note: Sales are based on the locations of customers and are divided into countries or regions.

##### (2) Property, plant and equipment

Millions of yen		
Japan	Others	Total
¥174,199	¥53,542	¥227,741

#### 3 Information by major customer

There is no description because the Company has no single external customer for whom sales make up at least 10% of consolidated sales.

#### For the year ended March 31, 2018

#### 1 Information by finished goods and services

No further disclosure is made because the finished goods and services categories are identical to those in the reporting segments.

#### 2 Information by region

##### (1) Sales

Millions of yen				
Japan	United States	China	Others	Total
¥365,524	¥119,607	¥80,446	¥225,448	¥791,025

Notes: 1 Sales are based on the locations of customers and are divided into countries or regions.

2 “China” was previously included in “Other” and is presented separately for current year because sales of this segment make up at least 10% of consolidated sales.

##### (2) Property, plant and equipment

Millions of yen		
Japan	Others	Total
¥183,019	¥56,577	¥239,596

#### 3 Information by major customer

There is no description because the Company has no external customer for whom sales make up at least 10% of consolidated sales.

### [Information on Impairment Loss of Non-current Assets by Reporting Segment]

For the year ended March 31, 2017

	Reporting segments									Total
	Machinery Components	Precision Machinery	Construction Machinery	Industrial Machinery	Ships	Environmental Facilities & Plants	Sub-total	Other	Corporate/ Eliminations (Note)	
Sub-total	¥1,381	¥47	¥—	¥1,507	¥—	¥—	¥2,935	¥—	¥20	¥2,955

Note: All the amounts of corporate/eliminations relate to idle assets, such as residential lands or corporate assets.

For the year ended March 31, 2018

	Reporting segments									Total
	Machinery Components	Precision Machinery	Construction Machinery	Industrial Machinery	Ships	Environmental Facilities & Plants	Sub-total	Other	Corporate/ Eliminations (Note)	
Sub-total	¥—	¥—	¥—	¥289	¥—	¥—	¥289	¥—	¥5	¥294

Note: All the amounts of corporate/eliminations relate to idle assets, such as residential lands or corporate assets.

### [Amortization and Unamortized Balance of Goodwill by Reporting Segment]

For the year ended March 31, 2017

Descriptions are omitted because the relevant information is immaterial.

For the year ended March 31, 2018

	Reporting segments									Total
	Machinery Components	Precision Machinery	Construction Machinery	Industrial Machinery	Ships	Environmental Facilities & Plants	Sub-total	Other	Corporate/ Eliminations	
Amortization during the year	¥—	¥ 417	¥414	¥111	¥—	¥ 335	¥ 1,277	¥—	¥—	¥ 1,277
Balance at the end of the year	—	3,518	829	277	—	13,406	18,030	—	—	18,030

### [Information on Gain on Negative Goodwill by Reporting Segment]

Not applicable.

### [Information on Related Parties]

Not applicable.

### (Per-share Information)

	For the year ended March 31, 2017	For the year ended March 31, 2018
Net assets per share	¥3,252.37	¥3,517.33
Earnings per share	274.24	282.83

Notes: 1 There is no disclosure for diluted earnings per share information after adjustments of dilutive potential shares, because there are no dilutive potential shares.  
 2 The share consolidation of five shares of common share into one share was effective October 1, 2017. Net assets per share and earnings per share are calculated assuming that such share consolidation had been executed at the beginning of the previous year.  
 3 Basis for calculation of earnings per share is presented below.

	For the year ended March 31, 2017	For the year ended March 31, 2018
Profit attributable to owners of parent	¥ 33,613	¥ 34,660
Value not attributable to common shareholders	—	—
Profit attributable to common shareholders of parent	33,613	34,660
Average number of outstanding shares for the term (in thousand shares)	122,566	122,547

### (Subsequent Events)

#### Acquisition of companies through share acquisition

The Board of Directors of SHI on May 25, 2018 resolved a resolution for acquisition of shares in Lafert S.p.A, an Italian manufacturer and distributor of industrial motors ("Lafert") and its holding company, and SHI entered into the share transfer agreement on the same day.

