

 **SANYO SPECIAL STEEL**

REPORT

2019

APRIL 1.2018-MARCH 31.2019

CONTENTS

- 03 Top Message
- 05 “Steel You Can Count On” technologies that thrive in a variety of fields
- 07 Financial Highlights
- 09 Segment Data
- 11 10th Medium-Term Business Plan
- 13 **Features**
 - Sanyo Global Action - Expanding Sanyo Special Steel Worldwide
- 15 Topics
- 17 CSR-conscious management - the aim of the Sanyo Special Steel Group
- 19 Stakeholder Confidence
- Social**
 - 21 Confidence of customers
 - 23 Confidence of Suppliers
 - 25 Confidence of employee
- Environment**
 - 31 Environmental management
 - 33 Initiatives to prevent climate change
 - 34 Contributing to a resource-recycling society
 - 35 Moves to reduce the load on the environment
 - 36 Environmental risk management
- Governance**
 - 37 Corporate Governance
 - 39 Internal control systems
 - 41 Financial Section
 - 76 Company Profile

■ Editorial Policy

This report gives a summary of financial information such as earnings, as well as ESG (Environmental, Social, and Governance) initiatives and similar, which provide the foundations for sustainable growth, to allow a better understanding of Sanyo Special Steel Co., Ltd. (“Sanyo Special Steel”).

■ Period covered by the report

FY2018 (April 1, 2018 to March 31, 2019)
- note that the report contains some information from timeframes outside this period.

■ Scope of application

Sanyo Special Steel Co., Ltd., and group companies

■ Reference Guidelines

“Environmental Reporting Guidelines 2018” Ministry of the Environment
ISO26000

The corporate philosophy of the Sanyo Special Steel Group is

“Confidence-based Management .”

As well as doing our best to inspire confidence in our customers and in society at large, day-by-day we develop various efforts to build confidence among people.

We will continue to fulfill our economic and social mission, without relent.

The corporate philosophy

Confidence-based Management

Confidence of society

We aim to acquire the confidence of society by contributing to the realization of an affluent and culturally rich society and fulfilling our social responsibilities through our "high-quality special steel manufacturing."

Confidence of customers

We aim to earn the confidence of customers by rapidly ascertaining exactly what their needs are and providing them with high-quality special steel products.

Confidence among people

We aim to build the confidence among people by deepening communication with all of our stakeholders and acting autonomously in conformity with social norms.



Since our foundation in 1933, the Sanyo Special Steel Group (the “Group”) has helped develop a prosperous community and realize a society that recycles its resources by producing high-quality special steel using electric arc furnace steel-making, which is a method that uses scrap iron as the main raw material.

We believe that building up confidence among all our stakeholders is a value that the Group should protect moving forward; it is something that we aim to achieve by promoting sincere, fair, and transparent corporate management through our philosophy of “Confidence-based Management,” which aims to establish the “Confidence of Society,” “Confidence of Customers,” and “Confidence Among People.”

In recognition of this, the idea of “pursuing sustainable growth by globalizing the Sanyo Brand” is

highlighted in “Sanyo Global Action 2019” (our 10th Medium-Term Business Plan that is currently being implemented), and the Group is aiming to achieve sustainable growth in human resources, technology, and profitability through key initiatives based on the three basic policies of (i) establishing a robust corporate structure by strengthening our business foundations, including “Sanyo Factory Renovation”; (ii) aiming for further technological advancements by strengthening R&D and quality competitiveness; and (iii) promoting “Sanyo Special Steel - the Confident Choice” as a global brand.

We strengthened our business foundations and enhanced our technological advancements through initiatives conducted in FY2018. Specifically, we carried out work to relieve bottlenecks in Main Bar Mill as scheduled in a bid to future-proof the production structure in response to changes in the demand structure, such as the shift towards demand for smaller diameter and smaller lots, etc., and we also developed the “Sanyo Ultra Refining Process” (which is a process with an additional progress in our efforts to produce ultra-high cleanliness steel) and “QCM64-HARMOTEX®” (a steel that combines the extremely high levels of hardness and the superior toughness).

Overseas, we have created stable business foundations to achieve sustainable growth and increase corporate value in the medium-to-long term by making Mahindra Sanyo Special Steel Pvt. Ltd. in India (previously an equity affiliate) a consolidated subsidiary of Sanyo Special Steel in June 2018 and by also making Sanyo Special Steel a subsidiary of Nippon

In an environment of significant change in the social and industrial structure, we will implement the corporate philosophy that we have maintained to date of “Confidence-based Management” to ensure that we not only achieve sustainable growth but also contribute to the realization of a sustainable society.

Steel in March 2019, while at the same time converting Ovako AB of Sweden, a leading manufacturer of special steel in Europe, into a wholly-owned subsidiary of Sanyo Special Steel; and, in conjunction with this, we have developed a framework that will allow us to respond to the global expansion of both domestic and overseas customers and the need for high-quality special steel products by building integrated special steel manufacturing bases in Japan, Europe, and India.

In addition, we have made employee health and safety a top priority in our business activities, creating a workplace that promotes the mental and physical well-being of employees and enables them to work with enthusiasm. In recognition of this, in February 2019 Sanyo Special Steel was granted certification under the Ministry of Economy, Trade and Industry & Nippon Kenko Kaigi’s “Health and Productivity Management Organization Recognition Program” as an outstanding management company in the field of employee health (commonly known as the “White 500” large enterprise category).

The business environment surrounding the Group is facing major social and industrial structural changes, including the CASE (Connected, Autonomous, Shared, Electrified) revolution in the automotive sector. Furthermore, there has been a rapid spread in the idea of focusing on SDGs (Sustainable Development Goals) and ESG (Environment, Society, and Governance) set out by the United Nations as universal goals for the whole international community, with companies being required to contribute to a sustainable society and

achieve sustainable growth.

In addition to the major structural changes facing the business environment surrounding the Group, the current global economy is in a difficult situation as it experiences an economic slowdown due to increasing uncertainty caused by trade issues, geopolitical factors, and other reasons. However, we believe that in the medium-to-long term, the global economy will gradually expand and there will be a further increase in the demand for high quality, reliable special steel products. Moreover, despite numerous major changes in the environment in the past, the Group has always worked hard to accumulate the latest technology in any given era, allowing us to build trust in the brand “Sanyo Special Steel - the Confident Choice.”

The Group will continue to build up confidence among all its stakeholders through the practice of “Confidence-based Management” as we aim not only to achieve sustainable growth in our own operations in a rapidly changing business environment but also to continue to contribute to the realization of a sustainable society.

We hope that this report will provide an insight into the activities of the Group, and we look forward to your continued support and assistance.

樋口真哉

“Steel You Can Count On” technologies that thrive in a variety of fields

Sanyo Special Steel’s “Steel You Can Count On” is incorporated and used in a variety of industrial products, including automobiles, railroads, construction machines, electronics products, and information communication devices. Sanyo Special Steel provides materials that offer high functionality and quality to support development of industry and society.

Wind power generation equipment

- Bearings: Bearing Steel
- Bolts, Gears, etc.: Engineering Steel

Formed & Fabricated Materials

Electrical Cables

- High alloy cables: High-strength low thermal expansion alloy for high voltage (transmission lines)
- High Alloy Steel Wires

Construction machineries

- Gears, Shafts, Cylinders, Sprockets, Swing gears, etc.: Engineering Steel

Formed & Fabricated Materials

Formed & Fabricated Materials

Shinkansen bullet train

- Bearings: Bearing Steel

Formed & Fabricated Materials

Factories, Plants, Power Stations

- Dies for forging press, Dies for high-quality plastics, Casting dies, Rolls, Tolls, etc.: Tool Steel

- Cutting tools, Dies, Injection molding machine(ex. screw), etc.: Powder Metallurgy high-speed steel

- Extra-high-anticorrosion pipes, Chemical plant piping, Pipes for heat exchanges, etc.: High Alloy Steel

- Bearings, Linear Motion Bearings, Ball Screws, etc.: Bearing Steel

- Engineering Steel

- Tubes for refuse incineration and power generation and power generation boilers, Tubes for waste heat recovery, Chemical plant piping: Stainless Steel

- Heat-resistant thermal spray powder for boiler pipes, Metal powders for 3D printing: Metal powders

Aerospace

- Driving parts, etc.: Bearing Steel

- Engineering Steel

- Stainless Steel

- Metal powders for 3D printing: Metal powders

PCs

- Motor shafts for OA equipment, Sleeves, etc.: Stainless Steel

- HDDs: Powder Metallurgy products

Mobile Phone, Smartphone

- Electro-magnetic wave absorber: Metal powders

Electrical Appliances

- Magnetic head for HDD recorders, etc.: Powder Metallurgy products

Automobiles

- Transmission gears, Shafts, Engine parts, Connecting rods, etc.: Engineering Steel

- Bearings, etc.: Bearing Steel

- Intake/exhaust valves, etc.: Heat resistant steel

- EGR cooler, Shot peening: Metal powders

Roads

- Base course materials, Asphalt aggregates, etc.: Electric arc furnace slag

Robots

- Driving parts, etc.: Bearing Steel

- Engineering Steel

Industrial Machineries

- Spindles, Turrets, etc.: Engineering Steel

Buildings

- Bolts: Engineering Steel
- Seismic isolation systems: Bearing Steel

Medical Fields

- Parts for dental treatment devices (hand pieces): Stainless Steel

Ships

- Shafts, Bolts, etc.: Engineering Steel
- Propeller shafts, etc.: Stainless Steel
- Engine valves: Heat resistant steel
- High Alloy Steel

Iron scrap



Recycle



The Group of Sanyo Special Steel's Products

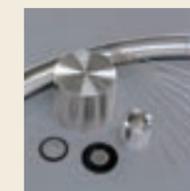
- Bearing Steel
- Engineering Steel
- Tool Steel
- Stainless Steel
- Heat resistant steel
- High Alloy Steel



- Rolled bars
- Tubes
- Forged bars



Metal powders



Powder Metallurgy products



Formed & Fabricated Materials



Electric arc furnace slag

At Sanyo Special Steel, we use electric arc furnace steel-making (which uses iron scrap as a main raw material) to manufacture special steel, contributing to the recycling and effective use of iron resources. Compared to blast furnace steel-making, which makes steel from iron ore, the electric arc furnace method has the advantage of lower CO₂ emissions and lower energy consumption. Approximately 95% of the raw materials used by Sanyo Special Steel are recycled materials such as scrap iron (including materials recycled in-house)

Financial Highlights

FY2018 Overview & Forthcoming Initiatives

During the fiscal year under review (April 1, 2018 to March 31, 2019), there was a moderate recovery in the Japanese economy due to a recovery in personal consumption and an increase in capital investment. Nevertheless, the future remains unclear. While the Japanese economy is expected to continue to enjoy moderate recovery on the back of improving employment and income conditions despite some weaknesses, there are still uncertainties in the global economy stemming from concerns over policy trends in the United States and a downturn in emerging countries including China, among other factors. In the special steel industry, the second half of the year saw the start of an adjustment phase for some industrial machinery such as machine tools, robots, and semiconductor manufacturing equipment as a slump in capital investment took effect; however, production volumes of special hot-rolled steels held firm thanks to on-going, strong demand from the automotive and construction machinery sectors.

In these circumstances, Group sales for the fiscal year increased by 28,332 million yen to 185,818 million yen. This was driven by an increase in sales prices due to the application of a scrap iron surcharge system and an increase in base prices due to the rise in the cost of raw materials and fuel, as well as the consolidation of the Indian equity affiliate Mahindra Sanyo Special Steel Pvt. Ltd. (hereinafter "MSSS") as a subsidiary company of the Group.

In terms of profits, while certain factors such as a rise in sales prices and a reduction in variable costs increased revenue, other factors meant that ordinary income fell to 9,437 million yen (down 1,221 million yen year-on-year) and ROS (return on sales - ordinary income as a percentage of sales) fell to 5.1% (compared with 6.8% the previous year); these "other factors" included the rising cost of raw materials and fuel, the acquisition cost recorded for Ovako shares (Note 1), and the amortization recorded for goodwill associated with the consolidation of MSSS as a subsidiary of the Group.

Net income attributable to owners of the parent increased to 7,721 million yen (up 687 million yen year-on-year) due to the recording of marginal gains pertaining to the staged acquisition of MSSS as a consolidated subsidiary.

An extraordinary general shareholders' meeting of Sanyo Special Steel held on February 28, 2019, passed a resolution on a share subscription agreement for a third-party allotment to Nippon Steel Corporation ("Nippon Steel"; a company that changed its name from Nippon Steel and Sumitomo Metal Corporation on April 1, 2019) in connection with the "Agreement on Subsidiary Conversions (Note 2)" concluded on August 2, 2018, with Nippon Steel. On March 28, 2019, Sanyo Special Steel executed the third-party allotment and became a subsidiary of Nippon Steel. At the same time, we acquired all Ovako shares from Nippon Steel and Ovako became a wholly-owned subsidiary of Sanyo Special Steel.

(Note 1) Shares of Triako Holdco AB, the parent company with full control of Ovako AB, a special steel manufacturer with its head office based in Sweden.

(Note 2) The conversion of Sanyo Special Steel to a subsidiary of Nippon Steel and the simultaneous acquisition by Sanyo Special Steel of all Ovako shares from Nippon Steel.

While there are expectations that the modest recovery of Japan's economy will continue, uncertainty in the global economy is increasing due to trade issues and other factors. Moreover, with international competition in the special steel industry escalating and prices for raw materials rising, uncertain conditions that do not allow for optimism are expected to continue in the business environment surrounding the Group.

In such circumstances, despite a tough business environment with stiff competition and increasing costs for raw materials and energy, etc., we aim to achieve sustainable growth in human resources, technology, and profitability by strengthening our business foundations through the implementation of "factory renovations," etc., seeking further technological advances, and promoting the global brand "Sanyo Special Steel - the Confident Choice" under our corporate philosophy of "Confidence-based Management" as stated in the 10th Medium-Term Business Plan "Sanyo Global Action 2019."

Furthermore, in cooperation with Nippon Steel and Ovako, we will maximize the potential of Sanyo Special Steel and our group companies to achieve synergistic effects as soon as possible.

Profit Distribution Policy and Dividends

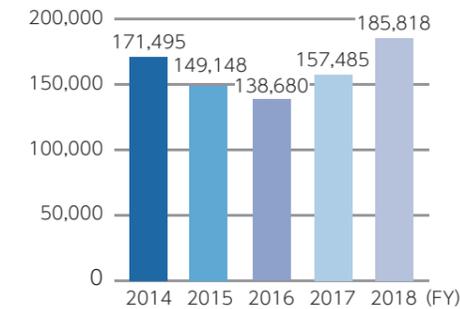
Our basic policy on profit distribution is to reward our shareholders by increasing the profits available for distribution while strengthening our business foundation. Concerning dividend payment, we intend to meet our shareholders' expectations, primarily by distributing profits based on periodic business performance, while giving due consideration to both the payout ratio and the amount of funds required for investment and other activities to enhance our corporate value. Dividends from surplus are based on a consolidated payout ratio of 25-30% and are paid at the end of the 2nd quarter and the end of fiscal year according to our profit distribution standard based on our consolidated business performance.

With net income attributable to owners of the parent at 7,721 million yen (equating to net earnings per share of 237.75 yen), the dividend per share for the full fiscal year under review was 69 yen (based on a pay-out ratio of 29.0%), which was paid as an interim dividend of 45 yen per share and a final dividend of 24 yen per share.

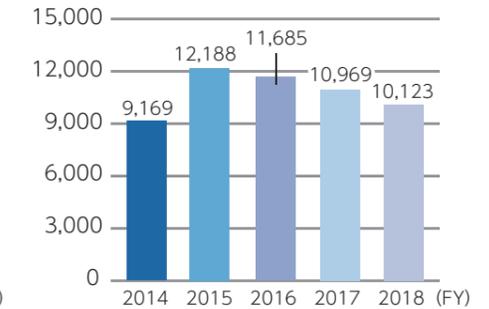
Consolidated Results

Business performance

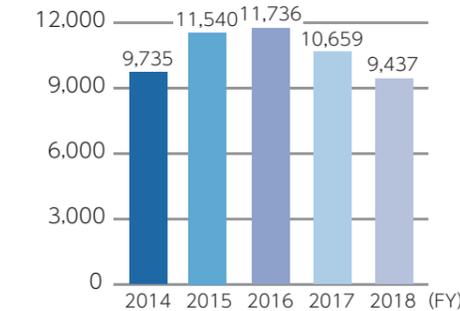
Net Sales
(Millions of Yen)



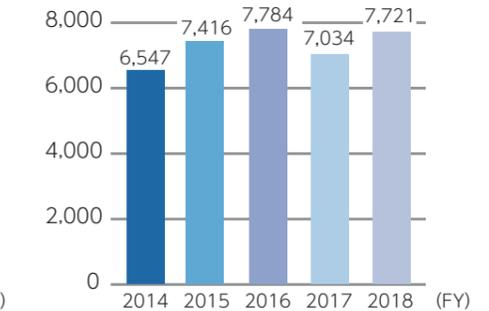
Operating income
(Millions of Yen)



Ordinary Income
(Millions of Yen)

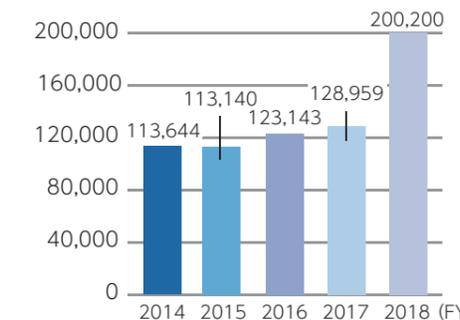


Net income
(Millions of Yen)

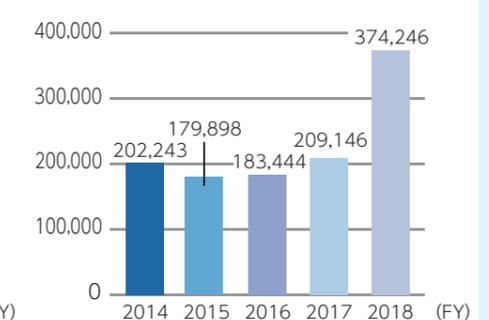


Financial condition

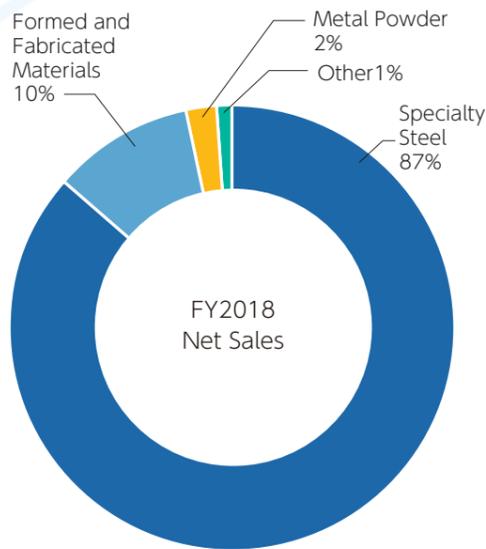
Net assets
(Millions of Yen)



Total assets
(Millions of Yen)



Segment Data

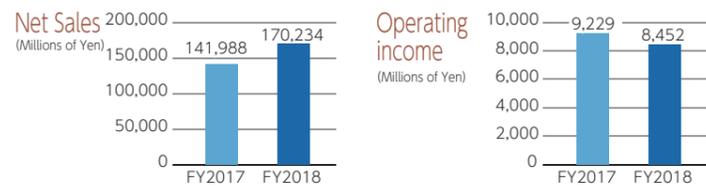


	Net Sales	Operating income
Specialty Steel	170,234*	8,452
Metal Powder	4,897*	683
Formed and Fabricated Materials	19,983*	879
Other	1,641	42
Adjustments	▲10,938	65
Total	185,818	10,123

* Net sales include internal sales and transfers conducted between segments

◆Special Steel

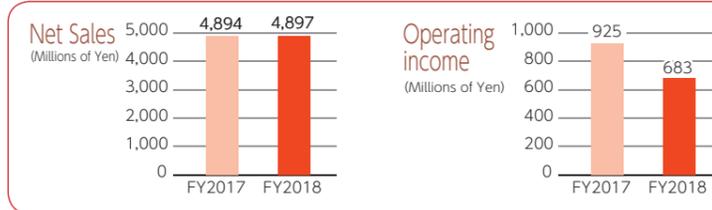
In the Specialty Steel business, we manufacture and sell various special steel products including bearing steel, which boasts a top share in total domestic production, as well as engineering steel, stainless steel, heat resistant steel, and tool steel. Net sales for FY2018 were 170,234 million yen (up 28,245 million yen year-on-year) due mainly to the effect of the rise in sales prices and the consolidation of MSSS as a subsidiary. Operating income fell to 8,452 million yen (down 777 million yen year-on-year) due, among other factors, to the rising cost of raw materials and fuel, and the amortization recorded for goodwill associated with the consolidation of MSSS as a subsidiary of the Group; this was despite positive profit drivers such as a rise in sales prices and a reduction in variable costs.



◆Metal Powder

In Metal Powder, we manufacture and sell high-purity metal powders with low impurities levels and powder metallurgy products made using our own proprietary powder consolidation technologies. We not only provide alloy design that meets the needs of our customers, but are also able to support everything from mass production to small lots for research and development. We provide high functionality materials required in a variety of situations-from the forefront of research and development to manufacturing sites.

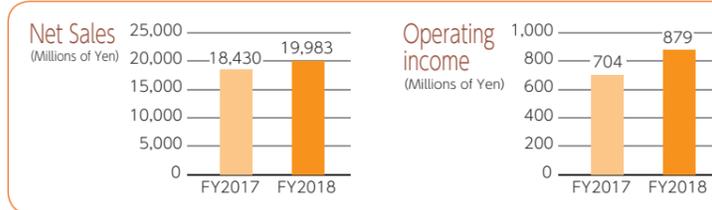
Net sales for FY2018 increased by 2 million yen year-on-year to 4,897 million yen, mainly due to an increase in the volume of sales for the automotive and industrial machinery sectors, and a rise in sales prices; this was despite a fall in the volume of sales for the electronic materials sector. Operating income fell by 242 million yen year-on-year to 683 million yen due to a fall in the volume of sales for the electronic materials sector and a rise in the cost of raw materials.



◆Formed & Fabricated Materials

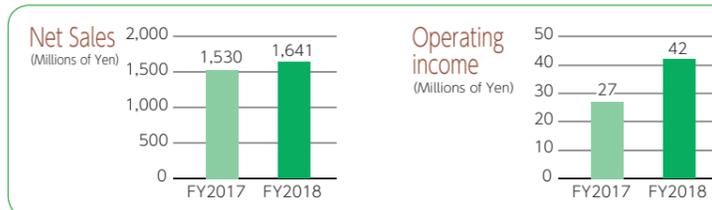
Formed & Fabricated Materials use an integrated process to manufacture high-quality formed and fabricated materials from "steel you can count on," which is produced using our advanced clean steel technology. Our formed and fabricated materials include cut rings produced by cutting special steel tubes with high precision, forged rings/forged products/rolled products made from steel bars, and cold roll formed rings made from ring materials.

Net sales for FY2018 increased by 1,553 million yen year-on-year to 19,983 million yen, mainly due to increases in sales volumes and rises in sales prices. Operating income increased by 175 million yen year-on-year to 879 million yen, mainly due to an increase in sales volumes at our Chinese subsidiary; this was despite start-up costs for the subsidiary in Mexico.



◆Others

This segment includes information processing services conducted through subsidiaries. Net sales for FY2018 increased by 111 million yen year-on-year to 1,641 million yen, while operating income was up 15 million yen year-on-year to 42 million yen.



Strategy of the 10th Medium-Term Business Plan

Based on our management principle of "Confidence-based Management," we will firmly establish a strong corporate structure that will enable us to secure stable earnings by executing "Sanyo Factory Renovation" and strengthening our business foundation. In addition, we aim to further pursue technological superiority and to promote "Sanyo Special Steel - the Confident Choice" to a global brand, with the aim of achieving sustainable growth (human resources, technologies, and profitability) even in a challenging environment of intensifying global competition in the special steel industry, and rising raw material and energy prices.



Priority Measures

Establish a strong corporate structure by strengthening the business foundation

(1) Strengthen competitiveness by executing "Sanyo Factory Renovation"

- Eliminate bottlenecks at No. 2 Bar Mill, etc.
- Streamline factory logistics and directly link production processes
- Promote automation and improve efficiency through AI and IoT, etc.