The share transfer was completed on June 25, 2018.

#### (1) Outline of the acquisition

(Lafert S.p.A.)

(i) Name and nature of business of the acquired company

Name of the acquired company: Lafert S.p.A.

Nature of business: Manufacture, sale and distribution of motors and motion control devices

(ii) Main reason for the business combination

To expand product portfolios of the Company and offer comprehensive solutions to broader customer bases through a combination of gear products of the Company and various motors and driver products of Lafert.

(iii) Acquisition date

June 25, 2018

(iv) Legal form of business combination

Acquisition of shares

(v) Company name after the business combination

Lafert S.p.A.

(vi) Percentage of the voting rights acquired

Percentage of voting rights held shortly before the business combination: —%

Percentage of voting rights acquired on the business combination date: 100.0%

Percentage of voting rights after acquisition: 100.0%

(vii) Major grounds leading to the selection of the acquiring entity

Due to the fact that SHI acquired the shares in cash.



(9FIN S.r.l.)

(i) Name and nature of business of the acquired company

Name of the acquired company: 9FIN S.r.l.

Nature of business: Shareholding company

(ii) Main reason for the business combination

To aim to expand product portfolios of the Company and offer comprehensive solutions to broader customer bases through a combination of gear products of the Company and various motors and driver products of Lafert.

(iii) Acquisition date

June 25, 2018

(iv) Legal form of business combination

Acquisition of shares

(v) Company name after the business combination

9FIN S.r.l.

(vi) Percentage of the voting rights acquired

Percentage of voting rights held shortly before the business combination: —%

Percentage of voting rights acquired on the business combination date: 100.0%

Percentage of voting rights after acquisition: 100.0%

(vii) Major grounds leading to the selection of the acquiring entity

Due to the fact that SHI acquired the shares in cash.

(3FIN S.r.l.)

(i) Name and nature of business of the acquired company

Name of the acquired company: 3FIN S.r.l.

Nature of business: Shareholding company

(ii) Main reason for the business combination

To expand product portfolios of the Company and offer comprehensive solutions to broader customer bases through a combination of gear products of the Company and various motors and driver products of Lafert.

(iii) Acquisition date

June 25, 2018

(iv) Legal form of business combination

Acquisition of shares

(v) Company name after the business combination

3FIN S.r.l.

(vi) Percentage of the voting rights acquired

Percentage of voting rights held shortly before the business combination: —%

Percentage of voting rights acquired on the business combination date: 100.0%

Percentage of voting rights after acquisition: 100.0%

(vii) Major grounds leading to the selection of the acquiring entity

Due to the fact that SHI acquired the shares in cash.

(2) Acquisition cost of the acquired companies and breakdown by kind of consideration

	Millions of yen
Consideration for acquisition: Cash	¥21,356
Acquisition cost:	21,356

(3) Details and amounts of major acquisition-related expenses

Advisory fees and other : ¥234 million.

(4) Amount of goodwill generated, cause of generation, and method and period of amortization

(i) Amount of goodwill generated

¥17,735 million

The amount of goodwill is the provisional amount as the allocation of acquisition cost is incomplete.

(ii) Cause of generation

Generated from difference between net assets acquired and liabilities assumed, and acquisition cost.

(iii) Method and period of amortization

SHI amortizes goodwill on a straight-line basis over the period in which it is expected to emerge.

(5) The major components of assets acquired and liabilities assumed on the date of acquisition

	Millions of yen
Current assets	¥12,650
Non-current assets	3,922
Total assets	¥16,572
Current liabilities	¥10,325
Non-current liabilities	2,192
Total liabilities	¥12,516

(Consolidated Supplementary Schedules)

[Bonds Schedule]

Company name	Name of issue	Issue date	Millions of yen		Interest rate (%)	Security	Redemption date
			Balance at the beginning of the current period	Balance at the end of the current period			
Sumitomo Heavy Industries, Ltd.	3rd unsecured bonds	October 28, 2014	¥10,000	¥10,000	0.26	Unsecured	October 28, 2019
Sumitomo Heavy Industries, Ltd.	4th unsecured bonds	March 15, 2018	—	10,000	0.17	Unsecured	March 15, 2023
Total	—	—	¥10,000	¥20,000	—	—	—

Note: Annualized amounts to be redeemed within five years after the end of the current year are as follows.

Millions of yen				
Within 1 year	Over 1 year but within 2 years	Over 2 years but within 3 years	Over 3 years but within 4 years	Over 4 years but within 5 years
¥—	¥10,000	¥—	¥—	¥10,000

[Loans Schedule]

Category	Millions of yen		Average interest rate (%)	Repayment date
	Balance at the beginning of the current period	Balance at the end of the current period		
Short-term loans payable	¥36,711	¥33,516	1.50	—
Current portion of long-term loans payable	1,481	7,801	1.48	—
Lease obligations due within 1 year	2,886	3,169	—	—
Long-term loans payable (excluding long-term debt due within 1 year)	7,268	2,864	1.53	June 20, 2019 to January 29, 2023
Lease obligations (excluding lease obligations due within 1 year)	6,571	8,038	—	—
Total	¥54,917	¥55,388	—	—

Notes: 1 For “Average interest rate,” weighted average interest rate to the balance at the end of the year of loan is presented.  
2 The table below is the maturity profile of long-term loans payable and lease obligation at the end of the current year that are due after one year.

Category	Millions of yen			
	Over 1 year but within 2 years	Over 2 years but within 3 years	Over 3 years but within 4 years	Over 4 years but within 5 years
Long-term loans payable	¥ 598	¥ 164	¥ —	¥2,102
Lease obligations (long-term)	3,650	2,463	1,192	625

3 No interest rate information is available because lease obligations are measured by including interest expenses, except for certain consolidated subsidiaries.

[Asset Retirement Obligations Schedule]

No further disclosure has been made because the amount of asset retirement obligations was 1% or less than the total balance of the liabilities and the net assets at the beginning of the current year and at the end of the current year, respectively.



Independent Auditor’s Report

To the Board of Directors of Sumitomo Heavy Industries, Ltd.:

We have audited the accompanying consolidated financial statements of Sumitomo Heavy Industries, Ltd. and its consolidated subsidiaries, which comprise the consolidated balance sheets as at March 31, 2018 and 2017, and the consolidated statements of income, statements of comprehensive income, statements of changes in equity and statements of cash flows for the years then ended, and a summary of significant accounting policies and other explanatory information.

Management’s Responsibility for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with accounting principles generally accepted in Japan, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

Auditor’s Responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in Japan. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on our judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, we consider internal control relevant to the entity’s preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances, while the objective of the financial statement audit is not for the purpose of expressing an opinion on the effectiveness of the entity’s internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of Sumitomo Heavy Industries, Ltd. and its consolidated subsidiaries as at March 31, 2018 and 2017, and their financial performance and cash flows for the years then ended in accordance with accounting principles generally accepted in Japan.

KPMG AZSA LLC

September 26, 2018  
Tokyo, Japan

KPMG AZSA LLC, a limited liability audit corporation incorporated under the Japanese Certified Public Accountants Law and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative (“KPMG International”), a Swiss entity.

# Major Subsidiaries and Affiliates (As of June 30, 2018)



## Machinery Components Segment

<b>Power Transmission &amp; Controls</b>	Sumitomo Heavy Industries Gearbox Co., Ltd. Sumitomo Heavy Industries PTC Sales Co., Ltd. Sumitomo Heavy Industries Gearmotors Co., Ltd. Sumitomo Machinery Corporation of America Sumitomo (SHI) Cyclo Drive Germany GmbH Hansen Industrial Transmissions NV Lafert S.p.A. Sumitomo (SHI) Cyclo Drive Asia Pacific Pte. Ltd. Sumitomo Heavy Industries (Vietnam) Co., Ltd. Sumitomo (SHI) Cyclo Drive Korea, Ltd. Sumitomo Industrias Pesadas do Brasil Ltda. Sumitomo (SHI) Cyclo Drive China, Ltd. Sumitomo (SHI) Cyclo Drive Logistics, Ltd. Sumitomo Heavy Industries (Tangshan), Ltd.
--	--