Strengthen cost & delivery competitiveness

(2) Secure stable earnings

i) Steel Products business

- Absorb the material/energy price hike through cost reductions and sales price increase
- Capture the growing overseas demand for special steel
- Improve the sales mix

Achieve stable earnings

ii) Non-steel Products business

- Establish investment decided in 9th medium-term and capture growth market
 - Formed and Fabricated Materials: Local subsidiaries in Thailand(SSSP) and Mexico(SMM)
 - Special Materials: No.2 Metal Powder Plant
- Non-Steel Products business sales: 1.5-fold growth vs. FY2016

Improve stability of earnings through expansion

(3) Enhance the management foundation

i) Promote agile, transparent management

- Firmly establish the executive officer system(June 2017 onwards)
- Continuously focus on safety initiatives, disaster prevention, environmental conservation and compliance structure

ii) Secure and train human resources

- Strengthen the regular recruitment program for internationalization and transfer of expertise (2.7-fold increase from the 9th medium-term period)
- Improve re-hiring scheme and continue to promote diversity management including support for women in the workplace, etc.
- Implement work style reforms to achieve work-life balance

iii) Enhance shareholder return

- Set 25% as the lower limit for the consolidated dividend payout ratio (currently 20%)
- Aim for a consolidated dividend payout ratio of 30% in FY2019

Further pursue technological superiority by enhancing R&D and quality competitiveness

(1) Enhance quality competitiveness, mainly for bearing steel

- Maintain Sanyo Special Steel' s internal quality superiority based on its core "Premium Cleanliness Steel Manufacturing Technology"
- Develop external appearance quality through process improvements and a higher level of quality assurance

Aim to become "No. 1 globally in internal quality and external appearance quality"

(2) Promote R&D

- R&D spending 1.1-fold increase from 9th medium term (4.6 → 5.0 billion yen)
- Clarify functions of basic research and product development
- Strengthen medium- and long-term R&D planning functions

Create products with high reliability and new technology rapidly and continually

Promote "Sanyo Special Steel-the Confident Choice" to a global brand

(1) Promote global branding measures

Enhance the source of our brand power (QCDD* power)

- Strengthen the roles of our overseas bases
- Establish a 6-center structure worldwide for the Formed and Fabricated Materials business
- Build a global supply chain

Global branding

* Quality (Quality), Cost (cost) , Delivery (delivery on time) Development (R&D)

(2) Promote initiatives aimed at further improvements in recognition

- Strengthen the technical planning function and accelerate technical exchanges with customers
- Enhance communication of information in Japan and overseas ... Actively expand PR and IR activities, etc.

Worldwide brand penetration

Investments

Planning for 50 billion yen in 3 years (x1.4 compared to 9th Medium-Term)

- Strategic investment 25 billion yen/3 years ... "Sanyo Factory Renovation" , M&A, etc.
- General investment 25 billion yen/3 years ... Investment in cost reductions such as energy savings, labor savings, quality, updating of aging facilities, etc.

Features

Sanyo Global Action - Expanding Sanyo Special Steel Worldwide

The global steel market is facing social and industrial structural changes, including a declining population in Japan, a move towards global protectionism, an increasing trend for customers to procure materials locally as they expand globally, the CASE (Connected, Autonomous, Shared, Electrified) revolution in the automotive industry, an increase in the use of renewable energy, and the use of robots in manufacturing and service industries.

Given these circumstances, we expect to see strong growth in the future for special steel products, which are used as materials for key components in industry; and along with this, we believe there will be further increases in the need for special steel products of high quality. Meanwhile, as domestic and international competition intensifies in the special steel market, we need to enhance our competitiveness in terms of technology, product development, and cost.

We have been promoting "Sanyo Special Steel - the Confident Choice" as a global brand under our corporate philosophy of "Confidence-based Management" as stated in the 10th Medium-Term Business Plan "Sanyo Global Action 2019."

We have been building integrated bases for the manufacture of special steel in Japan, Europe, and India with the consolidation of the Indian special steel manufacturer Mahindra Sanyo Special Steel Pvt. Ltd. (previously an equity affiliate) as a subsidiary of Sanyo Special Steel in June 2018. In addition to this, Sanyo Special Steel became a subsidiary of Nippon Steel in March 2019 and, at the same time, Ovako AB of Sweden, a leading manufacturer of special steel Europe, became a wholly-owned subsidiary of Sanyo Special Steel. In Formed and Fabricated Materials, we have also added a six-country network to provide a framework to enhance our ability to respond to the global developments and increasingly sophisticated/diverse needs our customers, both within Japan and overseas.

Expanding our global network in the growing, Indian market

With the demand for special steel in India set to expand significantly from the current estimated 4 million tons per year to around 10 million tons per year by 2030, we expect to see a further increase in our customers' (including Japanese companies) need for local procurement and requirement for quality products.

So far, Sanyo Special Steel has been providing technical support to MSSS to improve quality, reduce costs, and increase productivity, etc. However, moving forward we intend to go beyond technical support and provide a boost to the company across the board in areas such as production, quality, and sales in order to expand our global network in the growing Indian market and further promote "Sanyo Special Steel - the Confident Choice" as a global brand.



Sanyo Special Steel global business sites



Seeking synergies through cooperation between the three companies

As a member of the Nippon Steel Group, Sanyo Special Steel is not only building stable business foundations for sustainable growth, but we have also secured a firm foothold in Europe, one of the world's leading markets, through the acquisition of Ovako as a wholly-owned subsidiary.

Moving forward, we will seek synergies in a three-company partnership, including the integration of leading, world-class technology in the manufacture of advanced clean steel with Ovako and the reciprocal use of sales, distribution, and logistics networks; and in so doing, we aim to further enhance our competitiveness in the global market and improve corporate value.



- Construction of optimal production systems for each geographical region
- Sharing operating know-how
- Reciprocal use of overseas production sites' logistics networks

- Reciprocal use of sales/distribution networks
- Enhanced ability to provide proposals through joint R&D

- Improve efficiencies in the transport of raw materials
- Centralized purchasing

Development of Sanyo Ultra Refining Process (SURP)

We have developed the Sanyo Ultra Refining Process (SURP), marking additional progress in Sanyo New Refining Process (SNRP).

SNRP is a process that allows the mass production of high-quality ultra-high-cleanliness steel. It not only reduces the volume of inclusions, it also controls (reduces) the size of large inclusions.

We found new ways to reduce the frequency of large inclusions by means of controlling their composition (type, quantity, and fraction of their trace components).

We have developed SURP, helping to reduce the frequency of large non-metallic inclusions by adding to the inclusion control technology of SNRP.

We expect that applying this technology to bearings and other rotating parts for high-speed rail train components, wind turbines, and industrial equipment, which involve heavy loads that require stable operation in extreme, severe lubrication environments enables to respond to needs for higher reliability and maintenance-free operation.

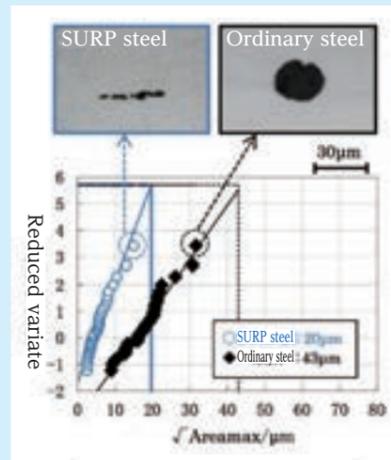


Fig.Example of extreme value statistical result of hardening steel

We developed QCM64-HARMOTEX®, a steel that combines the high hardness of 64 HRC

Class and superior toughness, to meet the demand for cold-work tool steel with higher performance properties.

We discovered the optimum alloy composition to control crystallization in coarse carbides by using outstanding precipitated carbides control technology, therefore we realized the high hardness and superior toughness.

Features of QCM64-HARMOTEX®

1) High hardness and superior toughness that are far excellent than the JIS SKD11

→Contributing to improve the service life of cold-work tools and the quality of finished products

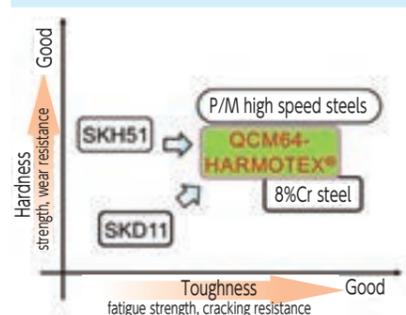
2) Outstanding performance under the heat treatment conditions as general purpose cold-work tool steel

→Contributing to save on the manufacturing costs for cold-work tools

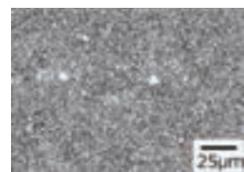
*1 HRC ...It is a unit that expresses the hardness of steel on the Rockwell hardness scale. The hardness of annealed material is typically around 20 HRC.

*2 High-speed Steel ...It is a grade of steel that was originally made for tools used to cut steel— a grade that exhibits a high level of hardness and outstanding wear resistance.

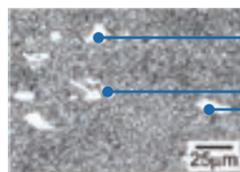
Even equal high hardness of high-speed steel and superior toughness
Helps to improve productivity and quality of finished goods and reduce die costs



Micro-structure Comparison



QCM64-HARMOTEX



JIS SKD11

Coarse

Certified as an outstanding management company in the field of employee health for 2019 (large enterprise category)

In February 2019, Sanyo Special Steel was selected by the Ministry of Economy, Trade and Industry and Nippon Kenko Kaigi for certification as “an outstanding management company in the field of employee health for 2019 (large enterprise category).”

We were assessed as having made employee health and safety a top priority in our business activities and promoting a workplace that ensures the mental and physical well-being of employees and enables them to work in an energetic manner.

Moving forward, Sanyo Special Steel will continue to promote the creation of safe and healthy workplaces, contributing to the realization of a prosperous society and aiming to be a company that inspires yet more confidence.



Receipt of the “Award for Corporations Actively Promoting Women” from Himeji City



In March 2019, Sanyo Special Steel was selected as one of the corporations in Himeji City actively engaged in promoting women through training and job promotions for female employees, improvements in the work environment, and similar initiatives, and we received an award from the Mayor of Himeji.

In 2007, we started initiatives to support the active participation of women, and the company has encouraged the creation of work-friendly environments by developing programs, implementing training schemes, and similar initiatives.

Moving forward, Sanyo Special Steel intends to continue to support the active participation of women and provide a company where both men and women can work with enthusiasm.

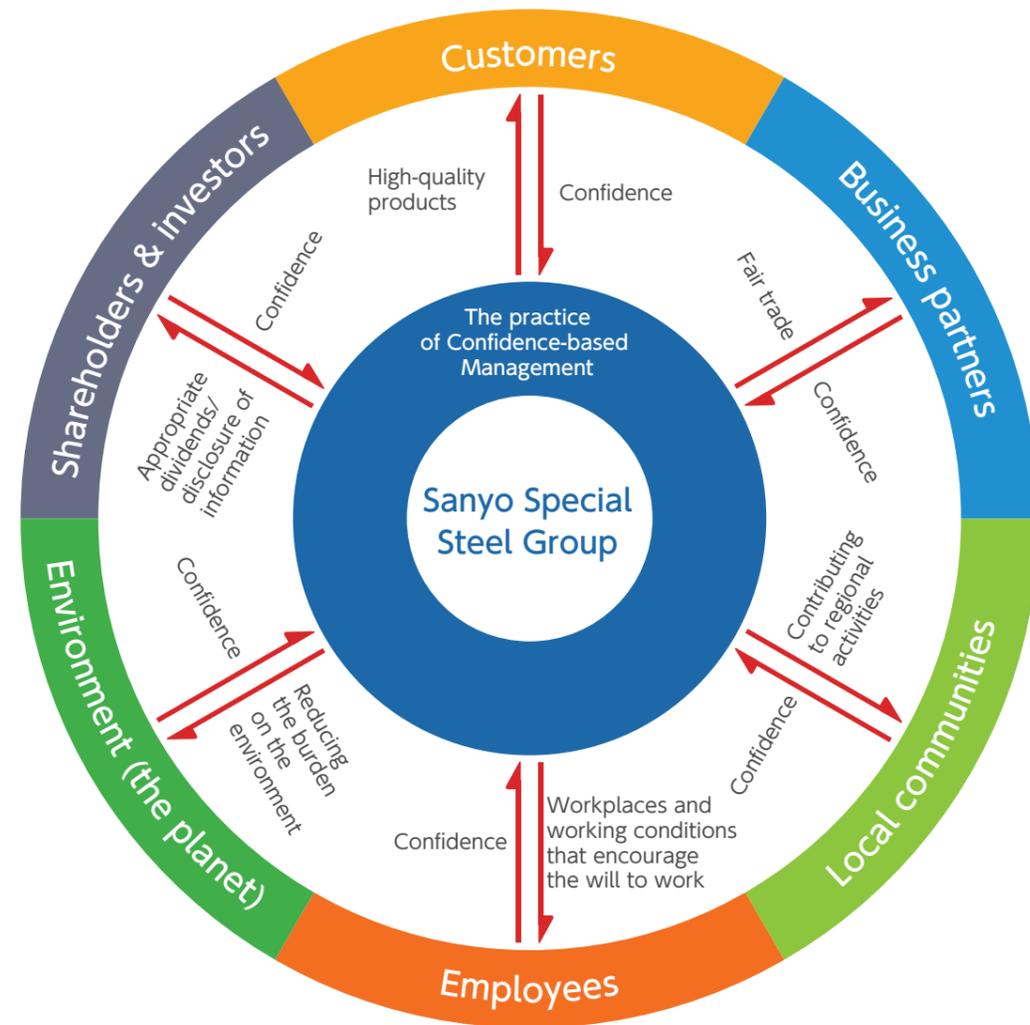
We have implemented training for female employees to promote active participation by women.



* Training to support active participation of women in technical job roles

CSR-conscious management - the aim of the Sanyo Special Steel Group

CSR-conscious management is the aim of the Sanyo Special Steel Group, and its purpose is to realize sustainable growth and contribute to a sustainable society by building relationships of trust with all stakeholders through the practice of "Confidence-based Management," our corporate philosophy. The practice of "Confidence-based Management" can be rephrased as "being a completely honest company." Companies are members of society and they cannot develop without confidence from their stakeholders. The Sanyo Special Steel Group contributes to the realization of a sustainable society by honestly and frankly practicing "Confidence-based Management."



Sustainable growth of Sanyo Special Steel

Realization of a sustainable society

FY2018 CSR Management Initiatives

Stakeholder	Missions to be fulfilled	Results of key CSR activities in FY2018
Customers	<ul style="list-style-type: none"> Stable supply of high-quality products Sustainable efforts to improve quality Promotion of technology and research on steel 	<ul style="list-style-type: none"> Presentations at expositions in Japan and overseas Development of a process for manufacturing ultra-high-cleanliness steel (SURP - Sanyo Ultra Refining Process) Receipt of the Technical Development Award from the Japan Institute of Metals and Materials for the development steel "QDX-HARMOTEX." Development of "QCM64-HARMOTEX" cold-work tool steel
Business partners	<ul style="list-style-type: none"> Fair and equitable trading Sustainable procurement activities 	<ul style="list-style-type: none"> Implementation of a supplier award
Shareholders & investors	<ul style="list-style-type: none"> Appropriate disclosure of financial information Communication with shareholders and investors Promotion of prompt and transparent management 	<ul style="list-style-type: none"> Issue of annual report Video of financial results briefing distributed on Web page Plant tours for individual shareholders
Local communities	<ul style="list-style-type: none"> Regional revitalization both in Japan and overseas Support activities for volunteer/cultural promotions 	<ul style="list-style-type: none"> Cultural lectures One day track & field sessions Plant tours held for elementary school pupils Clean up activities in the area around the head office plant
Employees	<ul style="list-style-type: none"> Development of work-friendly environments Training for international personnel Eradication of occupational accidents Improvement of disaster prevention awareness 	<ul style="list-style-type: none"> Implementation of "no overtime days" Language training for new employees in the US Enhancements to the safety experience center Implementation of disaster prevention drills
Environment (the planet)	<ul style="list-style-type: none"> Development of environmentally friendly products and technologies Efforts towards environmental preservation 	<ul style="list-style-type: none"> Switch to LED lighting Use of inverters in on-site water supply pumps Use of brick waste as heat-resistance raw material Updating large fans with high-efficiency fans

Sanyo Special Steel and SDGs

The relationship between our Group's key business activities and the SDGs

In the global economy, people, goods, and capital shift on a global scale and one country's economic crisis is instantly linked to another; similarly, in this age, global issues such as climate change and natural disasters also have global repercussions and severe impact. Given this situation, the 2030 Agenda for Sustainable Development was adopted by the UN in September 2015 with universal objectives for the entire international community to work towards—both developed and developing countries alike. In the 2030 Agenda, 17 goals and 169 targets were listed as Sustainable Development Goals (SDGs). The relationship between our Group's key business activities and the SDGs is as follows.

SDGs Goals	Group Activities
	<ul style="list-style-type: none"> Development and stable supply of highly-functional special steel products
	<ul style="list-style-type: none"> Health and safety activities Development of employees' skills Welfare scheme
	<ul style="list-style-type: none"> Support for the active participation of women
	<ul style="list-style-type: none"> Utilization of scrap raw material Recycling of by-products
	<ul style="list-style-type: none"> Promotion of energy saving Reductions in CO₂ emissions Modal shift Increase the ratio of transportation made by ship
	<ul style="list-style-type: none"> Prevention of water pollution Re-use of waste water
	<ul style="list-style-type: none"> Reductions in the emission of air pollutants Development of green spaces within factory sites Chemical substance controls

Stakeholder Confidence

Our Group contributes to the creation of a sustainable society by ensuring that each and every employee is always aware of "coexisting with society" and fulfills his/her responsibilities as a member of society. Moving forward, the Group will also practice its corporate philosophy of "Confidence-based Management" as we aim to inspire yet more confidence in all our stakeholders. Here we show some results from our activities in FY2018.

2018

	Apr.	May	Jun.	Jul.	Aug.	Sep.
Initiatives for shareholders, suppliers and customers	<ul style="list-style-type: none"> Announcement of financial results for FY2017 and press conference Exhibits presented at Indian tool steel exhibition "Die & Mold India International Exhibition" 	<ul style="list-style-type: none"> Financial results briefing for business partners and shareholders  <ul style="list-style-type: none"> Exhibits presented at the "5th Highly-functional Metal Exposition" 	<ul style="list-style-type: none"> General Meeting of Shareholders Ceremony for the presentation of supplier awards held 		<ul style="list-style-type: none"> Announcement of 1Q earnings results Exhibits presented at the "Taiwan International 3D Printing Show 2018" (Taipei) 	
Initiatives for global society and the environment	<ul style="list-style-type: none"> Provision of practice steel materials for Himeji Technical High School 	<ul style="list-style-type: none"> Cultural lecture organized by the Sanyo Special Steel Cultural Promotion Foundation (Lecturer: Mr. Kawaguchi, Project Manager of Hayabusa, an asteroid probe, at the Japan Aerospace Exploration Agency (JAXA)) 	<ul style="list-style-type: none"> Special lecture by Managing Director Yanagimoto at Waseda University under the "Special Lectures by Corporate Executives" sponsored by the Iron and Steel Institute of Japan. 	<ul style="list-style-type: none"> Acceptance of internships Blood donation event (the first of the year) Donation of wheelchairs by the labor union to our Employees Hall and other welfare facilities for senior citizens 	<ul style="list-style-type: none"> Sponsorship for women's soccer matches in the "Nadeshiko League" (Second Division) 	
Initiatives for employees			<ul style="list-style-type: none"> Disaster drills for major earthquakes 		<ul style="list-style-type: none"> Disaster drills for major earthquakes Safety lectures Collaborative industry/academia lectures  	

2019

Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
<ul style="list-style-type: none"> Announcement of 2Q earnings results 	<ul style="list-style-type: none"> Financial results briefing and plant tours for business partners and shareholders  <ul style="list-style-type: none"> Exhibits presented at the 3D printer exhibition "Formnext2018" (Germany) 	<ul style="list-style-type: none"> Exhibits presented at the "5th Highly-functional Metal Exposition" 	<ul style="list-style-type: none"> Announcement of 3Q earnings results 	<ul style="list-style-type: none"> Extraordinary Meeting of Shareholders Exhibits presented at the 3D printer exhibition TCT+Japan2019" 	<ul style="list-style-type: none"> Plant tours for individual shareholders
<ul style="list-style-type: none"> Invitation to a plant tour extended to 5th grade pupils from Himeji Municipal Tegara Elementary School 	<ul style="list-style-type: none"> Invitation to a plant tour extended to 5th grade pupils from Himeji Municipal Tsuda, Takahama, and Shikama Elementary Schools Blood donation event (the second of the year) Participation by the Athletics Club in a marathon contest at Himeji Municipal Tegara Elementary School "Presentation Ceremony for Donation Pledges" held for the book-gifting scheme for inner-city elementary schools run by the Sanyo Special Steel Cultural Promotion Foundation. Activities to beautify the local area 	<ul style="list-style-type: none"> 2019 New Year Concert organized by the Sanyo Special Steel Cultural Promotion Foundation  		<ul style="list-style-type: none"> Blood donation event (the third of the year) One-day Track & Field workshop organized by the Sanyo Special Steel Cultural Promotion Foundation 	<ul style="list-style-type: none"> Labor management seminar 
<ul style="list-style-type: none"> Creation of a corporate ethics "slogan of the month" and company-wide distribution 	<ul style="list-style-type: none"> Quality lectures  <ul style="list-style-type: none"> Creation of a quality slogan and company-wide distribution Training in Security Export Controls Company-wide competition to demonstrate skills in crane handling and slinging Disaster prevention drills at plants 	<ul style="list-style-type: none"> Compliance lectures 		<ul style="list-style-type: none"> Certified as an "outstanding management company in the field of employee health 2019" 	<ul style="list-style-type: none"> Receipt of the "Award for Corporations Actively Promoting Women" from Himeji City Plant tours for the families of new employees taking up engineering positions in FY2018  



Confidence with customers



Quality

Quality assurance is about creating a process that allows us to accurately grasp the needs of customers and provide a reliable supply of products that meet those needs, and is directly linked to our corporate philosophy of "Confidence-based Management." The Group has established a quality management system based on ISO9001:2015, and we promote quality control activities that create product quality by integrating our sales division, engineering division, production division, and quality assurance division to ensure that we satisfy product standards such as JIS and various overseas standards. Furthermore, quality assurance is not just about controlling product quality; it also about ensuring that the quality management system, which is a key part of our corporate structure, can respond to environmental changes such as globalization and changing customer needs, and also address the need to make improvements to realize a more efficient structure. The Group aims to continue to be an enterprise that enjoys sustainable growth by placing emphasis not only on product quality controls but also on maintaining and improving the quality management system, which forms the cornerstone of the Group's quality assurance system.

Quality Assurance System

The Quality Assurance Department plays a central role in the quality management system maintained and managed by Sanyo Special Steel, which forms the cornerstone of our quality assurance system. The process for product quality control is developed through collaboration between various divisions. The Sales Division gains an understanding of customer needs, the Engineering Division then reflects these requirements in the manufacturing designs, and the Production Division creates the final product based on these designs. In addition, Sanyo Special Steel continues to work to provide products that inspire ever-more confidence, using its Quality Assurance Department (an independent department responsible for all aspects of quality assurance) to provide checks and balances in a bid to optimize and enhance quality assurance functions. The Quality Assurance Committee meets regularly and is chaired by the Director in Charge of Quality Assurance. The Committee discusses basic policy and plans concerning quality assurance for the fiscal year and implements improvement activities such as "systematic improvements in key issues," "prevention of quality complaints," "enhancement of quality assurance," and "improvements in customer satisfaction levels."



Quality Assurance Initiatives



Under ISO9001:2015, individual organizations need to conduct operational risk assessments to address new requirements for "risk and opportunity initiatives." Based on issues at Sanyo Special Steel that have been identified through these assessments, we have been rolling-out a medium-to-long term PDCA (Plan-Do-Check-Act) plan in a bid to upgrade our quality assurance. Specifically, we are working to improve our quality management system by continuously updating our quality manuals, implementing quality patrols, and sharing information between organizations through internal quality audits.

In addition, we hold lectures on quality issues in November, which is National Quality Month, to promote activities aimed at raising employee awareness of quality.

Understanding and reflecting customer needs

Once a year, we survey our customers to have them assess us on QCDD (Quality, Cost, Delivery, Development). We analyze the results and extract any points with low scores for improvement, leading to even higher customer satisfaction. Furthermore, in order to understand the needs of customers in a timely manner, we hold meetings to exchange technical ideas with customers and we also take part in exhibitions, both in Japan and overseas. We not only present detailed information on the products and new technologies we have developed, but we also collect information on customers' latest needs, which is then used to develop and improve our products.



Promotion of skill transfer activities

On April 1, 2015, the Skills Transfer Group was established. This Group specializes in the transfer of technology and skills and is involved in the planned, systematic training of employees who will succeed to the relevant roles.

FY2019 is the final year of the three-year activity plan established in FY2017, and we have been making steady progress toward achieving the plan's activity targets through on-going initiatives that include one-on-one training (pairing up employees imparting the skills with those learning them), the creation of training materials, and the enhancement of award programs to improve motivation.

In addition, as of this fiscal year, we have not only been investigating (and planning countermeasures for) the causes of suspensions in production and equipment stoppages from the perspective of skill transfers, but we have also started activities to track the overall progress of measures to prevent recurrence and follow them to completion; and, in light of this, the role played by skill transfer activities is becoming increasingly important.