## Precision Machinery Segment

<b>Plastics Machinery</b>	Sumitomo Heavy Industries Modern, Ltd. Izumi Seiki Co., Ltd. Sumiju Platec Co., Ltd. Sumiju Logitech Co., Ltd. Sumitomo (SHI) Demag Plastics Machinery GmbH Sumitomo (SHI) Demag Plastics Machinery North America, Inc. SHI. Plastics Machinery (Phils.), Inc. S.H.I. Plastics Machinery (S) Pte. Ltd. S.H.I. Plastics Machinery (Vietnam) Ltd. PT. SHI. Plastics Machinery (Indonesia) SHI. Plastics Machinery (India) Private Limited SHI. Plastics Machinery (Korea) Co., Ltd. SHI. Plastics Machinery (Taiwan), Inc. SHI Plastics Machinery (Hong Kong) Ltd. SHI. Plastics Machinery (Shanghai) Co., Ltd. Ningbo Sumiju Machinery, Ltd.
<b>Cryogenic Equipment</b>	Sumitomo (SHI) Cryogenics of America, Inc. Sumitomo (SHI) Cryogenics of Europe GmbH Sumitomo (SHI) Cryogenics of Europe, Ltd. SHI Manufacturing & Services (Philippines), Inc. Sumitomo (SHI) Cryogenics Korea Co., Ltd. Sumitomo (SHI) Cryogenics Taiwan Co., Ltd. SHI Electro-Mechanical Systems (Taiwan) Co., Ltd. Sumitomo (SHI) Cryogenics Shanghai, Ltd. Persimmon Technologies Corporation
<b>Precision Equipment and Components</b>	Sumitomo Heavy Industries Himatex Co., Ltd. Sumiju Precision Forging Co., Ltd.
<b>LCD and Semiconductor Equipment</b>	Sumitomo Heavy Industries Ion Technology Co., Ltd.
<b>Machine Tools</b>	Sumitomo Heavy Industries Finetech, Ltd.
<b>Defense Equipment</b>	Sumiju Business, Ltd. Sumiju Tokki Service Co., Ltd.



## Construction Machinery Segment

<b>Hydraulic Excavators and Road Machinery</b>	Sumitomo (S.H.I.) Construction Machinery Co., Ltd. Sumitomo (S.H.I.) Construction Machinery Sales Co., Ltd. PT. SUMITOMO S.H.I. CONSTRUCTION MACHINERY INDONESIA LBX Company, LLC Sumiju SCE (Xiamen) Construction Machinery Co., Ltd. Sumitomo (S.H.I.) Construction Machinery (Tangshan) Co., Ltd. Sumitomo Heavy Industries (China) Financial Leasing, Ltd.
<b>Mobile Cranes</b>	Sumitomo Heavy Industries Construction Crane Co., Ltd. Link-Belt Cranes, L.P., LLLP



## Industrial Machinery Segment

<b>Material Handling Systems</b>	Sumitomo Heavy Industries Material Handling Systems Co., Ltd. Sumimec Engineering Inc.
<b>Turbines and Pumps</b>	Shin Nippon Machinery Co., Ltd.
<b>Forklift Trucks</b>	Sumitomo NACCO Forklift Co., Ltd.
<b>Quantum Equipment and Cyclotron Accelerators</b>	SHI-ATEX Co., Ltd. SHI Accelerator Service Ltd. Sumiju Magnet (Kunshan) Co., Ltd. SHI Machinery Service (Hong Kong) Ltd.