Promotion of TPM (Total Productive Maintenance) activities



The entire production division is working on TPM activities with the aim of thoroughly eliminating losses and waste due to equipment breakdowns and problems, increasing production efficiency, and providing a reliable supply of products.

In terms of activities, we have not only set up the "TPM School" as a place to provide training on basic knowledge about equipment and machinery to develop human resources with a good understanding of the equipment, but we are also creating common-interest groups for individual work categories on topics such as quality improvement, productivity improvement, safety, and cost to allow us to carry out improvements every day. By the end of August this fiscal year, 97 people had attended the TPM School, with total attendance at 1,800 since the School started, to acquire the basic skills and knowledge useful for autonomous maintenance. In addition to this, the outcomes of improvement activities are

announced at in-house TPM contests held four times a year in a bid to enhance TPM activities.

Moreover, we are conducting IoT application training at the TPM School and promoting the introduction of IoT at manufacturing sites in order to further improving productivity and stabilize operations.



Procurement

The Group promotes procurement activities based on its Basic Procurement Policy, ensures compliance with laws and social norms, conducts fair and equitable transactions widely, with an open-door policy regardless of whether it be in Japan or overseas, and promotes environmentally-friendly procurement activities with our suppliers. These days we are required to contribute to the sustainability of society in various forms as part of our corporate social responsibility. The Group has identified principles for "sustainable procurement" such as accountability, transparency, respect for human rights, and ethical behavior in the procurement of raw materials and services, and these principles are reflected in our procurement decisions. In addition, we strive to maintain and improve mutual understanding and trust with our suppliers as we aim for mutual development as business partners; and through stronger partnerships, we endeavor to realize "sustainable procurement" that will contribute to the sustainability of business operations for all our suppliers.

Basic procurement policies

In our procurement activities, Sanyo Special Steel complies with all relevant laws, conducts an open-door policy across the board, regardless of whether in Japan or overseas, and conducts fair and equitable transactions as we strive to build partnerships with our suppliers. We also promote environmentally-friendly procurement activities.

1. Compliance with laws, regulations, and social norms

In addition to complying with all relevant laws and regulations, as well as social norms, and acting in good faith, we manage any information obtained in the course of a transaction in a proper manner. We will also ensure that any relationships with anti-social forces posing a threat to the order and security of civil society are not allowed to continue.

2. Fair and equitable trading

Regardless of whether in Japan or overseas, Sanyo Special Steel conducts an open-door policy across the board, providing all suppliers with the opportunity to participate and conducting transactions based on economic rationale.

3. Building partnerships

Sanyo Special Steel conducts transactions with all its suppliers on a fair and equal basis as we strive to maintain and improve mutual understanding and trust and aim for mutual development as business partners.

4. Promotion of environmentally-friendly procurement activities

In collaboration with our suppliers, we are building a system that ensures we do not purchase raw materials, other materials, or machine parts that contain hazardous chemicals.

Responsible procurement



Initiatives for the construction of a reliable procurement framework

Sanyo Special Steel factories are usually in production 24 hours a day. Consequently, with the collaboration of our suppliers, we use a 24-hour system to take delivery of scrap iron (our main raw material). We also procure the required amounts of ferro-alloys and supplementary material when needed. In anticipation of the risk of disruptions to supplies due to disasters and other factors, we try to gain an understanding of production conditions, production locations, delivery routes, and other information for our key procurement items through initiatives such as visiting our suppliers' factories. We also regularly share information on procurement items with suppliers, and we have established a sustainable production system for times of emergency by securing prompt replacements in the event of an emergency and by holding an appropriate amount of stock on our premises.

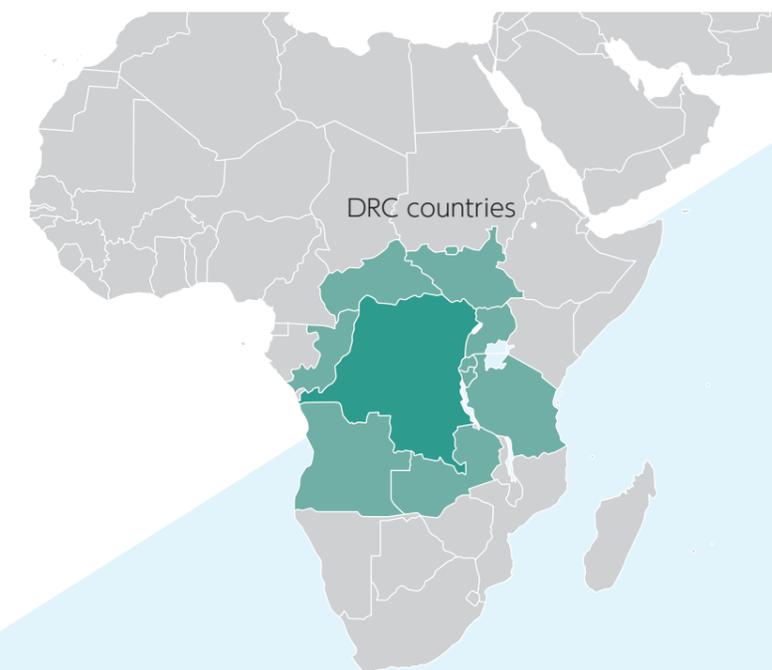
Implementation of a supplier awards (to strengthen partnerships)

Sanyo Special Steel believes that building good trading relationships with suppliers is essential for sustainable procurement and values its partnerships with suppliers. As part of this, we have set up an award scheme for suppliers. Under the supplier award scheme, we comprehensively evaluate a number of factors to select suppliers who have attained outstanding achievements and present them with an award. The scheme covers raw materials, various other materials, maintenance, and outsourcing services supplied to each division, and the factors used in evaluations include the quality, cost competitiveness, delivery deadline management, business status of the supplier, environmental measures taken, and service provided with regard to transactions carried out with Sanyo Special Steel over a fixed period of time. On June 20, 2019, we held the second "Supplier Awards Ceremony" and awards were presented to six companies that had made outstanding achievements.



Procurement of ferro-alloys considered to be "conflict minerals"

"Conflict minerals" indicate four minerals mined in the Democratic Republic of Congo (DRC) and its neighboring countries; these are tin, tantalum, tungsten, and gold, and they are referred to as 3TG (from their initials). There are concerns that some of the profits from the trade in 3TG are used as a source of funding for militia groups, contributing to human rights violations and conflict. While we purchase tantalum and tungsten needed in the manufacture of special steel, we check through our suppliers that any purchases are "DRC conflict-free" (i.e. not used to fund militia groups.) In addition, if customers ask whether our products are "DRC conflict-free," then we issue a statement declaring them to be so using the "Conflict Mineral Report Template."





To ensure sustainable growth of a company, "human resource development" and "the creation of a work-friendly environment that takes health and safety into account" are important. In order to create a work-friendly environment that takes health and safety into account, we are working to prevent occupational accidents, provide mental health care, and promote a work-life balance, among other initiatives, to develop an environment where various human resources can play an active part. In addition, and most importantly, as a manufacturing company, we are committed to creating a safe workplace.

Furthermore, the Group needs human resources who can "think autonomously," regulating themselves and thinking and acting independently. The requirements for this are self-direction and the spirit to take on a challenge. In order to realize this, under our basic policy of "developing employees and make full use of their potential," we not only offer various training in accordance with job role and career, but we have also adopted a personnel system that encourages a strong desire for self-growth and the achievement of goals in our employees and allows them to always challenge high-level problems.

Human resource development

Personnel system:

Establishing work tasks and training themes through dialog

During personnel appraisals at the company, we naturally discuss final outcomes, but in addition, we also place emphasis on questions such as "Did you set high goals and strive to achieve them?" or "Did you carry out a definitive process to achieve your goals?" in the appraisal in order to foster self-direction and the spirit to take on a challenge in our employees. Employees' work tasks and topics are established through dialogue with their line manager, which allows them to clarify goals and make efforts to improve their skills. This approach also leads to a strengthening of the relationship of trust between managers and their staff. At Sanyo Special Steel, we also support the self-realization of each individual through a self-assessment system in which individual employees can state their own aspirations regarding job and workplace options through career design talks and interviews for junior employees.

Training for international personnel

In response to the globalization of the business environment, we are accelerating our training of human resources capable of performing on the international stage. We are carrying out various initiatives, including the dispatch of young employees to overseas affiliates, systematic foreign language training for new employees, and the dispatch of selected candidates to overseas universities, graduate schools, and research institutes to study or on temporary assignment. In FY2018, we started short-term, language study programs in abroad for selected employees. In addition to efforts to improve language proficiency, we will enhance our training programs on themes for acquiring international sensitivity through experience and promote the development of international human resources.

IFY2018 training pick-up

Basic training for managers

Since FY2018, we have been conducting basic training for those in managerial positions of Group Manager/Section Manager and above on the basic financial and product knowledge that they should have. By enhancing their understanding of areas in which they have little daily involvement, we aim to develop managers with diverse values and the right judgment to support them. We believe that this type of training to expand their scope of knowledge is essential for the growth of the company, and we will continue to work on it.

Follow-up training for new employees

In order to supplement on-the-job training (OJT), we conduct off-the-job training (Off-JT) for different grades and age-groups. In 2018, we started to conduct "follow-up training for new employees." The purpose of this training is for new employees to reflect on the time that they have spent with company, since they joined to the present, and to identify their own strengths and issues through self-diagnosis tests leading to an improvement in future behavior and promoting growth among new employees and better retention rates in the workplace. Moving forward, we will continue to enhance training to raise skills in the workplace.

Creating a work-friendly environment

Active participation of women

We have set a goal to raise the ratio of female staff to 25% by the end of March 2028, utilizing them as a valuable asset. To achieve this goal, we have increased the areas where women play an active role by systematically recruiting female employees and expanding the range of their work, while introducing a system that allows women to continue working by alleviating pressure on them during life events by offering childcare leave, childcare allowances, and shorter working hours. In addition, we have been conducting in-house training to promote awareness of female employees and create an organizational culture that makes it easier for them to play active roles. In 2017 we conducted "Career Training for Women," a training program to raise awareness of career development for women aimed at female employees in non-managerial general and technical job roles, as well as a supporting program "Management Training for Line Managers" aimed at reforming the attitude of line managers with female employees.

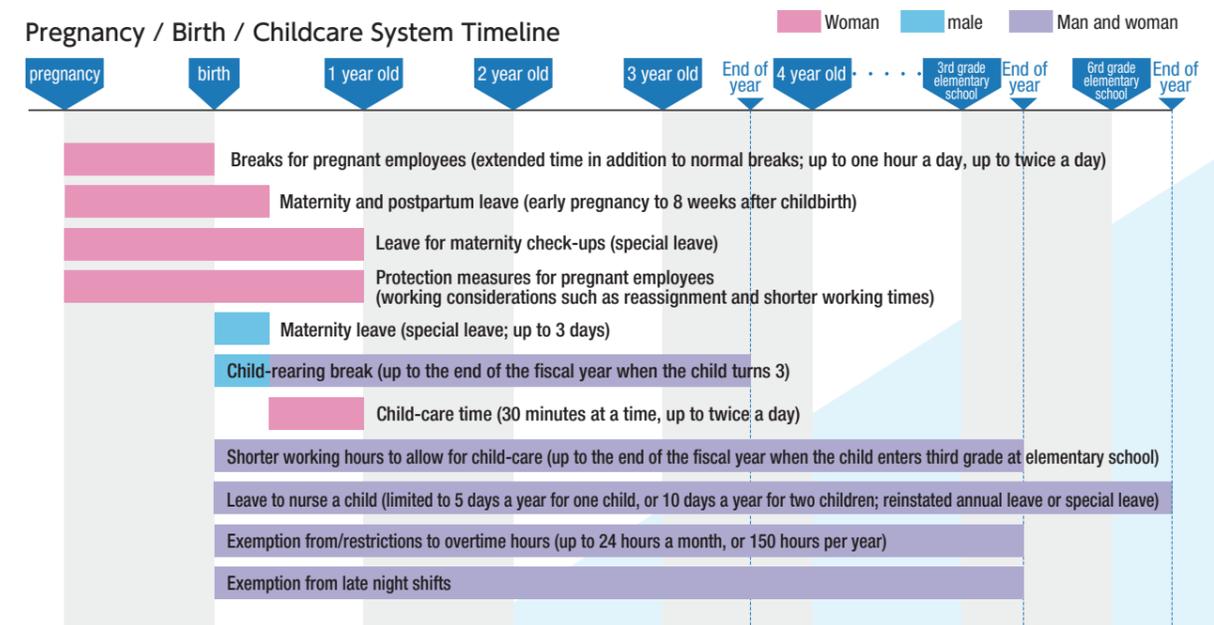


Ratio of female staff

13.9%

(As of March 31, 2019)

Pregnancy / Birth / Childcare System Timeline





Achieving a work-life balance

The "Work-Style Reform Related Bill" passed by the National Diet in 2018 has been rolled out since April 2019. "Work-style reforms" such as the prohibition of long working hours, properly managed working hours, and the obligation for employees to take a certain number of annual leave days have become increasingly important in terms of achieving a work-life balance. Sanyo Special Steel promotes Wednesdays as "no-overtime days" and promotes increased productivity in a bid to reduce overtime hours, as well as encouraging employees to improve the rate of paid leave taken. In terms of the amount of paid leave taken in particular, the figure at Sanyo Special Steel has already topped 60% (with a result of 64.5% in FY2018) compared to the national average of 51.1%; and we are working to achieve the target of "70% to be taken by 2020" as set by the Ministry of Health, Labor and Welfare. Furthermore, as well as encouraging employees to take blocks of paid leave or incremental leave and establishing a system that exceeds statutory requirements for maternity leave, childcare leave, and nursing care leave, etc., we are also striving to achieve a work-life balance for each and every employee by creating a work environment and culture that makes it easier to take this leave.

Rate of paid leave taken

64.5%
(FY2018)

Promoting health-conscious management

At Sanyo Special Steel, we view employee health management from a business point of view and invest in health initiatives based on the Industrial Safety and Health Act in order to help revitalize the organization by improving employees' energy and productivity. Mental and physical disorders among employees not only cause a fall in productivity but may also lead to an outflow of human resources as employees take leaves of absence or leave the company. Employees are provided with statutory health examinations, metabolic tests, health advice, and similar resources. Furthermore, we have been conducting on-going mandatory stress check-ups since FY2016. The results of tests on staff members are used to conduct an aggregated analysis, and we recommend that employees with high levels of stress see an occupational physician. In addition, we have a mental health help-desk, provide treatment to help employees stop smoking, and also provide dietary counseling among other initiatives. In recognition of these positive initiatives, in February 2019, Sanyo Special Steel was selected by the Ministry of Economy, Trade and Industry and Nippon Kenko Kaigi for certification as "an outstanding management company in the field of employee health for 2019 (large enterprise category)" (commonly known

as the "White 500"). Moving forward, we aim to be a company that inspires ever-more confidence as we continue to prioritize the health and safety of our employees (a major assumption of our corporate philosophy of "Confidence-based Management") and promote the creation of workplaces that improve the mental and physical health of our employees and allow them to work in an energetic manner.



Extend employment program

Sanyo Special Steel has established an extend employment program for employees who reach the age of 65. Making active use of certain older staff members who are healthy, wanting to work, and capable of performing their jobs not only means that they continue to work as a valued member of the staff and transfer skills and techniques, but is also consistent with the concept of diversity. As of April 1, 2019, there were 40 "senior citizen partners" active across various work sites.



Employment of Disabled Persons

We promote the employment of people with disabilities in a bid to achieve a society where everyone can enjoy an active working life.

We not only promote recruitment initiatives in conjunction with Hello Work (the Japanese government's Employment Service Center) and special support schools, etc., but we are also constantly making efforts to improve the work environment in both hard and soft aspects. In addition, any employee certified as disabled after joining the company is offered support to keep working, with consideration given to his/her work content and working hours.



Creating a safe workplace

As a manufacturing enterprise, our Group believes that "safety" should be afforded top priority above all. Evidence of this is the way that employees greet each other with "Keep Safe!" to impart a sense of safety in one another. In order to put our corporate philosophy of "Corporate-based Management" into practice, our goal is to achieve "no accidents at all over the year" under the Group's safety activities. We believe that we need to achieve a total absence of accidents throughout the year across the entire Group in order to build relationships of trust with various stakeholders and to achieve sustainable growth for the Group. All employees need to work together on safety activities, and if even one person is left out, then the goal cannot be achieved. There are no short-cuts in safety activities. Our objective is to achieve a whole year that is totally free of accidents by building up safety activities in the Group day-by-day to create a workplace where all employees are safe and can work with peace of mind.

2019 Comprehensive Health and Safety Management Policy

- **Basic policy** To develop a workplace culture and staff good at making changes to allow workplace standards, working methods, and the work environment to be revised.
- **Slogan** Pause before you act, and work safely with good command of your emotions and your physical state (in how you work)
- **Three safety principles** Stop, Step Back, Check Hands & Feet—then double-check that it is really safe
- **Goal** To achieve a total absence of accidents Occupation accidents "0" Accidents on the way to work "0"
- **Initiatives**
 - [1] **To gain an understanding of the actual working conditions at each worksite and review work methods, work standards, and work environments**
 - (i) Review work operations that show consistency between written work standards and work methods to discover risks and make things safer.
 - (ii) Identify and optimize any work operations that show an inconsistency between written work standards and work methods.
 - (iii) Identify work operations with no written work standards and unclear work methods and create work standards for such operations
 - (iv) Identify areas where there are problems in the work environment and where work operations cannot be performed safely in accordance with written work standards and make improvements to the work environment
 - [2] **Enhance grade-based safety training in order to create a safety-conscious organization and staff**
 - (i) Conduct safety training for "senior citizen partners"
 - (ii) Conduct safety training for staff in their 5th year of service with the company
 - (iii) Conduct safety training for those acting as team leaders
 - (iv) Provide on-going training for each level
 - [3] **Activities unique to each section to strengthen the safety culture in that section**

Occupational health and safety activities - to ensure safety -

Simulated experience training center for safety

We have established a simulated experience training center for safety that allows us to simulate dangers in a bid to eradicate occupational accidents. In 2018, 2,655 employees were trained at the center, and to date the total is 23,736. In 2018, we installed VR (virtual reality) equipment to give a more realistic experience. Moving forward, we will add new training content to allow us to consider the importance of hazard avoidance with our members of staff.

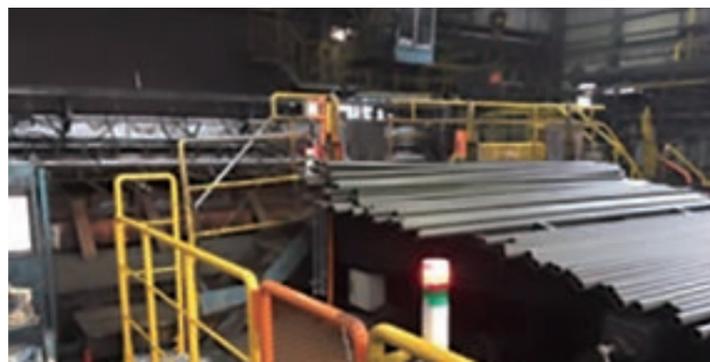
Grade-based training

Safety knowledge, risk behavior, and sensitivity to hazards, etc. vary for each age group and grade. Consequently, we need to conduct specialist training for each respective grade. In addition to the grade-based training held the year before, in 2019 we also introduced training for three more grades of employee: senior citizen partners (workers aged 65 and over), staff in their 5th year of service with the company, and those acting as team leaders.

Key initiatives to ensure safety

Measures to prevent intrusion into areas within equipment's scope of movement

In order to prevent accidental intrusion into equipment operating areas while machinery is running, we have installed safety fences, safety plug switches (that stop equipment automatically when a door is opened), door switches that confirm all is safe (that only allow the door to be unlocked once equipment has completely stopped running), and indicator lights to show if the power to equipment is "on" or "off," and we ensure that doors are locked in order to prevent disaster being caused by human error. Moving forward, will we continue to roll out these measures to other operating areas to help prevent disasters.



Disaster prevention initiatives

Risk management in emergency situations

Many employees work at our company, where we have various types of facilities and equipment. In addition to establishing a regular fire and disaster prevention management system, we take various steps to prevent accidents and stop the spread of (minimize) damage when a disaster does occur. For example, we have developed manuals in preparation for possible plant accidents such as fires or explosions and natural disasters such as earthquakes, and we hold regular disaster drills, among other measures.

The basic policy for FY2018 was "to aim to raise awareness of fire and disaster prevention measures through drills and training and create a workplace culture and staff well able to respond to disaster situations," with the following four points set as priority items.

- "Enhance fire and disaster prevention management"
- "Enhance management of facilities at high risk of fire, explosion, or leakage"
- "Improve capacity to respond to disasters through on-going training and drills for fire and disaster prevention"
- "Enhance disaster prevention measures by using specialist disaster prevention teams."

Based on these priority management items, we have been working hard to enhance and strengthen disaster prevention management systems to prepare for emergencies while, at the same time, conducting on-going activities that emphasize increased awareness of disaster prevention.

Initiatives to heighten disaster prevention and readiness awareness

To further enhance disaster prevention and readiness awareness among staff, the company holds workshops each year for fire prevention officers and disaster prevention officers as well as workshops for supervisors and officers responsible for hazardous materials. We are making efforts to improve the level of control of small and minute amounts of hazardous materials at licensed facilities by providing direct instruction to workplace managers and those responsible for handling hazardous materials and high-pressure gas.

At the workshop for fire and disaster prevention officers held in September, we provided guidance on how to prevent and respond to secondary disasters in the event of a disaster involving low concentrations of oxygen, and how to perform cardiopulmonary resuscitation and AED (Automated External Defibrillator) procedures. We also publicized the location of the on-site AED.

In addition, we worked on 3S activities in licensed facilities for hazardous materials and high-pressure gas equipment, with June and March designated as the months for improving controls in the licensed facilities, and October the designated month for improving controls on high-pressure gas equipment. In the workshop for supervisors and officers responsible for the security of hazardous materials, which was held in July, we made sure that 3S activities for facilities licensed for hazardous materials, etc. were extensively publicized, and we also reconfirmed the roles that supervisors and officers responsible for security should play. Moving forward, we will continue to

promote further awareness of disaster prevention issues among employees through these disaster prevention training programs and control enhancement activities.

In FY2018, we held a first-aid course for operating managers, in the first initiative of its kind. The course provided training on critical care / cardiopulmonary resuscitation (chest compressions / use of AED), preventing blood loss, and other first-aid related topics. The course received good feed-back from participants, and we intend to make it a regular event in the future.

Conducting disaster drills

The equipment and hazardous materials used at our company differ from workplace to workplace. Furthermore, awareness of disaster prevention, as well as experience in disaster prevention, varies widely among employees, not to mention new employees participating in disaster prevention training for the first time. In addition, the scale of a disaster may require coordination with affiliated companies. In view of this, when conducting disaster prevention drills, we identify appropriate emergency situations to ensure that drills are more specific and practical.

Typical disaster prevention drills in FY2018

In FY2018, we conducted a large number of drills, including a large-scale earthquake disaster drill, a joint factory disaster drill with the Shikama Fire Department, and initial firefighting drills at each workplace.

•Disaster drills for major earthquakes

We conducted a major earthquake disaster drill on September 3 based on the scenario of a huge earthquake and tsunami alert, with the epicenter in the Nankai Trough.

The purpose of the drill was to help ensure safety during a major earthquake/tsunami and deal with the injured, as well as to provide training on early measures to help restore business operations. On the day of the drill, a Disaster Response Headquarters was set up in the lecture hall at the head office to centralize the collection of damage reports from respective departments and data on overall damage using wireless communications, as well as to collect information from branch offices and branches.

•Disaster drill held at plant in conjunction with the Shikama Fire Department

In November, we held a disaster drill at the Billet rolling plant in conjunction with the Shikama Fire Department, based on the scenario of a fire occurring at the plant. A series of drills were practiced, including initial firefighting work by the occupational fire-fighting unit, firefighting activities and the rescue of injured persons by the self-defense fire brigade and the public fire brigade, and the sending/receiving of information by the Disaster Response Headquarters. Moving forward, we will continue to work towards improving our response skills to help prevent fires/disasters in the workplace by practicing these kinds of disaster drills.

Disaster drills carried out in FY2018 **71**

Environmental management



Sanyo Special Steel formulates an environmental policy that forms the basis of the company's environmental conservation activities. Based on this policy, we create plans to improve environmental conservation and use environmental management systems in initiatives to tackle global warming, recycle by-products, and help prevent environmental pollution in a bid to mitigate environmental risks.

In addition, we not only help recycle metal resources by manufacturing products using scrap iron as the main raw material, but we also promote goods that are manufactured to help reduce the burden on the environment, using components and mold dies that have a longer life and are smaller in size and lighter in weight.

Environmental policy

(Philosophy)

We recognize that environmental issues such as global warming; air, water, and soil contamination; and waste problems are serious issues shared by all of humanity. As a company located in a richly endowed environment that faces Himeji Castle, a UNESCO World Heritage Site and a national treasure of Japan in the north, and the Setonaikai National Park in the south, we are committed to caring for the preservation of the environment and contributing to building a sustainable society in every stage of our business activities.