## Ships Segment

<b>Ships</b>	Sumitomo Heavy Industries Marine & Engineering Co., Ltd. Sumiju Yokosuka Kogyo Co., Ltd.
--------------	---



## Environmental Facilities & Plants Segment

<b>Energy-Related and Environmental Protection Systems</b>	Sumiju Environmental Technologies, Ltd. Sumiju Plant Engineering Co., Ltd. Sumitomo SHI FW Energia Oy SHI DESIGNING & MANUFACTURING, INC.
<b>Water Treatment Systems</b>	Sumitomo Heavy Industries Environment Co., Ltd. SHI Airport System Co., Ltd.
<b>Pressure Vessels, Chemical Processing Equipment and Plants</b>	Sumitomo Heavy Industries Process Equipment Co., Ltd.
<b>Food Processing Machinery</b>	Izumi Food Machinery Co., Ltd.
<b>Industrial and Environment Equipment</b>	Nihon Spindle Manufacturing Co., Ltd.

## Others

<b>Others</b>	Lightwell Co., Ltd. Izumi Support Corporation Sumitomo Heavy Industries Business Associates, Ltd. Sumitomo Heavy Industries (USA), Inc. PT. Sumitomo Heavy Industries Indonesia Sumitomo Heavy Industries (China), Ltd.
---------------	--



History

**1888** The Company was launched as a machinery production and repair shop for the Besshi Copper Mine

**1897** Incorporated as Uraga Dock Co., Ltd.

**1928** Name changed to Sumitomo Besshi Copper Mine, Ltd.—Niihama Works

**1934** Incorporated as Sumitomo Machinery Co., Ltd.

**1940** Name changed to Sumitomo Machinery Industries Co., Ltd.

**1945** Name changed to Shikoku Machinery Industries Co., Ltd.

**1949** Listing of company stock on both the Tokyo and Osaka Stock Exchanges

**1952** Renamed Sumitomo Machinery Industries Co., Ltd.

**1961** Established Nagoya Works

**1962** Opened Hiratsuka Laboratory  
Uraga Dock Co., Ltd. merged with Uraga Tamashima Diesel Co., Ltd. to form Uraga Heavy Industries Co., Ltd.

**1965** Established Chiba Works

**1966** Establishment of Sumitomo Machinery Corporation of America (SMA)

**1969** Merged Sumitomo Machinery Industries Co., Ltd. and Uraga Heavy Industries Co., Ltd. to form Sumitomo Heavy Industries, Ltd.

**1972** Established Oppama Shipyard (currently known as Yokosuka Works)  
Establishment of Sumitomo Yale Co., Ltd. (currently, Sumitomo NACCO Material Handling Co., Ltd.) jointly with Yale Corporation in the U.S.

**1973** Established Toyo Factory (currently known as Ehime Works—Saijo Factory)

**1974** Equity investment made into Cyclo Getriebebau Lorenz Braren GmbH (currently, Sumitomo (SHI) Cyclo Drive Germany GmbH)

**1980** Established Sumitomo Heavy Industries Casting and Forging Co., Ltd. (currently known as Sumitomo Heavy Industries Himatex Co., Ltd.)

**1982** Merged with Nittoku Metal Industry Co., Ltd. to form the Precision Equipment Division (currently known as the Precision Equipment Group)

**1983** Establishment of Sumitomo Eaton Nova Corporation (currently, Sumitomo Heavy Industries Ion Technology Co., Ltd.) jointly with Eaton Corporation in the U.S.

**1986** Established Sumitomo (S.H.I.) Construction Machinery Co., Ltd.

**1988** Separation of the Diesel Engine Division to form Diesel United Ltd. jointly with IHI (current SHI stockholding ratio 0%)

**1995** Establishment of the naval shipbuilder Marine United jointly with IHI (current SHI stockholding ratio 0%)

**1999** Acquired Osaka Chain and Machinery, Ltd. (currently known as Sumitomo Heavy Industries Gearbox Co., Ltd.)  
Established Sumitomo Heavy Industries Engineering & Services Co., Ltd. (currently known as Sumitomo Heavy Industries Material Handling Systems Co., Ltd.)

**2000** Separated the precision forging business from the Company and established Sumiju Precision Forging Co., Ltd.  
Established Sumitomo Heavy Industries Finetech, Ltd.  
Acquired CBC Tech Co., Ltd., a manufacturer of extrusion molding machines, and renamed it as Sumitomo Heavy Industries Modern Machinery, Ltd. (currently known as Sumitomo Heavy Industries Modern, Ltd.)