(Policy)

Bearing in mind that we are a company with plants that manufacture and sell special steel and non-ferrous metals, we undertake environmental management based on the following policy.

- 1) We will contribute to the recycling of metal resources by manufacturing steel products using iron scrap as the main raw material.
- 2) In addition to complying with laws, regulations, and agreements related to the environment, we will make ongoing efforts to enhance our environmental management framework to improve our environmental performance, and we will responsibly control any business activities that may have an adverse impact on the environment.
- 3) We will make efforts to reduce our impact on the environment in all stages of our business activities, and we will actively promote resource and energy savings, the recycling of byproducts and reduction of waste material, and the control of pollutant and greenhouse gas emissions to contribute to conservation of the environment and mitigation of climate change. Moreover, we will strive to prevent environmental pollution by developing products that will contribute to reducing our impact on the environment.
- 4) In our environmental conservation activities, we will pay particular attention to the education of each and every employee in environmental awareness.
- 5) To achieve this environmental policy, we will set environmental targets and review them at least once a year, and we will revise these targets as necessary.
- 6) We will ensure that all employees are thoroughly familiar with this environmental policy through education and training, and we will appoint the General Manager of Environmental Management as the Environmental System Management Officer.

Acquisition of ISO14001 Certification

We have acquired ISO14001 Certification. This is the international standard for environmental management systems, and we are making efforts to establish this standard through our annual internal audit and external audit. During the internal audit, junior staff members are also in attendance at audit sites, which helps them understand the environmental management system. We are also making efforts to improve the system. We also focus on on-going training to facilitate the smooth change from one generation to another of internal auditors. In 2017, an external audit reviewed our transition to ISO14001:2015 and assessed that our Environmental Management System was being properly maintained and effectively utilized, allowing us to complete migration to the standard.

Promotion of the Environmental Management System

The Environmental Conservation Committee

Each year we hold a meeting of our Environmental Conservation Committee to enhance environmental management and mitigate environmental risk. The Committee is chaired by the director in charge of the Environment Division, and its members also include the General Manager of the Production Division and the General Manager of the

Administration Division, and it discusses the formulation of basic guidelines on environmental conservation and matters on basic initiatives. The contents of the Committee's discussions are reported to the Corporate Policy Committee

Environmental Liaison Meetings

Once a month, an Environmental Liaison Meeting is held to share information on the environment; those attending include the Chief Officer for Environmental Systems, executive officers, and department heads. The meetings collate information on the matters listed below and attempt to mitigate environmental risks.

- Status of responses to points identified in environmental checks**
- Results of assessments on compliance with statutory laws and regulations**
We share results on air and effluent measurements, etc. prescribed by law or under agreed protocols.
- Status of industrial waste treatment and results of inspections on industrial waste disposal facilities**
We share information on the status of industrial waste treatment and the results of inspections on industrial waste disposal facilities run by sub-contractors.
- Amendments to the latest environmental laws**

Plans for improvements in environmental conservation

Plans for improvements in environmental conservation and FY2018 results

Topics	Medium-term projections (2017-2019)	FY 2018 Resultst	Self-Assessment
Energy-saving and global warming prevention measures	<ul style="list-style-type: none"> • Reductions in CO₂ emissions resulting from the promotion of energy-saving measures (Goal: 2.6% reduction in FY2020 compared to BAU*) *Business as usual (if no special measures are taken) 	<ul style="list-style-type: none"> • Amount of reduction in CO₂ emissions: 2.83% vs BAU • Updating large fans with high-efficiency fans • Switch to LED lighting • Use of inverters in on-site water supply pumps 	○○○
Recycling of by-products	<ul style="list-style-type: none"> • Reduction in volume of dust and sludge sent to landfill • Improve percentage of brick waste recycled 	<ul style="list-style-type: none"> • Outsourcing of dust recycling to sub-contractor • Use of brick waste as heat-resistance raw material 	○○
Compliance with statutory laws and regulations	<ul style="list-style-type: none"> • Compliance with regulatory standards (Water Pollution Prevention Act, and the Air Pollution Control Act, etc.) 	<ul style="list-style-type: none"> • Attainment of regulatory standards in all items 	○○○
Education and development activities for employees	<ul style="list-style-type: none"> • Regular education and development activities for employees 	<ul style="list-style-type: none"> • Implementation of activities to beautify the local area (approx. 270 participants) • Registration of data into carbon footprint calculator for individual households (30 participants) 	○○○
	<ul style="list-style-type: none"> • Increase in the number of staff holding official environmental qualifications 	<ul style="list-style-type: none"> • On-going initiatives to increase the number of staff with managerial qualifications in the prevention of pollution 	○
Promotion of information disclosure	<ul style="list-style-type: none"> • Regular publication of environmental reports 	<ul style="list-style-type: none"> • Release of "CSR Report 2018" and publication on website 	○○○
	<ul style="list-style-type: none"> • Cooperation with environmental agencies such as local government bodies 	<ul style="list-style-type: none"> • Implementation of "Environment Month" events 	○○○

Self-Assessment: The level to which targets have been achieved are classified under 3 stages
 ○○○:Plans have been met ○○:Good progress is being made to achieve plans
 ○:Further initiatives will be undertaken to achieve plans

Environmental accounting

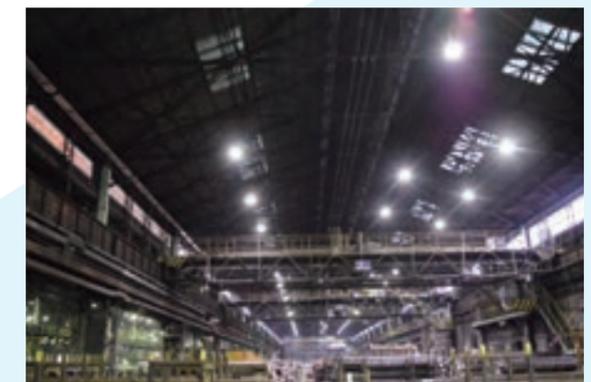
We collated costs for environmental conservation initiatives undertaken in FY2018 in accordance with guidelines from the Ministry of the Environment.

Maintenance and administration costs for environmentally-friendly equipment such as dust collection units and water treatment facilities and the cost of recycling/disposing of by-products amounted to approximately 3.3 billion yen. We also invest approximately 400 million yen in installing dust collection units in continuous casting sheds and in energy-saving initiatives such as switching to high-efficiency fans in dust collection units and using inverters in pump motors. Moving forward, we intend to continue to implement initiatives concerned with the conservation of the environment.

Categories	(Million of yen)	
	Expenses	Investment
1 .Costs within business areas	3,093	383
2 .Upstream/downstream costs	0	0
3 .Cost of administrative activities	158	0
4 .R&D costs	27	0
5 .Cost of social activities	17	0
6 .Cost of addressing environmental damage	12	0
Total	3,307	383

Activities for developing environmental awareness

We believe that raising every employee's awareness of the environment is important in tackling our environmental conservation activities, and we conduct regular training for new employees and grade-based environmental workshops. We have also established a reward program to encourage employees to obtain qualifications related to environmental conservation such as those for pollution prevention managers, and we have also been working to have employees calculate carbon footprints for their own households.



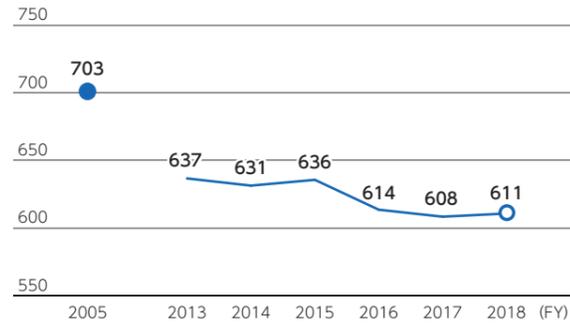
Initiatives to prevent climate change



Initiatives to reduce the amount of CO₂ emissions

Sanyo Special Steel is involved in efforts to reduce CO₂ emissions (one of the greenhouse gases (GHG)) as part of its initiatives on climate change. Under our medium-term business plan (2017-2019), we aim to cut CO₂ emissions by 2.6% compared to BAU (business as usual - the scenario where no special measures are taken) by 2020. Results for FY2018 show a reduction of 2.83% has been achieved, and we are making renewed efforts to achieve the target for FY2020. In addition, we have continued to promote energy-saving initiatives such as the switch in fuel from heavy crude oil to town gas, increased use of regenerative burners for heating furnaces, and the use of inverters in large motors (revolution controlled), and through these initiatives, we have reduced unit emissions of CO₂ by 13% per ton of crude steel in comparison with FY2005. As a result of these initiatives, we have been recognized as an "S-class" business operator (the top rank for companies making outstanding energy-savings) for the fourth consecutive year under the assessment program run by the Ministry of the Economy, Trade and Industry, a program that grades and classifies business operators.

CO₂ emissions per unit of crude steel (CO₂-kg/t)



Reducing CFCs (Chlorofluorocarbons)

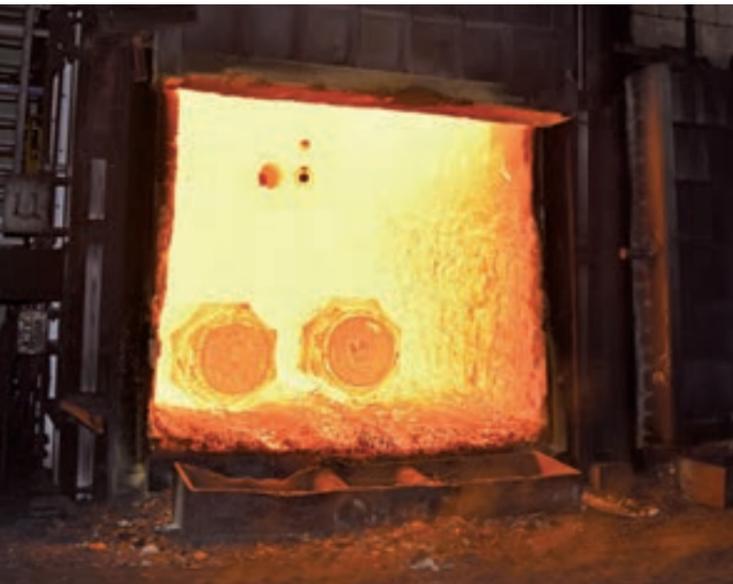
CFCs are used in our commercial air conditioners. As one of the GHGs, CFCs are deemed to contribute to global warming when released into the atmosphere. In accordance with Act on the Control of CFC Emissions, Sanyo Special Steel conducts inspections for "specified Class 1 products" on our commercial air conditioners and other equipment as we work to ensure proper control of CFC gases.

Reducing the load on the environment when transporting products

Reducing CO₂ emissions does not just involve manufacturing processes but also essential initiatives on the logistics front. We believe that the choice of transportation method when shipping products is a particularly important point for reducing the load on the environment on the logistics front. Consequently, we are working to promote the use of rail transport and freight ships on the assumption that product quality can be ensured; rail transport allows CO₂ reductions to be reduced by around 90% compared to transportation by truck, and freight ships provide a reduction of around 80% compared to the same. Of all the shipments that Sanyo Special Steel makes itself, transport by freight ship accounts for a significantly higher percentage than the average for the manufacturing sector.

<Specific initiatives>

- Use of rail transport for the Tohoku area
- Use of freight ships for transport to interim warehouses set up in the areas of Kanto, Chubu, Shikoku, Chugoku, and Kyushu
- Switch from trucks to barges for transport to Kobe Port where export vessels depart.



Contributing to a resource-recycling society



Special steel products created from recycled materials

We use electric arc furnace steel-making (which uses iron scrap as a main ingredient) to manufacture special steel, contributing to the recycling and effective use of iron resources. Scrap iron accounts for around 80% of our raw materials, and if materials recycled internally are included, around 95% of our raw materials are recycled products.

Initiatives to reduce by-products

In FY2018, the amount of by-products generated by our production activities was 253,000 tons, and the amount processed, including the volume sold, was 256,000 tons. By-products include electric furnace slag, scale, dust, brick waste, and sludge. Based on the 3 R (Reduce, Reuse, Recycle) concept, we encourage recycling of these by-products and, of the amount processed in FY2018, approximately 91% was either recycled or reduced down by incineration, with the remaining amount, approximately 9%, finally being disposed of in landfills. Moving forward, we will work to expand the use of by-products in new applications in order to reduce disposal in landfills.



Recycling slag from electric arc furnaces

We promote the recycling of electric furnace slag generated as a by-product of the manufacturing process, and by ensuring reliable quality in the product and responding to a diverse range of needs, we have been able to maintain a 100% recycling rate of this resource. Our electric furnace slag products are used mainly as roadbed material for roads and as an asphalt aggregate instead of natural resources such as stone and sand. Moving forward, we expect it to be used as a raw material in "inhibitors" to control foam expansion of molten steel and by local authorities as a recycled aggregate for paved surfaces.

We use pressurized steam-aging facilities to pressurize our furnace slag products to the highest level in Japan in a process that effectively stabilizes any expansion in the products. In addition, we use a classification machine that can sort electric furnace products into six stages simultaneously, from coarse-grained aggregate to fine grains, and multi-functional classification equipment made up of a granulator that chamfers aggregate particles to adjust grain size and improve resistance to wear. Using these manufacturing processes, we provide customers with high-quality electric furnace slag products.

Moving forward, we intend to focus on realizing a sustainable society as we continue to comply with the Nippon Slag Association's "Guidelines for Management of Iron and Steel Slag Products" and not only deploy management systems across all areas including manufacturing, quality, and sales, but also submit to reviews by third-party organizations to enhance management systems and further improve reliability.

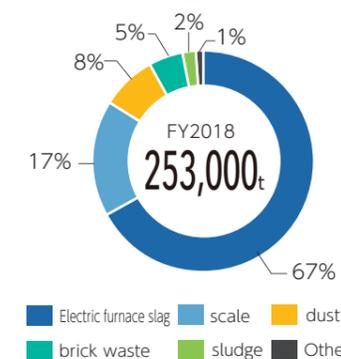


Electric furnace slag

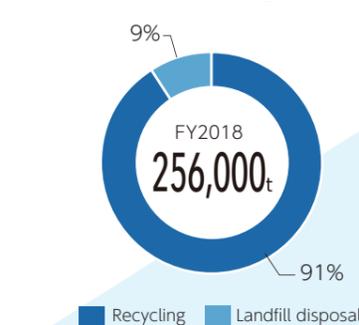


Road using electric furnace slag products

By-product generation



By-product throughput



Moves to reduce the load on the environment



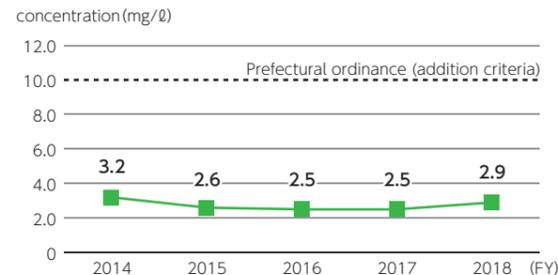
Efficient use of water resources

Water is vital for the manufacture of our products. It is used to cool steel and equipment, and also as a source of power for equipment. In recognition of the fact that water is a limited resource, we reuse more than 90% of the water employed in our production processes. Contaminated water that has been used in the factory is sent to an on-site treatment facility to be purified. After this, the purified water is reused in the factory, while the remainder undergoes further treatment before being released into public waterways. At the point where the water drains into the public waterways, there is a system that takes automatic measurements to constantly monitor pH levels, turbidity, chemical oxygen demand (COD), nitrogen, and phosphorus, and if levels go beyond our voluntary in-house management standards then an alert is issued to allow the officer in charge to deal with the issue in a prompt manner. In addition, the water is regularly analyzed for harmful substances, etc. by an external organization as part of our efforts to manage water quality and prevent water pollution.

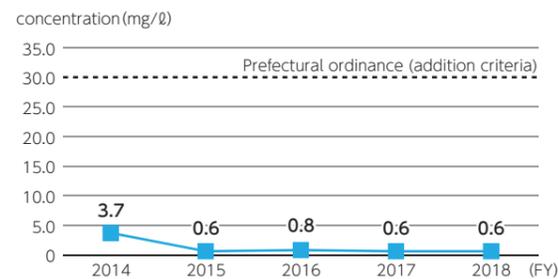


Wastewater treatment facility

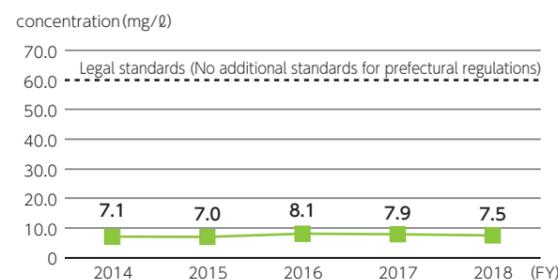
Chemical oxygen demand in wastewater (COD)



Suspended particulate matter in wastewater (SS)



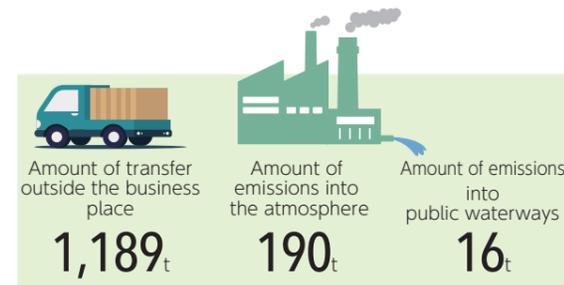
Nitrogen concentration in wastewater



Appropriate controls on chemical substances

In accordance with the PRTR* Act, we monitor the amount of chemical substances released and transferred. Volumes are reported to the Ministry of Economy, Trade and Industry, and we also work on initiatives to curtail the amount released. Furthermore, PCB waste is properly stored and controlled in accordance with the PCB Special Measures Act and, in addition, all applicable equipment is systematically updated/disposed of to ensure disposal is completed by the deadlines stipulated in the Act.

* PRTR (Pollutant Release and Transfer Register): a statutory system that promotes improvements in the monitoring and management of the amounts of specified chemical substances emitted into the environment



Proper disposal of waste

Sanyo Special Steel subcontracts services to industrial waste disposal companies that can dispose of waste in a proper manner, and we conduct checks to ensure that subcontractors hold the appropriate licenses as well as preliminary inspections of their disposal facilities. In addition, we check that our waste is being disposed of in an appropriate manner through regular inspections of disposal facilities and by confirming industrial waste disposal conditions in a manifest. We have introduced a manifest in electronic format to ensure that operations are running properly, and we make every effort to separate waste at the sites where waste is generated.

Reduction of emission of air pollutants

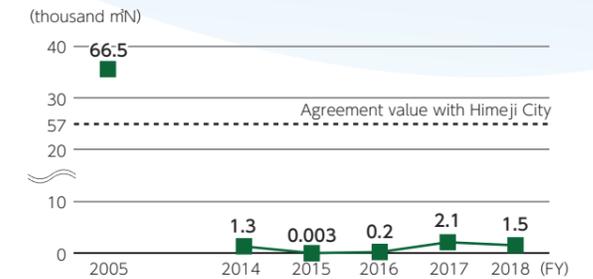
At facilities that generate soot and smoke, we have achieved SOx (sulfur oxide) emissions well below the levels agreed on with the Himeji City council by switching the fuel from heavy crude oil with high sulfur content to LNG (town gas) which contains almost no sulfur. In a bid to reduce NOx (nitrogen oxide) emissions, we are using low NOx burners and implementing proper combustion controls, among other initiatives. We have also introduced units that automatically measure NOx in a system that enables us to constantly monitor heating furnaces, which produce large volumes of emissions.

Furthermore, revisions to the Air Pollution Control Act in April 2018 stipulated that operators should voluntarily reduce emissions of mercury concentrations in exhaust gases from electric steel-making furnaces. Sanyo Special Steel regularly measures and records mercury concentrations in accordance with the voluntary standards recommended by the Japan Iron and Steel Federation to confirm that the concentrations meet voluntary control standards.

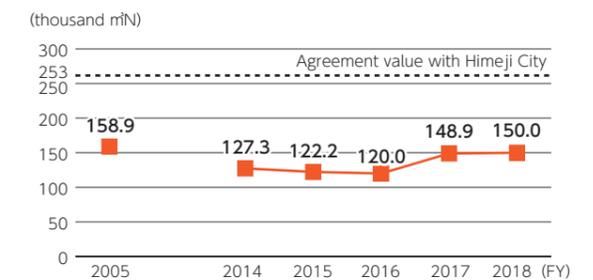
In terms of dust collection facilities, we are working on initiatives to increase and enhance equipment capacity, such as the installation of dust collection units in continuous casting sheds in FY2018.

We also use traditional methods of dealing with dust that include patrols by water sprinkler vehicles and street sweepers to help prevent the dust scattering.

Sulfur oxide emissions



Nitrogen oxide emissions



Environmental risk management

Environmental patrols

Once a month, a team made up of the Chief Officer for Environmental Systems, executive officers, department managers, pollution prevention managers, and others conducts patrols, primarily around our manufacturing sites. We aim to reduce environmental risks by responding to the issues raised by the patrols at individual manufacturing sites.

(i) Checks for significant environmental aspects

Patrols are conducted on processes and equipment with significant environmental aspects and inspections are carried out on equipment, management of measuring devices, and written work standards as we work to improve management levels and mitigate risk.

(ii) Checks on emergency drills

Emergency drills are carried out to check if there are any issues with emergency procedures, and in addition, we verify that there are no defects in equipment and instruments.

(iii) Patrols attended by the President

Once a year, an environmental patrol is conducted with the President in attendance. In FY2018, this patrol included checks on the management of significant environmental aspects in manufacturing plants, energy-saving initiatives, and initiatives to reduce by-products.

Responding to amendments in environmental laws

As stated in our environmental policy, compliance with statutory laws and regulations is a key assumption of our business activities. If there are any legal amendments related to our business, we revise our in-house environmental standards and ensure that all stakeholders receive appropriate training, among other initiatives.

June is "Environment Month" when we hold a "Study Workshop on Environmental Laws and Regulations" to which we invite section managers from across the company and environmental managers from group companies to ensure that they have a better understanding of statutory compliance obligations.

(Example of response to a legal amendment)

• Soil Contamination Countermeasures Act (April 2019 amendment)

Content of amendment :

Expansion of opportunities for soil contamination surveys

Our response :

Details of the statutory amendment were disseminated across the whole company at the Study Workshop on Environmental Laws and Regulations held in June.

Corporate Governance

The Sanyo Special Steel Group practices a basic philosophy of "Confidence-based Management" and, by supplying useful steel products to society at large, we aim to achieve sustainable growth and increase corporate value over the medium-to-long term as we support the development of the global economy, while also building a recycling-oriented society and focusing on environmental conservation.

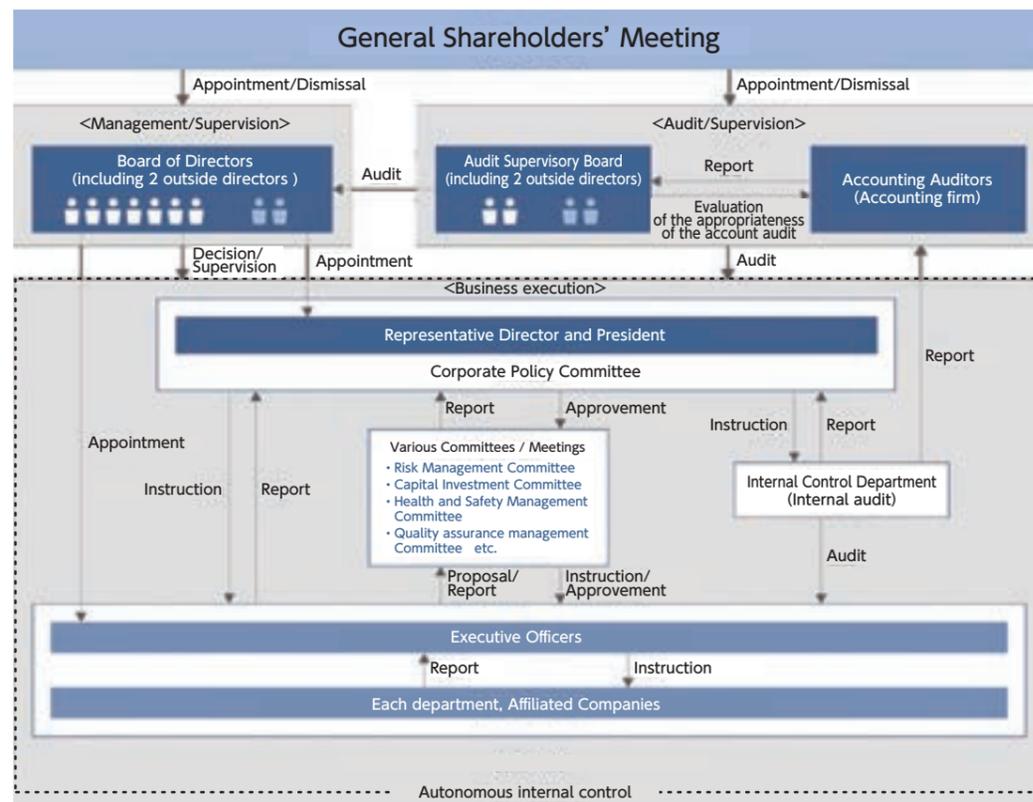
We recognize that proper corporate governance is essential as a management platform to achieve this and, in light of this, we are working to ensure the development, operation, and on-going improvement of corporate governance as we promote the establishment of a corporate governance system suited to our business by improving efficiency, soundness, and transparency in our management.

Fundamental thoughts on corporate governance

In order to ensure further confidence among our stakeholders, including shareholders, consumers, and the local community, Sanyo Special Steel has developed a corporate governance structure suited to the Group's business, and we will work to enhance corporate governance in a bid to improve efficiency, soundness, and transparency in our management.

Corporate Governance System

Sanyo Special Steel is a company with an Audit and Supervisory Board, which supervises how directors execute their duties, and a Board of Directors that consists of nine directors, including two independent outside directors. The Board of Directors meets regularly (at monthly meetings) and as required (at ad hoc meetings) to decide important matters concerning the execution of business. We also set up company-wide committees and meetings to discuss important operational matters. These include the Corporate Policy Committee (held twice a month in principle), which facilitates efficient decision-making on management, including at Board of Directors' meetings; the Risk Management Committee, which aims to ensure thorough compliance and further enhancements in corporate governance; the Security Trade Control Committee; and the Rewards and Sanctions Committee.



Officer



Representative Director and President
Higuchi Shinya



Director, Member of the Board Managing Executive Officer
Takahashi Koza

In charge of the Secretariat Office, Corporate Planning Department, Accounting & Finance Department, Computer Systems Planning Office, Personnel & Labor Relations Department, General Administration Department, Internal Control & Audit Department, and Procurement Department.



Director, Member of the Board Managing Executive Officer
Oi Shigehiro

In charge of the Safety & Disaster Prevention Office, Environmental Management Department, Slag Products Manufacturing & Sales Office, Production Planning & Administration Department, Industrial Engineering Office, Equipment Department, Steelmaking Department, Bar & Wire Manufacturing Department, Tube Manufacturing Department.



Director, Member of the Board Managing Executive Officer
Omae Koza

In charge of the Sales Planning & Administration Department, Sales Department for Bearings, Sales Department for Automobiles & Industrial Machinery, Special Products Sales Department, Overseas Marketing Department, Osaka Branch, Nagoya branch, Hiroshima Branch, Kyushu Sales Office, and Formed & Fabricated Products Division.



Director, Member of the Board Managing Executive Officer
Yanagimoto Katsu

In charge of the Metal Powder Manufacturing & Sales Division, Research & Development Center, Technical Planning & Administration Department, Quality Assurance Department, and Indian Business Administration Office.



Outside Director, Member of the Board
Kobayashi Takashi ※1

Grounds for appointment
 · Extensive experience and expertise in legal circles
 · Able to supervise and make recommendations on the management of the company from a standpoint that is independent of the management team responsible for executing business



Outside Director, Member of the Board
Onishi Tamae ※1

Grounds for appointment
 · Rich experience and broad insight from key positions held in national and regional government agencies or national universities, etc.
 · Able to supervise and make recommendations on the management of the company from a standpoint that is independent of the management team responsible for executing business



Director, Member of the Board
Masumitsu Noriyuki ※1

Grounds for appointment
 · Rich experience and broad insight in management at NIPPON STEEL TEXTENG.CO.,LTD., or similar



Director, Member of the Board
Tsuga Hiroshi ※1

Grounds for appointment
 · Rich experience and broad insight cultivated at Nippon Steel Corporation



Senior Audit & Supervisory Board Member
Nagano Kazuhiko ※2

Grounds for appointment
 · Experience in a wide range of fields as a director of Sanyo Special Steel



Outside Audit & Supervisory Board Member
Ohe Katsuaki ※2

Grounds for appointment
 · Rich experience and broad insight cultivated at Mizuho Bank, or similar



Outside Audit & Supervisory Board Member
Yogi Hiroshi ※3

Grounds for appointment
 · Rich experience and broad insight cultivated at Sumitomo Mitsui Banking Corporation



Audit & Supervisory Board Member
Sonoda Hiroto ※3

Grounds for appointment
 · Rich experience and broad insight cultivated at Nippon Steel Corporation

※1 Independent outside director ※2 Independent outside auditor ※3 Outside auditor

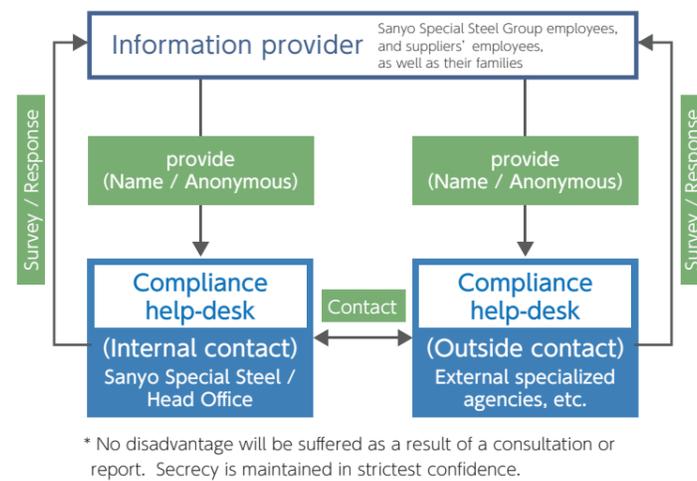
Internal control systems

Compliance System and Risk Management System

Sanyo Special Steel has established the "Corporate Standards of Conduct" that prescribe the standards of behavior we should follow as a corporation, and a "Code of Conduct" as guidance on conduct to be observed in the course of business activities within the framework of the Corporate Standards of Conduct. Moreover, Sanyo Special Steel makes efforts to ensure all officers and employees are thoroughly familiar with these standards. In addition, we have developed a system that promotes compliance with, among other initiatives, the establishment of a compliance help-desk and regular meetings of the Risk Management Committee in accordance with company rules.

Sanyo Special Steel will endeavor in the future to cultivate higher ethical standards by regularly conducting employee education on the necessity and significance of complying with various laws, regulations, and rules in corporate management and will make efforts to maintain and improve the management health of not only Sanyo Special Steel but also of the Group as a whole. Sanyo Special Steel is also committed to putting into practice its mission to "fulfill our social contribution through business" by promoting business activities rooted in high ethical standards.

Compliance help-desk



We have set up a compliance help-desk to prevent the occurrence or recurrence of circumstances or actions that violate, or appear to have violated, statutory laws, social norms, company rules, or similar regulations.

The help-desk can be used by anyone, including Sanyo Special Steel Group employees, casual workers, temporary workers, and suppliers' employees, as well as their families, and it provides a system for consultation to ensure that no-one has to handle problems alone—whether these concern issues that are difficult to solve in the workplace or troubles that people are unable to discuss with anyone else.

Consultations and reporting may be done anonymously, and no-one will suffer to his/her disadvantage as a result of any consultation or report.

It is company policy to respond promptly and appropriately to any consultation or report.

Implementation of compliance training

Every year, the Sanyo Special Steel Group holds compliance lectures to raise awareness of compliance issues among executive officers and employees.

We conduct training on different topics, such as e-learning compliance training, compliance training for new employees, and also grade-based training on harassment. Furthermore, all departments and affiliated companies conduct compliance training appropriate to the individual department and ensure that employees are familiar with laws, regulations, and rules necessary for the execution of business.



* Illustration of a compliance lecture

We have set up an Internal Control Department responsible for planning and auditing internal controls, as well as functional departments responsible for risk management in individual sectors to form an organizational structure to run the internal control system in the Group. In addition, we have assigned risk management officers to each department and group company; these officers are responsible for planning and promoting autonomous internal control activities in their respective departments/companies. Based on this organizational structure, we operate the internal control system as described below.

1 Internal control plans

Each year, we formulate a Group-wide internal control plan based on amendments to statutory laws and regulations and changes in the business environment. This plan contains basic policies; plans for different functions such as safety, the environment, disaster prevention, and quality; internal audit plans; and training plans. Each department and group company then formulates their respective plans based on the Group-wide plan.

2 Autonomous internal control activities

Sanyo Special Steel's individual departments and group companies implement their own, autonomous internal control activities in accordance with internal control plans, based on the nature of their business operations and inherent risks. Specifically, they develop operating regulations, manuals, and other materials and conduct training. They also conduct self-inspections and carry out improvements to operations based on the results. In the event of an accident, disaster, or situation that risks violating the law, the department or group company concerned immediately reports the fact to the Internal Control Department; in addition, corrective measures, such as measures to prevent any recurrence, are taken in collaboration with associated departments. Furthermore, the Internal Control Department gathers these cases together and shares them within the Group, allowing individual departments and group companies to carry out inspections to check for similar risks.

3 Internal audits, etc.

In internal audits, the Internal Control Department and respective functional departments not only check the status of internal controls using documentation such as internal control checklists but also monitor each department/group company. In addition, as a measure to complement internal controls, we have established and operate a whistle-blowing help-desk that can be used by employees of Sanyo Special Steel and its group companies, their families, and suppliers' employees.

We also conduct surveys on employee awareness regarding internal controls and compliance.

4 Assessments and improvements

The Internal Control Department and the respective functional departments report on the operational status of the internal control system to the Risk Management Committee, which meets quarterly, and to the Board of Directors; in addition, these reports are also shared with individual departments/group companies at the meetings for risk management officers held each quarter. The Internal Control Department assesses the effectiveness of the internal control system based on information such as the status of internal control activities implemented and the results of internal audits, and once the results of the assessments are compiled, they are reported to the Risk Management Committee and the Board of Directors. Based on the assessment results, the Company formulates improvement initiatives to help make the internal control system more effective, and these initiatives are reflected in the internal control plan for the next fiscal year.

5 Training and raising awareness

We have set up courses on internal controls through grade-based training and other methods to provide training for executives and employees of Sanyo Special Steel and its group companies. Furthermore, we are pro-actively working to raise awareness of internal control concepts and improvements in workplace culture, among other topics, through talks between the Internal Control Department and respective departments/group companies.

6 Links with outside directors, corporate auditors, and accounting auditors

As members of the Risk Management Committee, outside directors and corporate auditors sit on the Committee and exchange their opinions. In addition, outside directors and corporate auditors hold regular meetings with the CEO to conduct a proper, uninterrupted exchange of information. In terms of interaction with the accounting auditor, we submit regular reports on the operating status of the Risk Management Committee, as well as assessment results on internal controls pertaining to financial reporting, and exchange opinions.

Financial Section

42 Financial Statements

75 Independent Auditor's Report

Sanyo Special Steel Co., Ltd. and Consolidated Subsidiaries
CONSOLIDATED BALANCE SHEETS

As of March 31, 2018 and 2019

ASSETS	Millions of yen		Thousands of U.S. dollars (Note 3)
	2018	2019	2019
Current Assets:			
Cash and bank deposits (Notes 5 and 19)	¥ 15,694	¥ 22,385	\$ 201,668
Notes and accounts receivable-trade (Notes 5, 9 and 10)	55,243	75,202	677,494
Electronically recorded monetary claims (Note 10)	5,826	7,372	66,412
Less: Allowance for doubtful accounts	(10)	(174)	(1,564)
Inventories (Notes 7 and 9)	51,129	95,492	860,289
Income taxes receivable	7	61	552
Shares in parent company (Note 5)	—	1,128	10,160
Other	1,853	10,084	90,843
Total current assets	129,742	211,550	1,905,854
Property, Plant and Equipment:			
Land (Note 9)	8,143	13,413	120,834
Buildings and structures (Note 9)	51,890	71,077	640,334
Machinery and equipment (Note 9)	219,307	272,757	2,457,272
Construction in progress	973	6,289	56,655
	280,313	363,536	3,275,095
Less: Accumulated depreciation	(220,958)	(259,689)	(2,339,541)
Total property, plant and equipment	59,355	103,847	935,554
Intangibles			
Goodwill	—	42,401	381,989
Other	1,484	3,189	28,733
Total intangible	1,484	45,590	410,722
Investments and Other Assets:			
Investments in securities (Notes 5, 6 and 8)	11,332	7,159	64,497
Long-term loans receivable	605	403	3,631
Deferred tax assets (Note 13)	476	1,593	14,353
Net defined benefit assets (Note 12)	5,578	2,791	25,143
Other	733	1,480	13,338
Less: Allowance for doubtful accounts	(158)	(167)	(1,506)
Total investments and other assets	18,566	13,259	119,456
Total assets	¥ 209,147	¥ 374,246	\$ 3,371,586

The accompanying notes are integral parts of these statements.

LIABILITIES AND NET ASSETS	Millions of yen		Thousands of U.S. dollars (Note 3)
	2018	2019	2019
Current Liabilities:			
Short-term loans (Notes 5, 9 and 11)	¥ 6,994	¥ 52,746	\$ 475,185
Current portion of long-term loans (Notes 5, 9 and 11)	4,875	98	878
Commercial paper	3,000	8,000	72,072
Notes and accounts payable-trade (Notes 5 and 10)	18,376	39,000	351,355
Accounts payable-other	5,020	11,354	102,285
Accrued income taxes	1,650	2,615	23,560
Accrued expenses	8,103	9,148	82,417
Provision for environmental measures	—	169	1,526
Other	969	4,332	39,024
Total current liabilities	48,987	127,462	1,148,302
Long-term Liabilities:			
Bonds payable (Notes 5 and 11)	10,000	10,000	90,090
Long-term loans (Notes 5, 9 and 11)	19,241	20,512	184,789
Accrued directors' and corporate auditors' retirement benefits	60	49	439
Deferred tax liabilities (Note 13)	944	4,324	38,956
Provision for loss on guarantees	6	4	34
Provision for environmental measures	31	143	1,291
Net defined benefit liabilities (Note 12)	762	11,266	101,495
Other	156	286	2,584
Total long-term liabilities	31,200	46,584	419,678
Total liabilities	80,187	174,046	1,567,980
Contingent Liabilities (Note 23)			
Net Assets (Note 14)			
Shareholders' Equity:			
Common stock:			
Authorized 94,878,400 shares in 2018 and 2019			
Issued 33,424,807 shares in 2018 and 57,437,307 shares in 2019	¥ 20,183	¥ 53,800	\$ 484,686
Capital surplus	22,672	55,896	503,572
Retained earnings	80,250	85,716	772,214
Less: Treasury stock, at cost (1,210,813 shares in 2018 and 1,212,166 shares in 2019)	(1,920)	(1,924)	(17,325)
Total shareholders' equity	121,185	193,488	1,743,147
Accumulated Other Comprehensive Income:			
Valuation difference on available-for-sale securities	3,519	2,178	19,620
Foreign currency translation adjustments	966	(40)	(356)
Remeasurements of defined benefit plans	1,929	71	637
Total accumulated other comprehensive income	6,414	2,209	19,901
Non-controlling Interests	1,361	4,503	40,558
Total net assets	128,960	200,200	1,803,606
Total liabilities and net assets	¥ 209,147	¥ 374,246	\$ 3,371,586

The accompanying notes are integral parts of these statements.

Sanyo Special Steel Co., Ltd. and Consolidated Subsidiaries
CONSOLIDATED STATEMENTS OF INCOME

For the years ended March 31, 2018 and 2019

	Millions of yen		Thousands of U.S. dollars (Note 3)
	2018	2019	2019
Net Sales	¥ 157,485	¥ 185,818	\$ 1,674,037
Cost of Sales (Notes 7 and 15)	132,079	159,256	1,434,741
Gross profit	25,406	26,562	239,296
Selling, General and Administrative Expenses (Notes 15 and 16)	14,437	16,439	148,096
Operating income	10,969	10,123	91,200
Other Income:			
Interest and dividends	280	326	2,941
Share of profit of entities accounted for using equity method	—	16	143
Other	226	331	2,978
	506	673	6,062
Other Expenses:			
Interest	(102)	(521)	(4,690)
Commission fees	(64)	(560)	(5,048)
Share issuance cost	—	(178)	(1,605)
Other	(650)	(99)	(893)
	(816)	(1,358)	(12,236)
Ordinary income	10,659	9,438	85,026
Extraordinary Gains and Losses:			
Gain on step acquisitions	—	1,459	13,146
Loss on sale and disposition of property, plant and equipment (Note 17)	(440)	(552)	(4,972)
Gain on sale of investment in securities	40	80	714
Loss on evaluation of investments in securities	—	(49)	(440)
	(400)	938	8,448
Income before income taxes	10,259	10,376	93,474
Income Taxes (Note 13):			
Current	3,411	3,507	31,595
Deferred	(239)	(559)	(5,036)
	3,172	2,948	26,559
Net income	7,087	7,428	66,915
Net Income Attributable to Non-controlling Interests	53	(293)	(2,647)
Net Income Attributable to Owners of the Parent	¥ 7,034	¥ 7,721	\$ 69,562
	Yen		U.S. dollars (Note 3)
	2018	2019	2019
Per Share:			
Net income (Note 18)	¥ 218.34	¥ 237.75	\$ 2.14
Cash dividends	¥ 31.70	¥ 69.00	\$ 0.62
Net assets	¥ 3,960.99	¥ 3,480.62	\$ 31.36

The accompanying notes are integral parts of these statements.

Sanyo Special Steel Co., Ltd. and Consolidated Subsidiaries
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

For the years ended March 31, 2018 and 2019

	Millions of yen		Thousands of U.S. dollars (Note 3)
	2018	2019	2019
Net Income	¥ 7,087	¥ 7,428	\$ 66,915
Other Comprehensive Income:			
Valuation difference on available-for-sale securities	(58)	(1,341)	(12,080)
Deferred gains on hedges	10	—	—
Foreign currency translation adjustments	190	(720)	(6,482)
Remeasurements of defined benefit plans	305	(1,858)	(16,741)
Share of other comprehensive income of affiliates accounted for by the equity method	34	(421)	(3,797)
Total other comprehensive income (Note 4)	481	(4,340)	(39,100)
Comprehensive Income	7,568	3,088	27,815
Comprehensive income attributable to:			
Owners of the parent	7,532	3,521	31,724
Non-controlling interests	36	(433)	(3,909)

The accompanying notes are integral parts of these statements.

CONSOLIDATED STATEMENTS OF CHANGES IN NET ASSETS

For the year ended March 31, 2018

	Number of outstanding common shares	Millions of yen		
		Common stock	Capital surplus	Retained earnings
Balance at beginning of year	167,124,036	¥ 20,183	¥ 22,597	¥ 75,503
Issuance of new shares	—	—	—	—
Net income attributable to owners of the parent	—	—	—	7,034
Cash dividends paid	—	—	—	(2,287)
Acquisition of treasury stock	—	—	—	—
Disposal of treasury stock	—	—	0	—
Change in treasury shares of parent arising from transactions with non-controlling shareholders	—	—	75	—
Decrease due to share consolidation	(133,699,229)	—	—	—
Other changes for fiscal year 2017, net	—	—	—	—
Total changes for fiscal year 2017	(133,699,229)	—	75	4,747
Balance at end of year	33,424,807	¥ 20,183	¥ 22,672	¥ 80,250

	Millions of yen			
	Treasury stock, at cost	Valuation difference on available-for- sale securities	Deferred gains on hedges	Foreign currency translation adjustments
Balance at beginning of year	¥ (1,904)	¥ 3,577	¥ (9)	¥ 759
Issuance of new shares	—	—	—	—
Net income attributable to owners of the parent	—	—	—	—
Cash dividends paid	—	—	—	—
Acquisition of treasury stock	(16)	—	—	—
Disposal of treasury stock	0	—	—	—
Change in treasury shares of parent arising from transactions with non-controlling shareholders	—	—	—	—
Decrease due to share consolidation	—	—	—	—
Other changes for fiscal year 2017, net	—	(58)	9	207
Total changes for fiscal year 2017	(16)	(58)	9	207
Balance at end of year	¥ (1,920)	¥ 3,519	¥ —	¥ 966

	Millions of yen		
	Remeasurements of defined benefit plans	Non- controlling interests	Total
Balance at beginning of year	¥ 1,624	¥ 814	¥ 123,144
Issuance of new shares	—	—	—
Net income attributable to owners of the parent	—	—	7,034
Cash dividends paid	—	—	(2,287)
Acquisition of treasury stock	—	—	(16)
Disposal of treasury stock	—	—	0
Change in treasury shares of parent arising from transactions with non-controlling shareholders	—	—	75
Decrease due to share consolidation	—	—	—
Other changes for fiscal year 2017, net	305	547	1,010
Total changes for fiscal year 2017	305	547	5,816
Balance at end of year	¥ 1,929	¥ 1,361	¥ 128,960

CONSOLIDATED STATEMENTS OF CHANGES IN NET ASSETS

For the year ended March 31, 2019

	Number of outstanding common shares	Millions of yen		
		Common stock	Capital surplus	Retained earnings
Balance at beginning of year	33,424,807	¥ 20,183	¥ 22,672	¥ 80,250
Issuance of new shares	24,012,500	33,617	33,617	—
Net income attributable to owners of the parent	—	—	—	7,721
Cash dividends paid	—	—	—	(2,255)
Acquisition of treasury stock	—	—	—	—
Disposal of treasury stock	—	—	0	—
Change in treasury shares of parent arising from transactions with non-controlling shareholders	—	—	(393)	—
Decrease due to share consolidation	—	—	—	—
Other changes for fiscal year 2018, net	—	—	—	—
Total changes for fiscal year 2018	24,012,500	33,617	33,224	5,466
Balance at end of year	57,437,307	¥ 53,800	¥ 55,896	¥ 85,716

	Millions of yen			
	Treasury stock, at cost	Valuation difference on available-for- sale securities	Deferred gains on hedges	Foreign currency translation adjustments
Balance at beginning of year	¥ (1,920)	¥ 3,519	¥ —	¥ 966
Issuance of new shares	—	—	—	—
Net income attributable to owners of the parent	—	—	—	—
Cash dividends paid	—	—	—	—
Acquisition of treasury stock	(4)	—	—	—
Disposal of treasury stock	0	—	—	—
Change in treasury shares of parent arising from transactions with non-controlling shareholders	—	—	—	—
Decrease due to share consolidation	—	—	—	—
Other changes for fiscal year 2018, net	—	(1,341)	—	(1,006)
Total changes for fiscal year 2018	(4)	(1,341)	—	(1,006)
Balance at end of year	¥ (1,924)	¥ 2,178	¥ —	¥ (40)

	Millions of yen		
	Remeasurements of defined benefit plans	Non- controlling interests	Total
Balance at beginning of year	¥ 1,929	¥ 1,361	¥ 128,960
Issuance of new shares	—	—	67,234
Net income attributable to owners of the parent	—	—	7,721
Cash dividends paid	—	—	(2,255)
Acquisition of treasury stock	—	—	(4)
Disposal of treasury stock	—	—	0
Change in treasury shares of parent arising from transactions with non-controlling shareholders	—	—	(393)
Decrease due to share consolidation	—	—	—
Other changes for fiscal year 2018, net	(1,858)	3,142	(1,063)
Total changes for fiscal year 2018	(1,858)	3,142	71,240
Balance at end of year	¥ 71	¥ 4,503	¥ 200,200

CONSOLIDATED STATEMENTS OF CASH FLOWS

For the years ended March 31, 2018 and 2019

	Number of outstanding common shares	Thousands of U.S. dollars (Note 3)		
		Common stock	Capital surplus	Retained earnings
Balance at beginning of year	33,424,807	\$ 181,826	\$ 204,259	\$ 722,967
Issuance of new shares	24,012,500	302,860	302,860	—
Net income attributable to owners of the parent	—	—	—	69,562
Cash dividends paid	—	—	—	(20,315)
Acquisition of treasury stock	—	—	—	—
Disposal of treasury stock	—	—	2	—
Change in treasury shares of parent arising from transactions with non-controlling shareholders	—	—	(3,549)	—
Decrease due to share consolidation	—	—	—	—
Other changes for fiscal year 2018, net	—	—	—	—
Total changes for fiscal year 2018	24,012,500	302,860	299,313	49,247
Balance at end of year	57,437,307	\$ 484,686	\$ 503,572	\$ 772,214

	Treasury stock, at cost	Thousands of U.S. dollars (Note 3)		
		Valuation difference on available-for- sale securities	Deferred gains on hedges	Foreign currency translation adjustments
Balance at beginning of year	\$ (17,292)	\$ 31,700	\$ —	\$ 8,705
Issuance of new shares	—	—	—	—
Net income attributable to owners of the parent	—	—	—	—
Cash dividends paid	—	—	—	—
Acquisition of treasury stock	(37)	—	—	—
Disposal of treasury stock	4	—	—	—
Change in treasury shares of parent arising from transactions with non-controlling shareholders	—	—	—	—
Decrease due to share consolidation	—	—	—	—
Other changes for fiscal year 2018, net	—	(12,080)	—	(9,061)
Total changes for fiscal year 2018	(33)	(12,080)	—	(9,061)
Balance at end of year	\$ (17,325)	\$ 19,620	\$ —	\$ (356)