**2001** Split Sumitomo (S.H.I.) Construction Machinery Co., Ltd. into two companies: Sumitomo Construction Machinery Co., Ltd., which focuses on roadwork equipment and excavators, and Sumiju Construction Crane Co., Ltd., which focuses on the crane business  
Transfer of the Research and Development Center (currently, Technology Research Center) from Hiratsuka Works to Yokosuka Works

**2002** Split the Company’s Paper Manufacturing Machinery and Press Machine Divisions and established Sumitomo Heavy Industries Techno-Fort Co., Ltd.  
Establishment of Hitachi Sumitomo Heavy Industries Construction Crane Co., Ltd. (currently, Sumitomo Heavy Industries Construction Crane Co., Ltd.) jointly with Hitachi Construction Machinery Co., Ltd.

**2003** Acquired 100% ownership of Shin Nippon Machinery Co., Ltd. after a stock swap  
Split the Shipbuilding Division and subsequently established Sumitomo Heavy Industries Marine & Engineering Co., Ltd.  
Merged the film processing equipment business and Sumitomo Heavy Industries Modern Machinery, Ltd. to form Sumitomo Heavy Industries Modern, Ltd.

**2004** Established Sumitomo Heavy Industries (Shanghai), Limited (currently known as Sumitomo Heavy Industries (Shanghai) Management, Ltd.)

**2006** Acquired 100% ownership of SEISA Gear, Ltd. (currently, Sumitomo Heavy Industries Gearbox Co., Ltd.)

**2007** Established Sumitomo Heavy Industries Environment Co., Ltd.  
Made Nihon Spindle Mfg. Co., Ltd. a subsidiary

**2008** Acquired 100% ownership of Demag Plastics Group (currently, Sumitomo (SHI) Demag Plastics Machinery GmbH)

**2009** Made SEN-SHI and Axcelis Company, a joint venture between SHI and Axcelis Company, a wholly owned subsidiary (currently known as Sumitomo Heavy Industries Ion Technology Co., Ltd.)  
Established Sumitomo Heavy Industries Process Equipment Co., Ltd.  
Established Sumitomo Heavy Industries (Tangshan), Ltd.  
Established Sumitomo (S.H.I.) Construction Machinery (Tangshan) Co., Ltd.

**2010** Established Sumitomo Heavy Industries Business Associates Ltd.  
Acquired 100% ownership of Nihon Spindle Mfg. Co., Ltd.

**2011** Acquired 100% ownership of Hansen Industrial Transmissions NV in Belgium  
Established Sumitomo Heavy Industries Gearmotors Co., Ltd.

**2012** Establishment of Sumitomo Heavy Industries (China) Financial Leasing, Ltd.

**2013** Establishment of Sumitomo Heavy Industries Material Handling Systems Co., Ltd., by integrating the logistics system and automated parking lot businesses and Sumitomo Heavy Industries Engineering & Services Co., Ltd.  
Establishment of the Industrial Equipment Division by integrating the Quantum Equipment Division and Sumitomo Heavy Industries Techno-Fort Co., Ltd.

**2015** Sumitomo Heavy Industries Material Handling Systems Co., Ltd. takes over the industrial crane business from Mitsubishi Heavy Industries Machinery Technology Corporation

**2016** Sumitomo Heavy Industries Environment Co., Ltd. merged with Sumiju Environmental Engineering Co., Ltd.

**2017** Acquired 100% ownership of Persimmon Technologies in the U.S.  
Hitachi Sumitomo Heavy Industries Construction Crane Co., Ltd. (currently, Sumitomo Heavy Industries Construction Crane Co., Ltd.) became a consolidated subsidiary  
Acquired the CFB boiler business of Amec Foster Wheeler plc (currently, Sumitomo SHI FW Energie B.V.)