	Thousands of U.S. dollars (Note 3)		
	Remeasurements of defined benefit plans	Non- controlling interests	Total
Balance at beginning of year	\$ 17,378	\$ 12,255	\$ 1,161,798
Issuance of new shares	—	—	605,720
Net income attributable to owners of the parent	—	—	69,562
Cash dividends paid	—	—	(20,315)
Acquisition of treasury stock	—	—	(37)
Disposal of treasury stock	—	—	6
Change in treasury shares of parent arising from transactions with non-controlling shareholders	—	—	(3,549)
Decrease due to share consolidation	—	—	—
Other changes for fiscal year 2018, net	(16,741)	28,303	(9,579)
Total changes for fiscal year 2018	(16,741)	28,303	641,808
Balance at end of year	\$ 637	\$ 40,558	\$ 1,803,606

	Millions of yen		Thousands of U.S. dollars (Note 3)
	2018	2019	2019
Cash Flows from Operating Activities:			
Income before income taxes	¥ 10,259	¥ 10,376	\$ 93,474
Adjustments -			
Depreciation and amortization	9,048	9,338	84,130
Amortization of goodwill	—	305	2,750
Increase (decrease) in allowance for doubtful accounts	0	(0)	(4)
Increase in net defined benefit liabilities	138	70	634
Decrease (increase) in net defined benefit assets	491	145	1,309
Increase (decrease) in accrued directors' and corporate auditors' retirement benefits, less payments	(2)	(11)	(104)
Increase in provision for environmental measures	31	—	—
Increase in provision for loss on guarantees	1	(3)	(25)
Interest and dividend income	(280)	(326)	(2,941)
Interest expense	102	521	4,690
Gain on sale of investments in securities	(40)	(80)	(714)
Loss on evaluation of investments in securities	—	49	440
Equity in losses (gains) of unconsolidated subsidiaries and affiliates	213	(16)	(143)
Loss (gain) on sale and disposition of property, plant and equipment	440	552	4,972
Loss (gain) on step acquisitions	—	(1,459)	(13,146)
Changes in assets and liabilities:			
Notes and accounts receivable-trade	(15,005)	(4,056)	(36,539)
Inventories	(11,326)	(4,304)	(38,779)
Notes and accounts payable-trade	4,913	1,909	17,200
Other, net	(1,030)	1,241	11,182
Subtotal	(2,047)	14,251	128,386
Interest and dividend income received	280	332	2,988
Interest expense paid	(93)	(525)	(4,731)
Income taxes paid	(3,708)	(3,266)	(29,415)
Net cash provided by (used in) operating activities	(5,568)	10,792	97,228
Cash Flows from Investing Activities:			
Acquisition of property, plant and equipment	(8,131)	(9,162)	(82,542)
Sale of property, plant and equipment	132	52	467
Acquisition of intangible assets	(298)	(333)	(3,001)
Acquisition of investments in securities	(2)	(2)	(19)
Sale of investments in securities	54	93	838
Decrease in long-term loans receivable	202	203	1,830
Purchase of shares of subsidiaries resulting in change in scope of consolidation (Note 20)	—	(60,450)	(544,593)
Increase in over-three-month deposits	952	1,107	9,980
Decrease in over-three-month deposits	(1,201)	(338)	(3,053)
Other, net	(63)	(216)	(1,944)
Net cash used in investing activities	(8,355)	(69,046)	(622,037)

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

	Millions of yen		Thousands of U.S. dollars (Note 3)
	2018	2019	2019
Cash Flows from Financing Activities:			
Increase (decrease) in short-term loans	¥ (11,725)	¥ 389	\$ 3,508
Increase in commercial paper	2,000	5,000	45,045
Proceeds from long-term loans	16,300	—	—
Repayment of long-term loans	—	(4,860)	(43,784)
Proceeds from issuance of bonds	10,000	—	—
Proceeds from issuance of common shares	—	67,117	604,660
Payments for purchases of treasury stock	(16)	(4)	(37)
Proceeds from sales of treasury stock	0	1	6
Cash dividends	(2,281)	(2,253)	(20,296)
Cash dividends to non-controlling interests	(4)	(4)	(39)
Proceeds from share issuance to non-controlling shareholders	555	570	5,136
Other, net	(123)	(26)	(237)
Net cash provided by financing activities	14,706	65,930	593,962
Effect of Exchange Rate Changes on Cash and Cash Equivalents	(28)	(182)	(1,635)
Net Increase (Decrease) in Cash and Cash Equivalents	755	7,494	67,518
Cash and Cash Equivalents at Beginning of the Year	13,543	14,298	128,808
Cash and Cash Equivalents at End of the Year (Note 19)	¥ 14,298	¥ 21,792	\$ 196,326

1. Basis of Presenting Consolidated Financial Statements

The accompanying consolidated financial statements of Sanyo Special Steel Co., Ltd. (the “Company”) and its consolidated subsidiaries (together, the “Companies”) have been prepared on the basis of accounting principles generally accepted in Japan, which are different in certain respects as to application and disclosure

2. Summary of Significant Accounting Policies**(1) Consolidation and investments in affiliates****(a) Scope of consolidation and elimination**

The Company had 41 subsidiaries as of March 31, 2019 (15 subsidiaries as of March 31, 2018). The consolidated financial statements include the accounts of the Company and its 41 subsidiaries. The 41 subsidiaries that have been consolidated for the fiscal year ended March 31, 2019 are listed below:

Yohkoh Bussan Co., Ltd.
Santoku Kogyo Co., Ltd.
Santoku Tech Co., Ltd.
Santoku Seiken Co., Ltd.
Santoku Computer Service Co., Ltd.
Santoku Security Service Co., Ltd.
Sanyo Special Steel Manufacturing de México, S.A. de C.V.
Ningbo Sanyo Special Steel Products Co., Ltd.
Siam Sanyo Special Steel Product Co., Ltd.
Sanyo Special Steel U.S.A., Inc.
P.T. Sanyo Special Steel Indonesia
SKJ Metal Industries Co., Ltd.
Mahindra Sanyo Special Steel Pvt. Ltd.
Sanyo Special Steel India Pvt. Ltd.
Sanyo Special Steel Trading (Shanghai) Co., Ltd.
Triako Holdco AB and its 26 subsidiaries including Ovako AB (“Ovako Group”)

Mahindra Sanyo Special Steel Pvt. Ltd., which used to be an affiliated company to which the equity method was applied, has become a subsidiary of the Company since the Company obtained additional shares of Mahindra Sanyo Special Steel Pvt. Ltd., (deemed acquisition date June 30, 2018). In addition, Ovako Group have become subsidiaries of the Company since the Company obtained shares of Triako Holdco AB (deemed acquisition date December 31, 2018). Therefore, they are included in the scope of consolidation for the fiscal year under review. Santoku Technos Co., Ltd. was merged to Santoku Kogyo Co., Ltd. Therefore, Santoku Technos Co., Ltd. was eliminated from the scope of consolidation for the current fiscal year.

The consolidated subsidiaries, except for the 33 foreign subsidiaries (Sanyo Special Steel Manufacturing de México, S.A. de C.V., Ningbo Sanyo Special Steel Products Co., Ltd., Siam Sanyo Special Steel Product Co., Ltd., Sanyo Special Steel U.S.A., Inc., P.T. Sanyo Special Steel Indonesia, SKJ Metal Industries Co., Ltd., Sanyo Special Steel Trading (Shanghai) Co., Ltd., and Ovako Group (26 companies)) use a fiscal year ending March 31, which is the same as that of the Company. The 33 foreign subsidiaries use a fiscal year ending December 31. For these 33 subsidiaries, certain adjustments are made, if appropriate, in preparing the consolidated financial statements to reflect material transactions which occurred

requirements from International Financial Reporting Standards, and are compiled from the consolidated financial statements prepared by the Company as required by the Financial Instruments and Exchange Law of Japan.

between their fiscal year-end and March 31.

For the purpose of preparing the consolidated financial statements, all significant intercompany transactions, balances and unrealized profits among the Companies have been eliminated.

(b) Investments in affiliates

Investments in Advanced Green Components, LLC and AB Järnbruksförmödenheter, two affiliates of the Company over which the Company has significant influence, are accounted for by the equity method.

AB Järnbruksförmödenheter is included in the scope of equity method affiliates of the Company since the Company obtained shares of Triako Holdco AB in the current fiscal year. Mahindra Sanyo Special Steel Pvt. Ltd. has become a subsidiary of the Company since the Company obtained additional shares of Mahindra Sanyo Special Steel Pvt. Ltd. (deemed acquisition date June 30, 2018). Therefore, Mahindra Sanyo Special Steel Pvt. Ltd. was eliminated from the scope of equity method affiliates in the current fiscal year.

(2) Foreign currency translation

Foreign currency transactions are translated into Japanese yen at the exchange rate prevailing at the respective transaction date. All monetary assets and liabilities denominated in foreign currencies, whether long-term or short-term, are translated into Japanese yen at the exchange rate prevailing at each balance sheet date. Resulting gains and losses are included in net income or loss for the period.

All assets and liabilities of the foreign subsidiaries are translated into Japanese yen at the exchange rate prevailing at each balance sheet date. All income and expense accounts for the year are also translated at that rate. These differences are recorded as foreign currency translation adjustments.

(3) Securities

The accounting standard for financial instruments (“Accounting Standards for Financial Instruments” (Accounting Standards Board of Japan (“ASBJ”) Statement No. 10)) requires that securities be classified into 4 categories: trading securities, held-to-maturity debt securities, equity securities issued by subsidiaries and affiliates and available-for-sale securities. Except for the equity securities issued by subsidiaries and affiliates, securities that the Company has are all classified as available-for-sale securities.

Under the standard, marketable securities classified as available-for-sale securities are carried at fair value with changes in unrealized holding gains and losses, net of the applicable income taxes, included directly in net assets. Non-marketable securities classified as available-for-sale securities are carried at cost. A decline in the value of available-for-sale securities is reflected in net income or loss for the period unless deemed to be temporary. The cost of securities sold is determined by the moving average method.

(4) Derivative transactions and hedge accounting

Derivative financial instruments are stated at fair value.

The Companies use foreign exchange forward contracts, interest rate swaps and commodity futures contract to reduce their exposure to market risks from fluctuations in foreign currencies, interest rates and electricity prices. The Companies do not hold or issue financial derivative instruments for trading purposes. If derivative transactions are used as hedges and meet certain hedging criteria, the Companies use the deferred hedge accounting method.

In addition, with regard to interest rate swap transactions that meet the criteria, the exceptional method has been adopted. And, with regard to interest rate and currency swap transactions that meet the criteria, the unified method (the exceptional method, the allocation method) has been adopted. Using these methods, the Companies do not account for gains and losses on those interest rate swap transactions on a fair value basis, but recognize the interest on an accrual basis.

The Companies compare the total change in cash flow or rate fluctuation of hedging instruments and those of hedged items every half year and evaluate the hedge effectiveness based on the differences.

(5) Amortization of goodwill

Goodwill is amortized using the straight-line method over a reasonably determined period on individual basis.

(6) Inventories

Inventories are stated at the lower of weighted-average cost or net realizable value.

(7) Depreciation and amortization

The Companies compute depreciation using the straight-line method for buildings (excluding leasehold improvements and auxiliary facilities attached to buildings) which have been acquired on or after April 1, 1998 and facilities attached to buildings and structures which have been acquired on or after April 1, 2016.

The Companies compute depreciation mainly using the declining-balance method for property, plant and equipment other than those described above. Foreign consolidated subsidiaries compute depreciation mainly using the straight-line method.

Amortization of capitalized software costs for internal use is computed by the straight-line method based on the useful life estimated to be mainly 5 years. Amortization of other intangible assets is computed by the straight-line method.

(8) Research and development costs

Research and development costs are charged to profit or loss as incurred.

(9) Allowance for doubtful accounts

Allowance for doubtful accounts is provided at an amount based on past loss experience plus the amount estimated to be uncollectible based on an assessment of certain individual accounts.

(10) Provision for bonuses

Provision for employees bonuses is provided at the estimated amount of bonuses to be paid to the employees in the following year.

(11) Provision for directors' bonuses

Provision for directors bonuses is provided at the estimated amount of bonuses to be paid to the directors and corporate auditors employees in the following year.

(12) Accrued directors' and corporate auditors' retirement benefits

Certain consolidated subsidiaries provide for lump-sum payments to retiring directors and corporate auditors based on internal rules.

(13) Provision for loss on guarantees

To provide for losses on guarantees, the Company makes a provision for potential losses at the end of the fiscal year.

(14) Provision for environmental measures

Reserve for environmental measures for obligatory PCB treatment in Japan and removing soil pollution on overseas steel-making plants is stated as the estimated cost at the end of the fiscal year.

(15) Accounting methods for employees' retirement benefits

In the calculation of retirement benefit obligations, the estimated amount of retirement benefits is attributed to the consolidated fiscal year using the benefit formula basis.

Actuarial gains and losses are posted in expenses after the consolidated fiscal year of accrual by the straight-line method over a period of mainly 10 years, which is within the average remaining service years of the employees.

Providing for lump-sum payments to retiring executive officers is calculated based on internal rules.

In the calculation of net defined benefit liabilities and retirement benefits expenses, certain consolidated subsidiaries adopt a simplified method that regards the benefits payable assuming the voluntary retirement of all employees at the fiscal year-end as retirement benefit obligations.

(16) Income taxes

The asset-liability method is used to recognize deferred tax assets and liabilities for the expected future tax consequences of temporary differences between the carrying amounts of assets and liabilities and their tax basis.

(17) Revenue recognition

Sales are generally recognized at the time the goods are delivered or shipped to customers.

(18) Net income and cash dividends per share

Net income per share is computed by dividing net income available for distribution to shareholders of common stock by the weighted-average number of shares of common stock outstanding during the year. Diluted net income per share is not disclosed because potentially dilutive securities are not issued.

Cash dividends per share shown for each year in the consolidated statements of income represent dividends declared as applicable to the respective years rather than those paid during the years.

(19) Cash and cash equivalents

Cash and cash equivalents in the consolidated statements of cash flows consists of cash on hand, bank deposits able to be withdrawn on demand and short-term investments with an original maturity of three months or less and which represent a minor risk of fluctuations in value.

(20) Consumption tax

In Japan, a consumption tax, with certain exemptions, is imposed on the domestic consumption of goods and services at the rate of 8%. The consumption tax imposed on the Company and its domestic subsidiaries' sales to customers is withheld at the time of sale and is subsequently paid to the national government. The

consumption tax withheld upon sale is not included in the amount of "net sales" in the consolidated statements of income but is recorded as a liability. The consumption tax imposed on the purchases of products, merchandise and services from vendors borne by the Company and its domestic subsidiaries is not included in costs or expenses but is recorded as an asset. The balance of consumption tax withheld, net of consumption tax paid, is included in "Other current liabilities" in the consolidated balance sheets.

(21) Reclassifications and restatement

Certain prior year amounts have been reclassified to conform to the current year presentation.

(22) Standards and guidance not yet adopted

The followings were issued but not yet adopted.

(The Company and its domestic subsidiaries)

(a) "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 above standard and guidance provide comprehensive principles for revenue recognition. Under the standard and guidance, revenue is recognized by applying the following 5 steps.

Step 1: Identify contracts with customers.

Step 2: Identify the performance obligations in the contract.

Step 3: Determine the transaction price.

Step 4: Allocate the transaction price to the performance obligations in the contract.

Step 5: Recognize revenue when the entity satisfies a performance obligation.

2. Effective date

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

3. Effects of the application of the standards

The Company and its consolidated subsidiaries are in the process of determining the effects of these new standard and guidance on the consolidated financial statements.

(Subsidiaries in foreign countries)

(b) "Leases" (IFRS 16)

1. Overview

This accounting standard requires lessees to recognize most leases on the balance sheet, thereby resulting in the recognition of lease assets and liabilities.

2. Effective date

Effective from the beginning of the fiscal year ending March 31, 2020.

3. Effects of the application of the standard

The foreign consolidated subsidiaries are in the process of determining the effects of this new standard on the consolidated financial statements.

(23) Changes in presentation method

(Changes due to adoption of "Partial Amendments to Accounting Standard for Tax Effect Accounting")

Upon application of "Partial Amendments to Accounting Standard for Tax Effect Accounting" (ASBJ Statement No. 28, February 16, 2018 (hereinafter, "Statement No. 28")) from the beginning of the current fiscal year, the Company and its domestic subsidiaries changed the presentation and related notes of deferred tax assets and deferred tax liabilities, such that deferred tax assets and deferred tax liabilities are classified as part of "investments and other assets" and "long-term liabilities", respectively. As a result, ¥1,444 million of deferred tax assets classified as "current assets" and ¥1,143 million of deferred tax liabilities classified as "long-term liabilities" have been included in deferred tax assets (¥476 million) in "investments and other assets", and deferred tax liabilities classified as "long-term liabilities" have been restated to ¥943 million in the balance sheet as of the end of the previous fiscal year. The notes related to tax effect accounting additionally included those described in notes 8 (excluding the total amount of valuation reserves) and 9 of "Accounting Standard for Tax Effect Accounting", which are required in paragraphs 3 to 5 of Statement No. 28. However, this additional information corresponding to the previous fiscal year is not disclosed, in accordance with the transitional treatments prescribed in paragraph 7 of Statement No. 28.

3. U.S. Dollar Amounts

The translations of Japanese yen amounts into U.S. dollar amounts are included solely for the convenience of readers outside Japan. These translations should not be construed as representations that the Japanese yen amounts actually represent or have been or could be converted into U.S. dollars. The rate of ¥111.00 to U.S. \$1.00, the approximate rate of exchange as at March 31, 2019, has been used for these translations.

4. Consolidated Statements of Comprehensive Income

Amounts reclassified to net income in the current period that were recognized in other comprehensive income in the current or previous periods and the tax effects for each component of other comprehensive income are as follows:

	Millions of yen		Thousands of U.S. dollars
	2018	2019	2019
Valuation difference on available-for-sale securities			
Increase (decrease) during the year	¥ 107	¥ (1,835)	\$ (16,533)
Reclassification adjustments	(40)	(30)	(273)
Subtotal, before tax	67	(1,865)	(16,806)
Tax (expense)	(125)	524	4,726
Subtotal, net of tax	(58)	(1,341)	(12,080)
Deferred gains on hedges			
Increase (decrease) during the year	6	—	—
Adjustments for acquisition cost of assets	4	—	—
Subtotal	10	—	—
Foreign currency translation adjustments			
Increase (decrease) during the year	190	(720)	(6,482)
Remeasurements of defined benefit plans			
Increase during the year	200	(2,550)	(22,974)
Reclassification adjustments	240	(127)	(1,148)
Subtotal, before tax	440	(2,677)	(24,122)
Tax (expense)	(135)	819	7,381
Subtotal, net of tax	305	(1,858)	(16,741)
Share of other comprehensive income of affiliates accounted for by the equity method			
Increase (decrease) during the year	34	(116)	(1,046)
Reclassification adjustments	—	(305)	(2,751)
Subtotal	34	(421)	(3,797)
Total other comprehensive income	¥ 481	¥ (4,340)	\$ (39,100)

5. Financial Instruments

(1) Status of financial instruments

The Companies procure funds required by our business plans through bank loans and bonds payable, and temporary surplus funds are invested in short-term bank deposits, etc., with low probability of loss of principal. The Companies use derivative transactions mainly to hedge foreign currency, interest rate and electricity price fluctuation risk and limit the amount to actual demand.

Notes and accounts receivable are exposed to the credit risk of customers. In order to reduce such risk, the Companies regularly monitor the maturity dates and balances of receivables of all customers' accounts and evaluate the credit risk of its main customers arising from the deterioration of their financial situation, etc., according to Company regulations. Notes and accounts receivable denominated in foreign currencies are exposed to exchange rate risks. The Companies reduce such risks by settling both notes and accounts receivable and notes and accounts payable with the same foreign currencies.

Investments in securities, which are mainly shares in companies that have business relationships with the Companies, are exposed to market price risks. The Companies regularly review the fair value of the securities and the financial position of the companies and revise their portfolios taking into consideration their relationships with the Companies.

Notes and accounts payable are paid within one year. Notes and accounts payable denominated in foreign currencies arising from the import of raw materials, etc., are exposed to exchange rate risks. The Companies reduce such risks by settling both notes and accounts receivable and notes and accounts payable with the same foreign currencies.

Bank loans and bonds payable are primarily for funding related to operating and investing activities. Bank loans with variable interest rates are exposed to foreign currency and interest rate fluctuation risks. The Companies reduce such risks with long-term loans in foreign currency and interest rate swap contracts.

As to derivative transactions, certain foreign subsidiaries have conducted forward exchange contracts to cope with the foreign currency

fluctuation risk arising from foreign currency business transactions and commodity futures contracts to cope with the fluctuation risk of electricity prices.

The Companies have established regulations which stipulate the authorization and management of derivative transactions. See Note 2 (4), "Derivative transactions and hedge accounting." Notes and accounts payable and bank loans are exposed to liquidity risks. The Companies reduce such risks by making monthly cash flow plans. In addition, the Company has commitment line contracts in preparation for contingencies.

The fair values of financial instruments include values based on market price and values obtained by reasonable estimates when the financial instruments do not have a market price. Since certain assumptions are necessary for the calculation of such values, the values may change when different assumptions are adopted.

(2) Fair values of financial instruments

Book values and fair values of the financial instruments on the consolidated balance sheet as of March 31, 2018 are set forth in the table below. Certain financial instruments were excluded from the table as the fair values were not available (see Note 2 below).

	Millions of yen		
	Book value	Fair value	Difference
(1) Cash and bank deposits	¥ 15,694	¥ 15,694	¥ —
(2) Notes and accounts receivable-trade	55,243	55,243	—
(3) Shares in parent company	—	—	—
(4) Investments in securities			
Available-for-sale securities	8,978	8,978	—
(5) Notes and accounts payable-trade	(18,376)	(18,376)	—
(6) Short-term loans (Including current portion of long-term loans payable)	(11,869)	(11,869)	—
(7) Bonds payable	(10,000)	(9,992)	8
(8) Long-term loans	(19,241)	(19,236)	5
(9) Derivative transactions			
① Hedge accounting is not applied	(7)	(7)	—
② Hedge accounting is applied	—	—	—

(※) The debt is displayed by ().

Book values and fair values of the financial instruments on the consolidated balance sheet as of March 31, 2019 are set forth in the table below. Certain financial instruments were excluded from the table as the fair values were not available (see Note 2 below).

	Millions of yen			Thousands of U.S. dollars		
	Book value	Fair value	Difference	Book value	Fair value	Difference
(1) Cash and bank deposits	¥ 22,385	¥ 22,385	¥ —	\$ 201,668	\$ 201,668	\$ —
(2) Notes and accounts receivable-trade	75,202	75,202	—	677,494	677,494	—
(3) Shares in parent company	1,128	1,128	—	10,160	10,160	—
(4) Investments in securities						
Available-for-sale securities	5,924	5,924	—	53,367	53,367	—
(5) Notes and accounts payable-trade	(39,000)	(39,000)	—	(351,355)	(351,355)	—
(6) Short-term loans (Including current portion of long-term loans payable)	(52,844)	(52,844)	—	(476,063)	(476,063)	—
(7) Bonds payable	(10,000)	(10,041)	△41	(90,090)	(90,459)	△369
(8) Long-term loans	(20,512)	(20,498)	14	(184,789)	(184,664)	125
(9) Derivative transactions						
① Hedge accounting is not applied	39	39	—	348	348	—
② Hedge accounting is applied	1,247	1,247	—	11,235	11,235	—

(※) The debt is displayed by ().

1. Methods used to estimate fair values of financial instruments and matters about investments in securities and derivative transactions.

(1) Cash and bank deposits and (2) Notes and accounts receivable-trade

The book value approximates the fair value because of the short-term maturities of these instruments.

(3) Shares in parent company and (4) Investments in securities

Market prices and quoted prices are used for equity securities.

See Note 6, "Securities."

(5) Notes and accounts payable-trade and (6) Short-term loans (Including current portion of long-term loans payable)

The book value approximates the fair value because of the short-term maturities of these instruments.

Short-term loans payable include the current portion of long-term loans.

(7) Bonds payable

The fair value of bonds payable is valued at the market price.

(8) Long-term loans

The discounted cash flow method is used to estimate the fair value of long-term loans by using marginal borrowing rates as the discount rate.

(9) Derivative transactions

See Note 22, "Derivatives."

2. Non-marketable securities whose fair values were not available were excluded from investments in securities above. These instruments as of March 31, 2018 were 2019 were as follows:

	Millions of yen			Thousands of U.S. dollars
	2018	2019	2019	
Shares of subsidiaries and associates	¥ 2,027	¥ 681	\$ 6,132	
Other securities	327	554	4,998	

3. The aggregate maturities subsequent to March 31, 2018 for financial assets with maturities were as follows:

	Millions of yen			
	Within 1 year	1 year or more but within 5 years	5 years or more but within 10 years	10 years or more
Cash and bank deposits	¥ 15,694	¥ —	¥ —	¥ —
Notes and accounts receivable-trade	55,243	—	—	—
Total	¥ 70,937	¥ —	¥ —	¥ —

The aggregate maturities subsequent to March 31, 2019 for financial assets with maturities were as follows:

	Millions of yen			
	Within 1 year	1 year or more but within 5 years	5 years or more but within 10 years	10 years or more
Cash and bank deposits	¥ 22,385	¥ —	¥ —	¥ —
Notes and accounts receivable-trade	75,202	—	—	—
Total	¥ 97,587	¥ —	¥ —	¥ —

	Thousands of U.S. dollars			
	Within 1 year	1 year or more but within 5 years	5 years or more but within 10 years	10 years or more
Cash and bank deposits	\$ 201,668	\$ —	\$ —	\$ —
Notes and accounts receivable-trade	677,494	—	—	—
Total	\$ 879,162	\$ —	\$ —	\$ —

4. The aggregate maturities subsequent to March 31, 2018 for short-term loans and long-term loans were as follows:

	Millions of yen			
	Within 1 year	1 year or more but within 5 years	5 years or more but within 10 years	10 years or more
Short-term loans (Including current portion of long-term loans payable)	¥ 11,869	¥ —	¥ —	¥ —
Bonds payable	—	—	10,000	—
Long-term loans	—	14,241	5,000	—
Total	¥ 11,869	¥ 14,241	¥ 15,000	¥ —

The aggregate maturities subsequent to March 31, 2019 for short-term loans, bonds payable and long-term loans were as follows:

	Millions of yen			
	Within 1 year	1 year or more but within 5 years	5 years or more but within 10 years	10 years or more
Short-term loans (Including current portion of long-term loans payable)	¥ 52,844	¥ —	¥ —	¥ —
Bonds payable	—	—	10,000	—
Long-term loans	—	20,172	340	—
Total	¥ 52,844	¥ 20,172	¥ 10,340	¥ —

	Thousands of U.S. dollars			
	Within 1 year	1 year or more but within 5 years	5 years or more but within 10 years	10 years or more
Short-term loans (Including current portion of long-term loans payable)	\$ 476,063	\$ —	\$ —	\$ —
Bonds payable	—	—	90,090	—
Long-term loans	—	181,729	3,060	—
Total	\$ 476,063	\$ 181,729	\$ 93,150	\$ —

6. Securities

1. The aggregate acquisition costs and fair values (book values) of marketable securities classified as available-for-sale securities as of March 31, 2018 and 2019 were as follows:

	Millions of yen			Thousands of U.S. dollars		
	2018	2019	2019	2018	2019	2019
	Acquisition cost	Fair value (book value)	Unrealized gain (loss)	Acquisition cost	Fair value (book value)	Unrealized gain (loss)
Securities whose book value exceeds acquisition cost:						
Stock	¥ 2,853	¥ 7,498	¥ 4,645	¥ 2,704	¥ 5,725	¥ 3,021
				\$ 24,360	\$ 51,574	\$ 27,214
Securities whose acquisition cost exceeds book value:						
Stock	1,650	1,480	(170)	1,738	1,327	(411)
Total	¥ 4,503	¥ 8,978	¥ 4,475	¥ 4,442	¥ 7,052	¥ 2,610
				\$ 40,019	\$ 63,527	\$ 23,508

2. Available-for-sale securities sold in the year ended March 31, 2018 and 2019 were as follows:

	Millions of yen			Thousands of U.S. dollars		
	2018	2019	2019	2018	2019	2019
	Amounts of sales	Realized gains	Realized losses	Amounts of sales	Realized gains	Realized losses
Stock	¥ 54	¥ 40	¥ —	¥ 93	¥ 80	¥ —
				\$ 838	\$ 714	\$ —

3. The Companies recognize impairment loss on available-for-sale securities when the market value declines by more than 50 percent, or the market value declines by more than 30 percent but less than 50 percent and the Companies' management determines the decline to be other than temporary. For available-for-sale securities for which fair values are deemed extremely difficult to assess, when the value of those securities substantially declines, the Companies recognize impairment loss, except for cases in which the future recoverability of the value of those securities is reasonably supported.

Impairment loss on available-for-sale securities recognized for the year ended March 31, 2019 were ¥49 million (\$440 thousand).

7. Inventories

Inventories held by the Companies at March 31, 2018 and 2019 consisted of the following:

	Millions of yen			Thousands of U.S. dollars
	2018	2019	2019	
Merchandise	¥ 1,599	¥ 1,970	\$ 17,746	
Finished products	7,289	24,298	218,904	
Work-in-process	26,487	43,735	394,007	
Raw materials and supplies	15,754	25,489	229,632	
Total	¥ 51,129	¥ 95,492	\$ 860,289	

The amount of inventories written down for the years ended March 31, 2018 and 2019, were ¥658 million and ¥73 million (\$656 thousand) respectively.

8. Unconsolidated Subsidiaries and Affiliates

Items relevant to unconsolidated subsidiaries and affiliates at March 31, 2018 and 2019 were as follows:

	Millions of yen			Thousands of U.S. dollars
	2018	2019	2019	
Investments in securities (stocks)	¥ 2,027	¥ 681	\$ 6,132	

9. Assets Pledged as Collateral

A breakdown of assets pledged as collateral and the related secured liabilities as of March 31, 2018 and 2019 were as follows:

	Millions of yen		Thousands of U.S. dollars
	2018	2019	2019
Assets pledged as collateral:			
Notes and accounts receivable-trade	¥ —	¥ 4,449	\$ 40,084
Inventories	—	4,172	37,581
Land	—	3,595	32,384
Buildings and structures	—	1,083	9,756
Machinery and equipment	—	2,467	22,221
Total	¥ —	¥ 15,766	\$ 142,026
Secured liabilities:			
Short-term loans (Including current portion of long-term loans payable)	—	2,261	20,370
Long-term loans	—	1,368	12,325
Total	¥ —	¥ 3,629	\$ 32,695

The assets above were pledged as collateral for bank guarantees in addition to the liabilities above.

10. Accounting for Notes Receivable and Payable and Electronically Recorded Monetary Claims Which Reached the Maturity at Year-end

Notes receivable and payable and electronically recorded monetary claims which reached the maturity at the year-end are treated as if they were settled at the clearing date for notes. Consequently, as March 31, 2018 and 2019 were each a holiday for banking institutions, the following notes receivable and payable and electronically recorded monetary claims which reached the maturity at the year-end were included in the ending balance of notes receivable and payable and electronically recorded monetary claims:

	Millions of yen		Thousands of U.S. dollars
	2018	2019	2019
Notes receivable	¥ 1,118	¥ 1,084	\$ 9,763
Electronically recorded monetary claims	237	424	3,822
Notes payable	100	86	772

11. Short-term Loans, Bonds Payable and Long-term Loans

Short-term loans at March 31, 2018 and 2019 represent bank overdrafts with weighted-average interest rates of 0.34% and 0.76%, respectively. In business in Japan, it is customary for short-term borrowings to be rolled over every year. For short-term financing, the Companies have commitment line contract arrangements with several financial institutions for an aggregate maximum amount of ¥21,270 million (\$191,622 thousand). At March 31 2019, the total ¥21,270 million (\$191,622 thousand) was unused.

Bonds payable at March 31, 2018 and 2019 consisted of the following:

	Millions of yen		Thousands of U.S. dollars
	2018	2019	2019
Bonds payable due 2025 with interest rates of 0.30% at March 31, 2018 and 2019	¥ 10,000	¥ 10,000	\$ 90,090

The annual maturities of bonds payable outstanding at March 31, 2019 were as follows:

Year ending at March 31,	Millions of yen	Thousands of U.S. dollars
2025 and thereafter	¥ 10,000	\$ 90,090

Long-term loans at March 31, 2018 and 2019 consisted of the following:

	Millions of yen		Thousands of U.S. dollars
	2018	2019	2019
Loans from banks and other financial institutions due 2019 to 2024 with interest rates ranging from 0.13% to 0.79% at March 31, 2018 and due 2020 to 2024 with interest rates ranging from 0.13% to 9.85% at March 31, 2019	¥ 24,089	¥ 20,597	\$ 185,561
Other payables due 2019 to 2022 with interest rate of 4.05% at March 31, 2018 and due 2020 to 2022 with interest rates of 4.05% at March 31, 2019	27	13	106
	24,116	20,610	185,667
Less: Current portion of long-term loans	(4,875)	(98)	(878)
	¥ 19,241	¥ 20,512	\$ 184,789

The annual maturities of long-term loans outstanding at March 31, 2019 were as follows:

Year ending at March 31,	Millions of yen	Thousands of U.S. dollars
2021	¥ 3,054	\$ 27,514
2022	11,211	100,996
2023	575	5,183
2024	5,332	48,036
2025 and thereafter	340	3,060
	¥ 20,512	\$ 184,789

12. Retirement Benefits

The Company has funded defined benefit corporate pension plans and lump-sum payment plans and defined contribution pension plans for employee retirement benefits. The domestic consolidated subsidiaries have similar plans.

The defined benefit corporate pension plans provide lump-sum payments or pension benefits based on salary and length of service. These plans set up retirement benefit trusts.

As a result of setting up retirement benefit trusts, some severance indemnity plans are funded and make lump-sum payments based on salary and length of service as retirement benefits.

Certain overseas consolidated subsidiaries have funded or unfunded defined benefit pension plans and defined contribution pension plans for employee retirement benefits.

The defined benefit pension plans of certain consolidated subsidiaries calculate net defined benefit liabilities and retirement benefit costs by the simplified method.

Defined benefit plans

(1) Movements in retirement benefit obligations, except plans applying the simplified method:

	Millions of yen		Thousands of U.S. dollars
	2018	2019	2019
Balance at beginning of year	¥ 7,072	¥ 7,341	\$ 66,136
Service cost	458	491	4,425
Interest cost	9	18	163
Actuarial gain	62	104	940
Benefits paid	(260)	(329)	(2,963)
Increase from newly consolidated subsidiaries	—	11,450	103,150
Other	(0)	(3)	(32)
Balance at end of year	¥ 7,341	¥ 19,072	\$ 171,819

(2) Movements in plan assets, except plans applying the simplified method:

	Millions of yen		Thousands of
	2018	2019	U.S. dollars
Balance at beginning of year	¥ 12,699	¥ 12,907	\$ 116,283
Expected return on plan assets	205	228	2,051
Actuarial gain (loss)	258	(2,446)	(22,033)
Contributions paid by employer	4	3	31
Benefits paid	(258)	(308)	(2,778)
Increase from newly consolidated subsidiaries	—	1,037	9,342
Other	(1)	(3)	(28)
Balance at end of year	¥ 12,907	¥ 11,418	\$ 102,868

(3) Movements in liability for retirement benefits of defined benefit plans applying the simplified method:

	Millions of yen		Thousands of
	2018	2019	U.S. dollars
Balance at beginning of year	¥ 621	¥ 751	\$ 6,765
Retirement benefit costs	160	158	1,426
Benefits paid	(57)	(75)	(679)
Others	27	(13)	(111)
Balance at end of year	¥ 751	¥ 821	\$ 7,401

(4) Reconciliation from retirement benefit obligations and plan assets to liability (asset) for retirement benefits:

	Millions of yen		Thousands of
	2018	2019	U.S. dollars
Funded retirement benefit obligations	¥ 7,341	¥ 19,072	\$ 171,819
Plan assets	(12,907)	(11,418)	(102,868)
	(5,566)	7,654	68,951
Unfunded retirement benefit obligations	750	821	7,401
Total net liability (asset) for retirement benefits at end of year	(4,816)	8,475	76,352
Net defined benefit liabilities	762	11,266	101,495
Net defined benefit assets	(5,578)	(2,791)	(25,143)
Total net liability (asset) for retirement benefits at end of year	¥ (4,816)	¥ 8,475	\$ 76,352

(5) Retirement benefit costs:

	Millions of yen		Thousands of
	2018	2019	U.S. dollars
Service cost	¥ 458	¥ 491	\$ 4,425
Interest cost	9	18	163
Expected return on plan assets	(205)	(228)	(2,051)
Net actuarial gain (loss) amortization	244	(127)	(1,147)
Retirement benefit costs based on the simplified method	160	158	1,426
Total retirement benefit costs	¥ 666	¥ 312	\$ 2,816

(6) Remeasurements of defined benefit plans:

	Millions of yen		Thousands of
	2018	2019	U.S. dollars
Actuarial gain (loss)	¥ 440	¥ (2,677)	\$ (24,122)

(7) Accumulated remeasurements of defined benefit plans:

	Millions of yen		Thousands of
	2018	2019	U.S. dollars
Actuarial losses that are yet to be unrecognized	¥ (2,779)	¥ (102)	\$ (918)

(8) Plan assets:

① Plan assets comprise:

	2018	2019
Equity securities	83%	76%
Cash and bank deposits	16%	18%
Other	1%	6%
Total	100%	100%

Assets in retirement benefit trusts account for 9% of total plan assets at March 31, 2018 and 2019.

② Long-term expected rate of return

Current and target asset allocations and historical and expected returns on various categories of plan assets have been considered in determining the long-term expected rate of return.

(9) Actuarial assumptions

The principal actuarial assumptions at March 31, 2018 and 2019 were as follows:

	2018	2019
Discount rate	0.1%	mainly 0.0%, 2.7%
Long-term expected rate of return	1.6%	mainly 1.7%, 2.4%
Expected rate of pay increase	—	3.0%

Mainly certain foreign consolidated subsidiaries use the expected rate of pay increase.

The Companies do not describe the expected rate of pay increase because they, other than certain foreign consolidated subsidiaries, mainly adopt a point basis and the effect on the calculation of retirement benefit obligations is immaterial.

Defined contribution plans

The Company and certain consolidated subsidiaries have contributed a total of ¥171 million and ¥202 million (\$1,820 thousand) to the defined contribution plans for the years ended March 31, 2018 and 2019, respectively.

13. Income Taxes

1. Significant components of deferred tax assets and liabilities at March 31, 2018 and 2019 were as follows:

	Millions of yen		Thousands of U.S. dollars
	2018	2019	2019
Deferred tax assets:			
Tax loss carry forwards	¥ 357	¥ 2,531	\$ 22,800
Amortization of transition obligations corresponding to contribution of certain marketable securities to employee retirement benefit trusts	2,089	2,089	18,819
Net defined benefit liabilities	301	1,502	13,529
Devaluation loss on marketable securities	870	850	7,655
Accrued bonuses	668	685	6,169
Gain on investment of certain marketable securities to employee retirement benefit trusts	645	637	5,735
Unrealized gains	197	361	3,257
Devaluation loss on inventories	230	272	2,455
Business tax payable	129	248	2,231
Excess depreciation of depreciable assets	129	102	921
Other	486	280	2,527
Gross deferred tax assets	6,101	9,557	86,098
Valuation allowance for tax loss carry forwards	—	(2,150)	(19,370)
Valuation allowance for deductible temporary differences	—	(980)	(8,824)
Less: Valuation allowance	(1,508)	(3,130)	(28,194)
Total deferred tax assets	¥ 4,593	¥ 6,427	\$ 57,904
Deferred tax liabilities:			
Depreciation, etc. of foreign subsidiaries	¥ —	¥ (2,795)	\$ (25,180)
Adjustment of carrying amount based on fair value	—	(2,404)	(21,656)
Securities to employee retirement benefit trusts	(1,110)	(1,110)	(10,001)
Reserve for deferred capital gains from property, plant and equipment	(923)	(900)	(8,112)
Net defined benefit assets	(1,707)	(850)	(7,654)
Unrealized holding gains on securities	(956)	(432)	(3,888)
Other	(365)	(667)	(6,016)
Total deferred tax liabilities	(5,061)	(9,158)	(82,507)
Net deferred tax assets (liabilities)	¥ (468)	¥ (2,731)	\$ (24,603)

1. Valuation allowance increased by ¥1,622 million (\$14,608 thousand) because subsidiaries (Ovako Group and Mahindra Sanyo Special Steel Pvt. Ltd.) recognized valuation allowance for tax loss carry forwards in the current fiscal year.

2. Tax loss carry forwards and their deferred tax assets by expiration periods at March 31, 2019 were as follows:

	Millions of yen						
	2020	2021	2022	2023	2024	2025 and beyond	total
Tax loss carry forwards (a)	¥ 2	¥ 21	¥ 212	¥ 256	¥ 303	¥ 1,737	¥ 2,531
Valuation allowance	(2)	(21)	(212)	(256)	(303)	(1,356)	(2,150)
Net deferred tax assets	¥ —	¥ —	¥ —	¥ —	¥ —	¥ 381	¥ 381

	Thousands of U.S. dollars						
	2020	2021	2022	2023	2024	2025 and beyond	total
Tax loss carry forwards (a)	\$ 14	\$ 192	\$ 1,906	\$ 2,309	\$ 2,730	\$ 15,649	\$ 22,800
Valuation allowance	(14)	(192)	(1,906)	(2,309)	(2,730)	(12,219)	(19,370)
Net deferred tax assets	\$ —	\$ —	\$ —	\$ —	\$ —	\$ 3,430	\$ 3,430

(a) Tax loss carry forwards shown in the table above is after multiplying by the statutory income tax rate.

2. The reconciliation between the statutory income tax rate and the effective income tax rate for the year ended March 31, 2019 was as follows:

Statutory income tax rate	30.6%
Add (deduct)	
Non-deductible expenses, including entertainment expenses	0.4
Non-taxable income, including dividend income	(0.2)
Equalization tax	0.2
Decrease in valuation allowance	(2.3)
Effect of special tax credits	(2.1)
Subsidiary deficit - not appropriated deferred tax assets	3.7
Gain on step acquisitions	(4.3)
Costs for obtainment of shares	1.7
Amortization of goodwill	0.9
Other	(0.2)
Effective income tax rate	28.4%

The reconciliation between the statutory income tax rate and the effective income tax rate for the year ended March 31, 2018 was not required to be disclosed due to the insignificance of the difference.

14. Net Assets

Under the Japanese Corporate Law (the "Law"), the entire amount of the issue price of new shares is required to be accounted for as common stock. However, a company may, by a resolution of the Board of Directors, account for an amount not exceeding 50% of the issue price of the new shares as additional paid-in capital, which is included in capital surplus. However, an increase resulting from a share exchange can be included in capital surplus up to the full amount.

The Law provides that the smaller of an amount equal to 10% of the dividend or the excess, if any, of 25% of common stock 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, in cases in which a dividend distribution of surplus is made.

Under the Law, additional paid-in capital may be used to eliminate or reduce a deficit or may be capitalized by a resolution of the shareholders' meeting, and legal earnings reserve may be used to eliminate or reduce a deficit by a resolution of the shareholders' meeting. Legal earnings reserve is included in retained earnings in the accompanying financial statements.

Additional paid-in capital and legal earnings reserve may not be distributed as dividends. Under the Law, however, 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 that a company can distribute as dividends is calculated based on its non-consolidated financial statements in accordance with the Law.

At the Company's Board of Directors meeting held on May 16, 2018, the directors approved cash dividends in the amount of ¥805 million. At the Company's Board of Directors meeting held on October 31, 2018, the directors approved cash dividends in the amount of ¥1,450 million. At the Company's Board of Directors meeting held on May 17, 2019, the directors approved cash dividends in the amount of ¥1,349 million (\$12,157 thousand).

15. Research and Development Costs

Research and development costs charged to manufacturing costs and selling, general and administrative expenses for the years ended March 31, 2018 and 2019 totaled ¥1,717 million and ¥1,773 million (\$15,978 thousand), respectively. For the year ended March 31, 2019, research and development cost in the Specialty Steel, Metal Powder and Formed & Fabricated Materials segments amounted to ¥1,072 million (\$9,653 thousand), ¥665 million (\$5,991 thousand) and ¥37 million (\$334 thousand), respectively.

16. Selling, General and Administrative Expenses

The main components of selling, general and administrative expenses for the years ended March 31, 2018 and 2019 were as follows:

	Millions of yen		Thousands of U.S. dollars
	2018	2019	2019
Packing and delivery expenses	¥ 6,016	¥ 6,482	\$ 58,396
Salaries	3,586	4,042	36,415
Provision of allowance for doubtful accounts	0	3	23
Provision for bonuses	508	534	4,814
Provision for directors' bonuses	91	98	882
Retirement benefit expenses	320	141	1,268
Provision for directors' retirement benefits	17	16	142

17. Loss on Sale and Disposition of Property, Plant and Equipment

The components of loss on sale and disposition of property, plant and equipment for the years ended March 31, 2018 and 2019 were as follows:

	Millions of yen		Thousands of U.S. dollars
	2018	2019	2019
Buildings and structures	¥ 4	¥ 44	\$ 395
Machinery and equipment	163	201	1,808
Others	273	307	2,769
Total	¥ 440	¥ 552	\$ 4,972

18. Net Income Per Share

Net income per share for the years ended March 31, 2018 and 2019 were as follows:

	Millions of yen		Thousands of U.S. dollars
	2018	2019	2019
Net income attributable to owners of the parent	¥ 7,034	¥ 7,721	\$ 69,562
Net income of common stock attributable to owners of the parent	¥ 7,034	¥ 7,721	\$ 69,562

	Thousands of shares		U.S. dollars
	2018	2019	
Weighted-average number of shares of common stock	32,217	32,477	

	Yen		U.S. dollars
	2018	2019	2019
Net income per share	¥ 218.34	¥ 237.75	\$ 2.14

The Companies had no dilutive securities for the years ended March 31, 2018 and 2019.

The Company carried out a share consolidation at the ratio of 5 shares to 1 share effective October 1, 2017. Accordingly, net income per share have been recalculated on the assumption that the share consolidation took place at the beginning of the year ended March 31, 2018.

19. Cash and Cash Equivalents

Cash and cash equivalents at March 31, 2018 and 2019 consisted of the following:

	Millions of yen		Thousands of U.S. dollars
	2018	2019	2019
Cash and bank deposits	¥ 15,694	¥ 22,385	\$ 201,668
Time deposits with deposit terms of over 3 months and other	(1,396)	(593)	(5,342)
Cash and cash equivalents	¥ 14,298	¥ 21,792	\$ 196,326

20. Assets and liabilities of newly consolidated subsidiaries through acquisition of shares

Assets and liabilities of acquired companies (Triako Holdco AB and its subsidiaries), the acquisition cost of shares and net cash outflow for the acquisition for the year ended March 31, 2019 were as follows:

	Millions of yen		Thousands of U.S. dollars
	2019	2019	2019
Current assets	¥ 63,507		\$ 572,137
Non-current assets	40,284		362,923
Goodwill	40,671		366,404
Current liabilities	(66,375)		(597,977)
Long-term liabilities	(15,247)		(137,361)
Acquisition cost of newly consolidated subsidiaries	62,840		566,126
Adjustment amount of acquisition cost of newly consolidated subsidiaries	4,395		39,595
Cash and cash equivalents held by newly consolidated subsidiaries at acquisition	(8,960)		(80,717)
Net cash used for the acquisition	¥ 58,275		\$ 525,004

The value of assets and liabilities for the other that was newly consolidated as a result of the acquisition of shares is not significant, and has therefore been omitted.

21. Accounting for Leases

Non-cancelable operating leases

As a lessee

Outstanding future lease payments under non-cancelable operating leases at March 31, 2018 and 2019 were as follows:

	Millions of yen		Thousands of U.S. dollars
	2018	2019	2019
Due within one year	¥ 81	¥ 1,174	\$ 10,580
Due after one year	41	2,160	19,455
Total	¥ 122	¥ 3,334	\$ 30,035

22. Derivatives

(1) Derivative transactions to which hedge accounting was not applied

Currency-related transactions

The contracted amount, fair value and unrealized gain (loss) of forward exchange contracts recognized for the year ended March 31, 2018 were as follows:

	Millions of yen		
	Contracted amount	Fair value	Unrealized gain (loss)
Forward exchange contracts:			
Buying			
U.S. dollars	¥ 106	¥ (1)	¥ (1)
Japanese yen	317	(6)	(6)
Total	¥ 423	¥ (7)	¥ (7)

The contracted amount, fair value and unrealized gain (loss) of forward exchange contracts recognized for the year ended March 31, 2019 were as follows:

	Millions of yen				Thousands of U.S. dollars			
	Contract amount	Contract amount after one year	Fair value	Unrealized gain (loss)	Contract amount	Contract amount after one year	Fair value	Unrealized gain (loss)
Forward exchange contracts:								
Buying								
U.S. dollars	¥ 269	¥ 4	¥ 29	¥ 29	\$ 2,424	\$ 34	\$ 256	\$ 256
Japanese yen	202	—	3	3	1,824	—	30	30
Selling								
U.S. dollars	1	—	1	1	5	—	10	10
Euro	3	—	6	6	27	—	52	52
Total	¥ 475	¥ 4	¥ 39	¥ 39	\$ 4,280	\$ 34	\$ 348	\$ 348

(2) Derivative transactions to which hedge accounting was applied

Derivative transactions to which hedge accounting was applied for the years ended March 31, 2018 and 2019 were as follows:

① Currency-related transactions

	2018	2019
Method of hedge accounting	—	Principle method
Type of derivative transactions	—	Forward exchange contracts Selling Euro
The main hedged items	—	Accounts payable-trade
Contract amount	—	¥22,544 million (\$203,102 thousand)
1 year or more amount of contract	—	¥5,842 million (\$52,635 thousand)
Fair value	—	¥(55)million (\$499 thousand)

② Interest rate swap transactions

	2018	2019
Method of hedge accounting	Exceptional method for interest rate swap transactions	—
Type of derivative transactions	Interest rate swap transactions Payment fixed, receipt floating	—
The main hedged items	Long-term loans	—
Contract amount	¥2,660 million	—
1 year or more amount of contract	—	—
Fair value	※	—

※ Because interest rate swap transactions accounted for by the exceptional method are managed together with long-term loans that are the hedged items, the fair value is included in the fair value of the long-term loans.