**2018** Acquired 100% ownership of Italian industrial motor manufacturer, Lafert Group

Corporate Data (As of March 31, 2018)

Corporate Data

Head Office	Sumitomo Heavy Industries, Ltd. 1-1, Osaki 2-chome, Shinagawa-ku, Tokyo 141-6025, Japan
Tel	+81-3-6737-2331
URL	http://www.shi.co.jp/english/index.html

Domestic Offices

Chubu Office	10-24, Higashi-sakura 1-chome, Higashi-ku, Nagoya-shi, Aichi 461-0005, Japan Tel: 81-52-971-3063
Kansai Office	3-33, Nakanoshima 2-chome, Kita-ku, Osaka-shi, Osaka 530-0005, Japan Tel: 81-6-7635-3610
Kyushu Office	8-30, Tenyamachi, Hakata-ku, Fukuoka-shi, Fukuoka 812-0025, Japan Tel: 81-92-283-1670
Tanashi Works	1-1, Yato-cho 2-chome, Nishitokyo-shi, Tokyo 188-8585, Japan Tel: 81-42-468-4104
Chiba Works	731-1, Naganumahara-machi, Inage-ku, Chiba-shi, Chiba 263-0001, Japan Tel: 81-43-420-1351
Yokosuka Works	19, Natsushima-cho, Yokosuka-shi, Kanagawa 237-8555, Japan Tel: 81-46-869-1842

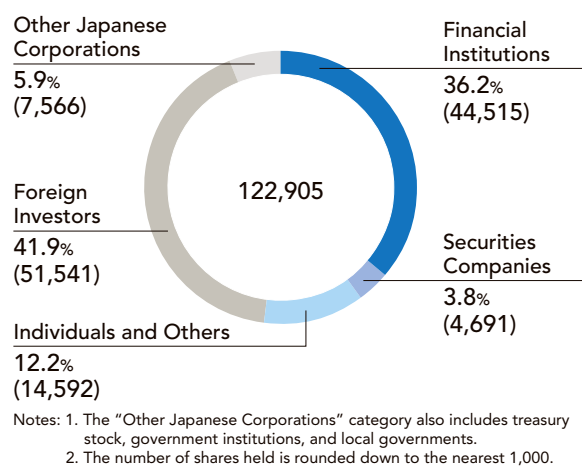
Founded	1888
Incorporated	November 1, 1934
Paid-In Capital	¥30,871,651,300
Number of Employees	21,017 (Consolidated) 2,857 (Non-consolidated)
Nagoya Works	1, Asahi-machi 6-chome, Obu-shi, Aichi 474-8501, Japan Tel: 81-562-48-5111
Okayama Works	8230, Tamashima-Otoshima, Kurashiki-shi, Okayama 713-8501, Japan Tel: 81-86-525-6101
Ehime Works —Niihama Factory	5-2, Sobiraki-cho, Niihama-shi, Ehime 792-8588, Japan Tel: 81-897-32-6211
Ehime Works —Saijo Factory	1501, Imazaike, Saijo-shi, Ehime 799-1393, Japan Tel: 81-898-64-4811
Technology Research Center	19, Natsushima-cho, Yokosuka-shi, Kanagawa 237-8555, Japan Tel: 81-46-869-2300

Stock-Related Information (As of March 31, 2018)

Stock Information

Transfer Agent	Sumitomo Mitsui Trust Bank, Limited
Stock Exchange Listing	Tokyo
Shares Outstanding	122,905,481
Number of Shareholders	35,284

Stock Information



Major Shareholders

Name of shareholder	Percentage of total shares issued and outstanding
The Master Trust Bank of Japan, Ltd. (Trust account)	7.6
Japan Trustee Services Bank, Ltd. (Trust account)	5.4
Sumitomo Life Insurance Company	3.5
Japan Trustee Services Bank, Ltd. (Trust account 9)	2.9
Sumitomo Heavy Industries, Ltd. Kyoeikai	2.2
Sumitomo Mitsui Banking Corporation	2.0
CHASE MANHATTAN BANK GTS CLIENTS ACCOUNT ESCROW	1.9
THE BANK OF NEW YORK, NON-TREATY JASDEC ACCOUNT	1.8
Japan Trustee Services Bank, Ltd. (Trust account 5)	1.8
STATE STREET BANK WEST CLIENT – TREATY 505234	1.8