③ Interest rate and currency swap transactions

	2018	2019
Method of hedge accounting	Unified method of interest rate and currency swap transactions	Unified method of interest rate and currency swap transactions
Type of derivative transactions	Interest rate and currency swap transactions Payment fixed, receipt floating Receive floating US\$ and pay fixed yen	Interest rate and currency swap transactions Payment fixed, receipt floating Receive floating US\$ and pay fixed yen
The main hedged items	Long-term loans	Long-term loans
Contract amount	¥2,929 million	¥2,929 million (\$26,387 thousand)
1 year or more amount of contract	¥2,929 million	¥2,929 million (\$26,387 thousand)
Fair value	※	※

※ Because interest rate and currency swap transactions accounted for by the unified method (the exceptional method, the allocation method) are managed together with the long-term loans that are the hedged items, the fair value is included in the fair value of the long-term loans.

④ Other

	2018	2019
Method of hedge accounting	—	Principle method
Type of derivative transactions	—	Commodity futures contract
The main hedged items	—	Electricity
Contract amount	—	¥2,084 million (\$18,772 thousand)
1 year or more amount of contract	—	¥746 million (\$6,724 thousand)
Fair value	—	¥1,302 million (\$11,734 thousand)

23. Contingent Liabilities

Guarantees for loans of employees and others at March 31, 2018 and 2019 were as follows:

	Millions of yen		Thousands of U.S. dollars
	2018	2019	2019
UCHIDA-SATO TECH (THAILAND) CO., LTD.	¥ 2	¥ 4	\$ 32
Employees	2	0	6
Total	¥ 4	¥ 4	\$ 38

24. Segment Information

(1) General information about reportable segments

The Companies' reportable segments are the business units for which the Company is able to obtain separate financial information in order for the Board of Directors to determine the distribution of management resources and evaluate business results. Each operating division develops business activities and establishes comprehensive strategies for domestic and overseas markets according to the products it handles. Therefore, the Companies consist of business segments according to their products based on operating divisions and have determined the reportable segments, as "Specialty Steel," "Metal Powder" and "Formed and Fabricated Materials."

The "Specialty Steel" segment includes the manufacture and sale of various special steel products such as bearing steel, engineering steel, stainless steel, heat resistant steel and tool steel. The "Metal Powder" segment includes the manufacture and sale of metal powder products. The "Formed and Fabricated Materials" segment includes the manufacture and sale of formed and fabricated materials made from special steel bars and tubes.

(2) Accounting methods and basis of measurement for reportable segment profit or loss and other material items

The accounting methods applied to the reportable segments are generally the same as those described in Note 2, "Summary of Significant Accounting Policies," except that inventories are stated at cost to evaluate business results. Segment income is based on operating income. Intersegment transactions are based on market prices.

(3) Information about reportable segment profit or loss and other material items

Segment information for the years ended March 31, 2018 and 2019 was as follows:

	For the year ended March 31, 2018						
	Millions of yen						
	Reportable segments				Total	Adjustments	Consolidated total
Specialty Steel	Metal Powder	Formed and Fabricated Materials	Other				
(a) Sales and operating income:							
Net sales							
Outside customers	¥ 134,028	¥ 4,895	¥ 18,431	¥ 131	¥ 157,485	¥ —	¥ 157,485
Intersegment transactions	7,960	—	—	1,399	9,359	(9,359)	—
Total	141,988	4,895	18,431	1,530	166,844	(9,359)	157,485
Segment income	¥ 9,230	¥ 925	¥ 704	¥ 27	¥ 10,886	¥ 83	¥ 10,969
(b) Other:							
Depreciation	¥ 7,864	¥ 555	¥ 579	¥ 11	¥ 9,009	¥ (17)	¥ 8,992
Amortization of goodwill	—	—	—	—	—	—	—

1. The "Other" category is the information service segment not included in reportable segments.

2. Segment income adjustments are intersegment eliminations.

3. Segment income is adjusted with operating income in the consolidated statements of income.

4. As information about segment assets and liabilities is not used to determine the distribution of management resources or evaluate business results, the Companies are not required to disclose information about segment assets and liabilities.

For the year ended March 31, 2019							
Millions of yen							
Reportable segments							
Specialty Steel	Metal Powder	Formed and Fabricated Materials	Other	Total	Adjustments	Consolidated total	
(a) Sales and operating income:							
Net sales							
Outside customers	¥ 160,803	¥ 4,897	¥ 19,984	¥ 134	¥ 185,818	¥ —	¥ 185,818
Intersegment transactions	9,431	—	—	1,508	10,939	(10,939)	—
Total	170,234	4,897	19,984	1,642	196,757	(10,939)	185,818
Segment income	¥ 8,452	¥ 683	¥ 879	¥ 43	¥ 10,057	¥ 66	¥ 10,123
(b) Other:							
Depreciation	¥ 8,031	¥ 521	¥ 737	¥ 11	¥ 9,300	¥ (20)	¥ 9,280
Amortization of goodwill	305	—	—	—	305	—	305

Thousands of U.S. dollars							
Reportable segments							
Specialty Steel	Metal Powder	Formed and Fabricated Materials	Other	Total	Adjustments	Consolidated total	
(a) Sales and operating income:							
Net sales							
Outside customers	\$ 1,448,677	\$ 44,119	\$ 180,036	\$ 1,205	\$ 1,674,037	\$ —	\$ 1,674,037
Intersegment transactions	\$ 84,965	\$ —	\$ —	\$ 13,582	\$ 98,547	\$ (98,547)	\$ —
Total	1,533,642	44,119	180,036	14,787	1,772,584	(98,547)	1,674,037
Segment income	\$ 76,147	\$ 6,155	\$ 7,921	\$ 384	\$ 90,607	\$ 593	\$ 91,200
(b) Other:							
Depreciation	\$ 72,356	\$ 4,691	\$ 6,644	\$ 95	\$ 83,786	\$ (179)	\$ 83,607
Amortization of goodwill	2,750	—	—	—	2,750	—	2,750

- The "Other" category is the information service segment not included in reportable segments.
- Segment income adjustments are intersegment eliminations.
- Segment income is adjusted with operating income in the consolidated statements of income.
- As information about segment assets and liabilities is not used to determine the distribution of management resources and evaluate business results, the Companies are not required to disclose information about segment assets and liabilities.
- In fiscal year ended March 31, 2019, segment assets of reportable segments were revised to more accurately reflect the operating conditions of the Company. Certain corporate assets that were previously included in Adjustments were allocated to the reportable segments. Segment information for the fiscal year ended March 31, 2018 was restated using this revised calculation method.

(4) Related Information

(a) Segment related information for the year ended March 31, 2018 was as follows:

① Information about products and services

As described in "General information about reportable segments," the Companies are not required to disclose information about products and services.

② Information about geographic areas

1. Net sales

For the year ended March 31, 2018						
Millions of yen						
	Japan	Asia	North America	Europe	Others	Total
Net sales	¥ 116,157	¥ 34,497	¥ 3,931	¥ 2,567	¥ 333	¥ 157,485

2. Property, plant and equipment

As of March 31, 2018						
Millions of yen						
	Japan	Europe(Sweden of Europe)	Asia	North America	Others	Total
Property, plant and equipment	¥ 53,042	¥ —	¥ (—)	¥ 2,904	¥ 0	¥ 3,409
						¥ 59,355

③ Information about major customers

For the year ended March 31, 2018			
	Net sales		Related segment
	Millions of yen		
Marubeni-Itochu Steel Inc.	¥	32,359	Specialty Steel
Mitsui & Co., Ltd.	¥	19,601	Specialty Steel

Segment related information for the year ended March 31, 2019 is as follows:

① Information about products and services

As described in "General information about reportable segments," the Companies are not required to disclose information about products and services.

② Information about geographic areas

1. Net sales

For the year ended March 31, 2019						
Millions of yen						
	Japan	Asia	North America	Europe	Others	Total
Net sales	¥ 128,153	¥ 50,333	¥ 4,287	¥ 2,654	¥ 391	¥ 185,818

Thousands of U.S. dollars						
	Japan	Asia	North America	Europe	Others	Total
Net sales	\$ 1,154,527	\$ 453,452	\$ 38,625	\$ 23,909	\$ 3,524	\$ 1,674,037

2. Property, plant and equipment

As of March 31, 2019						
Millions of yen						
	Japan	Europe(Sweden of Europe)	Asia	North America	Others	Total
Property, plant and equipment	¥ 53,594	¥ 36,006	¥ (29,786)	¥ 10,172	¥ —	¥ 4,075
						¥ 103,847

Thousands of U.S. dollars						
	Japan	Europe(Sweden of Europe)	Asia	North America	Others	Total
Property, plant and equipment	\$ 482,831	\$ 324,377	\$ (268,344)	\$ 91,638	\$ —	\$ 36,708
						\$ 935,554

③ Information about major customers

For the year ended March 31, 2019			
	Net sales		Related segment
	Millions of yen		Thousands of U.S. dollars
Marubeni-Itochu Steel Inc.	¥	36,717	\$ 330,784
Mitsui & Co., Ltd.	¥	21,606	\$ 194,644
			Specialty Steel
			Specialty Steel

(5) Information about the amount of amortization of goodwill and the unamortized amount of goodwill by reportable segments

	As of March 31, 2019						
	Millions of yen						
	Reportable segments				Total	Adjustments	Consolidated total
Specialty Steel	Metal Powder	Formed and Fabricated Materials	Other				
Unamortized amount of goodwill	¥ 42,401	¥ —	¥ —	¥ —	¥ 42,401	¥ —	¥ 42,401

	Thousands of U.S. dollars						
	Reportable segments				Total	Adjustments	Consolidated total
	Specialty Steel	Metal Powder	Formed and Fabricated Materials	Other			
Unamortized amount of goodwill	\$ 381,989	\$ —	\$ —	\$ —	\$ 381,989	\$ —	\$ 381,989

The amount of amortization of goodwill is omitted because the information is disclosed in“(3) Information about reportable segment profit and loss and other material items”.

25. Business Combinations

(1) Business combination by acquisition of shares

(a) Overview of the business combination

① Name of acquired company and description of business

Acquired company: Mahindra Sanyo Special Steel Pvt. Ltd. (“Mahindra Sanyo”)

Business: Production and sales of special steel products

② Reason for the business combination

In order to develop our specialty steel business in India, the Company acquired additional shares of our equity method affiliate Mahindra Sanyo, making it a subsidiary.

③ Date of the business combination

June 21, 2018

④ Legal form of the business combination

Acquisition of shares

⑤ Name of the company after the business combination

Not changed

⑥ Percentage of voting rights acquired

Percentage of voting rights acquired: 22.0%

Percentage of voting rights after acquisition: 51.0%

⑦ Basis for determination of the acquirer

The Company has been determined the acquirer as it has acquired the shares of Mahindra Sanyo for cash consideration.

(b) Period of the business performance of the acquired company included in the consolidated statements of income regarding the consolidated fiscal year

The deemed acquisition date was assumed to be June 30, 2018. The equity method had been applied before the deemed acquisition date.

(c) The acquisition cost of the acquired company and its breakdown by the type of consideration

	Millions of	Millions of	Thousands of
	Indian Rupee	yen	U.S. dollars
Fair value at the date of the business combination of the acquired company’s shares held before the business combination	? 1,485	¥ 2,412	\$ 21,733
Cash paid for additional acquisition	1,463	2,377	21,414
Total Acquisition Cost	? 2,948	¥ 4,789	\$ 43,147

(d) Substance and amount of related acquisition costs

Advisory fees, etc.: ? 14 million (¥22 million, \$199 thousand)

(e) Difference between acquisition cost for acquired company and total acquisition cost for each transaction leading to acquisition

Gain on step acquisitions: ? 898 million (¥1,459 million, \$13,146 thousand)

(f) Amount of goodwill generated, reason for the generation of goodwill and major assets and liabilities received on the date of business combination

① The amount of goodwill: ? 1,288 million (¥2,113 million, \$19,032 thousand)

② The cause: The acquisition cost exceeded the fair value of the net assets acquired on date of the business combination.

③ The amortization method and period: The straight-line method over a period of 5 years

(g) Amounts of assets acquired and liabilities assumed on the date of the business combination and breakdown by major items

	Millions of	Millions of	Thousands of
	Indian Rupee	yen	U.S. dollars
Current assets	? 5,216	¥ 8,555	\$ 77,079
Non-current assets	5,057	8,295	74,730
Total assets	10,274	16,850	151,809
Current liabilities	5,065	8,307	74,839
Long-term liabilities	1,954	3,205	28,878
Total liabilities	? 7,019	¥ 11,512	\$ 103,717

(2) Transaction under common control

(a) Overview of transaction

(1) Overview of the Business Combination

① Name of acquired company and description of business

Acquired company: Triako Holdco AB (The ultimate parent company of Ovako AB)

Business: Production and sales of special steel products

② Reason for the business combination

In order to develop our specialty steel business in the world through the specialty steel market in Europe and reinforce our technology, product of quality and products development along with Ovako AB, the Company obtained shares of Triako Holdco AB which were owned by Nippon Steel corporation.

③ Date of the business combination

March 28, 2019

④ Legal form of the business combination

Acquisition of shares

⑤ Name of the company after the business combination

Not changed

⑥ Percentage of voting rights acquired

Percentage of voting rights acquired: 100%

⑦ Basis for determination of the acquirer

The Company has been determined as the acquirer as it has acquired the shares of Triako Holdco AB for cash consideration.

(b) Period of the business performance of the acquired company included in the consolidated statements of income regarding the consolidated fiscal year

As the deemed acquisition date was assumed to be December 31 2018, only the balance sheet of the acquired company was consolidated.

(c) Acquisition cost of acquired company and breakdown by type of consideration

Consideration for acquisition: Cash in the amount of ¥62,840 million (\$566,126 thousand)

Total acquisition costs are expected to fluctuate by adjustments.

(d) Substance and amount of related acquisition costs

Advisory fees, etc.: ¥603 million (\$5,432 thousand)

(e) Amount of goodwill generated, reason for the generation of goodwill and major assets and liabilities received on the date of business combination

① The amount of goodwill: ¥40,671 million, (\$366,404 thousand)

The amount of goodwill is anticipated fluctuating by adjustments of costs related to the acquisition of shares.

② The cause: The acquisition cost exceeded the net assets acquired on date of the business combination.

③ The amortization method and period: The straight-line method over a period of 15 years.

(f) Amounts of assets acquired and liabilities assumed on the date of the business combination and breakdown by major items

	Millions of Euro	Millions of yen	Thousands of U.S. dollars
Current assets	€ 500	¥ 63,507	\$ 572,137
Non-current assets	317	40,284	362,923
Total assets	817	103,791	935,060
Current liabilities	523	66,375	597,977
Long-term liabilities	120	15,247	137,361
Total liabilities	€ 643	¥ 81,622	\$ 735,338

(g) The impact on the consolidated statements of income for the fiscal year ended March 31, 2019, assuming the acquisition was completed on the first day of that year

	Millions of yen	Thousands of U.S. dollars
Net sales	¥ 129,093	\$ 1,163,000
Operating profit (before amortization of goodwill)	6,871	61,903
Operating profit (after amortization of goodwill)	4,160	37,476

(Method for calculating estimates)

Estimates reflect the impact of the difference between sales and income information calculations that assume acquisition completion on the first day of the consolidated fiscal year and sales and income information for that year. These estimates are unaudited.

(h) Overview of accounting treatment applied

The transaction was treated as which falls under one in the category of “common control transactions, etc.” set forth in “Accounting Standard for business Combinations” and “Implementation Guidance on Accounting Standard for Business Combinations and Accounting Standard for business Divestitures”

26. Related Party Information

(Related party transactions)

(1) Related Party transactions for the years ended March 31, 2019 were as follows:

	Transactions during the year ended March 31, 2019		Resulting account balances		
	Description of transaction	Amount		Amount	
	Millions of yen	Thousands of U.S. dollars	Account	Millions of yen	Thousands of U.S. dollars
Category:					
Parent company					
Name:					
Nippon Steel Corporation					
Head office address:					
Chiyoda-ku, Tokyo					
Paid-in capital:					
¥419,524 million					
Business content:					
Production, selling and engineering of steel products, etc					
Equity ownership percentage:					
Holding 51.44% directly	¥ 62,840	\$ 566,126	Other current assets	¥ 4,395	\$ 39,595
Holding 0.10% indirectly					
Relation with related party:					
Selling products of the company					

(Terms and conditions and decision policy of it)

① Regarding capital increase through third party allocation of shares, the capital increase through third party allocation of shares was resolved at the Board of Directors meeting held on August 2, 2018 and at the extraordinary general shareholders meeting held on February 28, 2019. By this resolution, Nippon Steel obtained 24,012,000 shares of the Company's stock through third party allocation of shares and became our parent company. The issue price per share average closing value of our shares of common stock from July 2, 2018 to August 1, 2018 on the Tokyo Stock Exchange.

② With regard to purchase of shares of subsidiaries and affiliates, the Company obtained all the shares of Triako Holdco AB. Therefore, Triako Holdco AB became a subsidiary of the Company. The acquisition price of shares of Triako Holdco AB was valued on the basis of an outside evaluation. The estimated refund amount by adjustment of the acquisition cost is included in other current assets.

(2) Principal transactions between a consolidated subsidiaries and a related parties for the years ended March 31, 2018 and 2019 were as follows:

Not applicable.

(Note between the parent company and principal related party)

(1) Information the parent company

Nippon Steel Corporation is listed on the Tokyo Stock Exchange, Nagoya Stock Exchange, Fukuoka Stock Exchange and Sapporo Stock Exchange.

(2) Financial statements of principal related parties

Not applicable.

27. Subsequent Events

Repurchase of shares and cancellation of treasury stock

The Company hereby announces that meeting of the Board of Directors on June 19, 2019 has resolved to repurchase of the Company's shares pursuant to Article 459, Paragraph 1, of the Companies Act of Japan as well as Article 39 of the Company's Articles of Incorporation, and for the cancellation of treasury stock pursuant to Article 178 of the Companies Act, to be implemented as follows.

1. Reason for repurchasing shares and cancellation of shares
To enhance shareholder returns and improve capital efficiency

2. Details of the repurchase

(1) Type of shares to be repurchased	Common stock
(2) Number of shares to be repurchased	1,730,000 shares (maximum)
(3) Total value of shares to be repurchased	¥3,000 million (\$27,027 thousand) (maximum)
(4) Repurchase period	From June 20, 2019 to December 23, 2019
(5) Methods of repurchase	Purchase on the Tokyo Stock Exchange based on discretionary trading contracts

3. Details of cancellation

(1) Type of shares to be cancelled	Common stock
(2) Number of shares to be cancelled	2,930,000 shares (planned)
(3) Scheduled date of cancellation	January 31, 2020

Independent Auditor's Report

To the Board of Directors of Sanyo Special Steel Co., Ltd.:

We have audited the accompanying consolidated financial statements of Sanyo Special Steel Co., Ltd. and its consolidated subsidiaries, which comprise the consolidated balance sheets as at March 31, 2018 and 2019, and the consolidated income statements, statements of comprehensive income, statements of changes in net assets 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 Sanyo Special Steel Co., Ltd. and its consolidated subsidiaries as at March 31, 2018 and 2019, and their financial performance and cash flows for the years then ended in accordance with accounting principles generally accepted in Japan.

Convenience Translation

The U.S. dollar amounts in the accompanying consolidated financial statements with respect to the year ended March 31, 2019 are presented solely for convenience. Our audit also included the translation of yen amounts into U.S. dollar amounts and, in our opinion, such translation has been made on the basis described in Note 3 to the consolidated financial statements.

KPMG ABSA LLC

July 24, 2019
Osaka, Japan

Corporate Profile

Company Name : Sanyo Special Steel Co., Ltd.
Head Office : 3007, Nakashima, Shikama-ku, Himeji, Hyogo
 672-8677, Japan
Established : January 11, 1935
President : Higuchi Shinya
Number of Employees : 6,835 (consolidated basis)
 1,334 (non-consolidated basis)
Capital : 53,800 million yen
Net Sales : Consolidated basis : 185,818 million yen (Fiscal 2018)
Fiscal Year End : March 31
Business Segment : Specialty Steel: Manufacturing and marketing of various special steel products, including bearing steel, engineering steel, stainless steel, heat resistant steel and tool steel.
 Metal powder : Manufacturing and marketing of metal powders and powder metallurgy products.
 Formed and Fabricated Materials : Manufacturing and marketing of formed and fabricated materials made from special steel bars and tubes.
 Others : Providing information processing services.



Head office/Factory Whole view

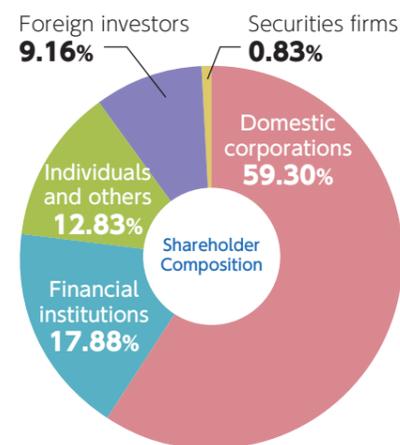
Stock Information

Total Number of Shares Authorized to be Issue : 94,878,400
Total Number of Shares Issued : 57,437,307
Stock Listings : Tokyo Securities Exchange(1st Section)
Number of Shareholders : 10,923
Principal Shareholders

NIPPON STEEL CORPORATION	28,863,000	51.43%
Company's Kyoeikai Association	2,319,000	4.13%
Japan Trustee Services Bank, Ltd. (trustaccount)	1,579,000	2.81%
Sumitomo Mitsui Banking CorporationThe Master Trust Bank of Japan, Ltd. (trust account)	1,473,000	2.62%
NSK Ltd.	1,467,000	2.03%
Sumitomo Mitsui Banking Corporation	1,139,000	2.03%
Mizuho Bank, Ltd.	728,000	1.29%
NORTHERN TRUST CO.(AVFC)RE-HCR00	725,000	1.29%
Marubeni-Itochu Steel Inc.	621,000	1.10%
DFA INTL SMALL CAP VALUE PORTFOLIO	610,000	1.08%

As of March 31, 2019

*The number of shares omits fractions of less than 1,000 shares.
 *The Company holds 1,212 thousand shares of its own stock in treasury, but is excluded from the above list of principal shareholders.
 *On the 1st day of April 2019, NIPPON STEEL CORPORATION has changed trade name from Nippon Steel & Sumitomo Metal Corporation



As of March 31, 2019

Subsidiaries and Affiliates As of March 31, 2019



- ① **Yohkoh Bussan Co., Ltd.**
(Osaka City, Osaka)
Trading of special steel products, steelmaking raw materials, and other materials
- ② **Santoku Kogyo Co., Ltd.**
(Himeji City, Hyogo)
Processing of special steel and machinery maintenance
- ③ **Santoku Tech Co., Ltd.**
(Himeji City, Hyogo)
Manufacturing of special steel product (formed & fabricated materials)
- ④ **Santoku Computer Service Co., Ltd.**
(Himeji City, Hyogo)
Construction, operation, and consulting services for information systems
- ⑤ **Santoku Security Service Co., Ltd.**
(Himeji City, Hyogo)
Services such as security services and facility management
- ⑥ **SANYO SPECIAL STEEL TRADING (SHANGHAI) CO., LTD.(China)**
Involved in business and sales of special steel products in China
- ⑦ **Ningbo Sanyo Special Steel Products Co., Ltd.(China)**
Manufacturing and marketing of special steel products (formed & fabricated materials)
- ⑧ **Siam Sanyo Special Steel Product Co., Ltd.(Thailand)**
Manufacturing and marketing of special steel products (formed & fabricated materials)
- ⑨ **SKJ Metal Industries Co., Ltd.(Thailand)**
Manufacturing and marketing of special steel products
- ⑩ **P.T. SANYO SPECIAL STEEL INDONESIA (Indonesia)**
Manufacturing and marketing of special steel products
- ⑪ **Sanyo Special Steel Manufacturing de México, S.A. de C.V. (Mexico)**
Manufacturing and marketing of special steel products (formed & fabricated materials)
- ⑫ **Advanced Green Components, LLC (U.S.A)**
Manufacturing and marketing of special steel products (formed & fabricated materials)
- ⑬ **SANYO SPECIAL STEEL U.S.A., INC. (U.S.A)**
Trading of special steel products

