



*shaping your dreams*

# HONING OUR GROWTH ELEMENTS

ANNUAL REPORT 2016

Year ended November 30, 2016

**OSG Corporation**

# WHAT ARE THE PRINCIPLES THAT SHAPE OUR WORLDWIDE GROWTH?



## CORPORATE PHILOSOPHY

### Global Presence

As a comprehensive cutting tool manufacturer, we make products that at a fundamental level contribute to enhancing people's quality of life. Through continuous growth, we have established a production, sales and technical support network spanning 33 countries. Our corporate aim is to continue to expand our operations globally and strengthen our contribution to the manufacturing industries in the world.

### Tool Communication

To OSG, there is a close link between tools and communication. Not only is active two-way communication with customers an essential part of our product development, it is also vital when we assist them in the selection and application of tools, and provide after-sales service. Thus, communication is key to the success of our operations and to our commitment to develop ever-better products. Moreover, the excellent results brought by the use of high-quality tools help to enhance business relationships.



### Cautionary Statement

We would like to advise you that some forward-looking plans, prospects, and strategies, etc., written in this Report that are not historical facts have the possibility of including risk and uncertainties caused by future changes of surrounding circumstances. We would appreciate your understanding that actual results may differ from plans, prospects, and strategies, etc.

## PROFILE

OSG manufactures and sells a comprehensive range of cutting tools, especially products that are attached to machine tools for use in metal processing.

Since its establishment in 1938, OSG has supported manufacturing worldwide by consistently creating high-quality, high-added-value products for use in automotive and aerospace manufacturing and many other industries.

A manufacturer of taps since its founding, OSG today boasts the biggest share of the world market for these products.

Today OSG Group employees at manufacturing and sales sites in 33 countries are united in their dedication to *shaping customers' dreams into reality.*

OSG's targets for the year ending November 2020 are net sales of ¥150 billion and operating profit of ¥30 billion.

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ELEMENTS FOR GROWTH

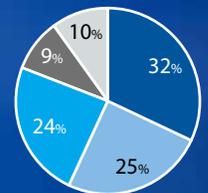
# 01

# INNOVATION

## Creating Tools with Equipment Developed In-House

The three key elements that determine the performance of tools are materials, shapes, and coatings. OSG is one of the few toolmakers in the world to develop and manufacture these three elements in-house. Carbide tool materials and coatings that dramatically extend tool life are developed by the OSG parent company and produced within the OSG Group. The production equipment used to shape these materials is also manufactured by the OSG parent company. By developing and manufacturing these elements in-house, OSG is able to differentiate itself from competitors by creating products that offer both strong cost performance and high added value.

% of Sales by Product



- Taps
- Drills
- End mills
- Rolling dies
- Gauges and other products

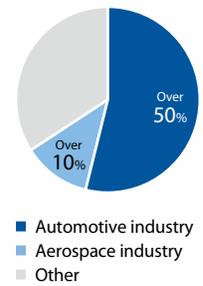
# 02

# TOTAL SOLUTIONS

## High-Quality, High-Performance Products

Our customers generally require tools that must be produced through advanced processing. We have achieved growth by actively improving our tool-related technologies in partnership with our customers. The priorities for automotive manufacturers are quality, precision, and the reduction of processing times. OSG has earned an excellent reputation with customers by supplying highly efficient tools that ensure reliable quality and high standards of dimensional precision in mass-production situations, while also shortening processing times. We will continue to contribute to manufacturing industries worldwide by focusing on the development of the world's best tools in terms of both quality and performance.

% of Sales by Industry



ELEMENTS FOR GROWTH

# 03

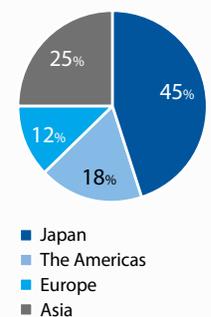
# GLOBAL NETWORK



## Delivering OSG Value

OSG established its first overseas subsidiary in the United States in 1968 under a corporate philosophy that saw the importance of a "Global Presence." Today, we are one of the most globalized companies in the cutting tool industry, with technical centers in six countries, production sites in 17, and sales offices in 33. Our overseas sales ratio has reached 55%. We are working to enhance customer convenience by carrying out prototype development, test processing, the manufacture of tailored products, and after-sales services, including regrinding and recoating, in locations close to our customers. We will continue to raise our presence in the world market by actively globalizing our business, and by supporting the production activities of our customers.

% of Sales by Region



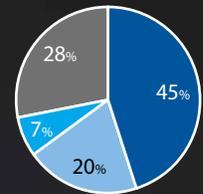
# 04

# INTEGRATION

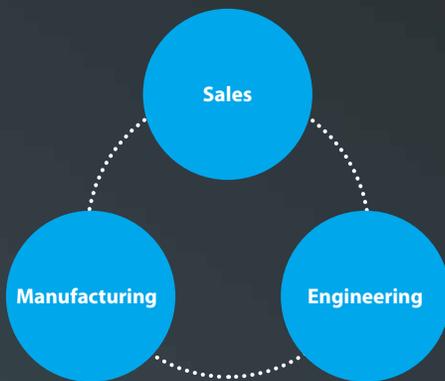
## Anticipating Our Customers' Needs

We believe that good, two-way communication is the source of products and services that earn customers' trust and provide real satisfaction. This concept of "Tool Communication" forms an extremely important part of our corporate philosophy. We achieve tool communication by always working closely with our customers, by listening to their problems and needs, and by suggesting optimal solutions. This approach is possible thanks to good internal communication and collaboration among our sales, engineering, and manufacturing units worldwide. We aim to earn the confidence of users throughout the world by applying knowledge gained through tool-based communication with our customers to product development, and by further evolving this business model.

% of Employees by Region



- Japan
- The Americas
- Europe
- Asia



# 05

## CLEAR GOALS

### New Medium-Term Management Plan

We recently launched a new medium-term management plan covering the years ending November 2017 through November 2020. Our goal under this plan, which we have named "The Next Stage 17," is to make OSG the leading global manufacturer of hole-making cutting tools. The plan contains two core strategies: the major end-users strategy and the catalogue item sales strategy. The aim of these strategies is to achieve simultaneous growth in sales of both tailored products used by major customers, and catalogue products with broad application used by various customers.

Our targets for the year ending November 2020 are net sales of ¥150 billion and operating profit of ¥30 billion. We will work toward these goals by using production systems that maximize mass-production benefits, by developing high-added-value products and services, and by strengthening synergies among OSG Group companies.

### LONG-TERM VISION

Leading global manufacturer of hole-making cutting tools

No.1

Global leader in market share for taps, end mills, drills, and rolling dies

20%

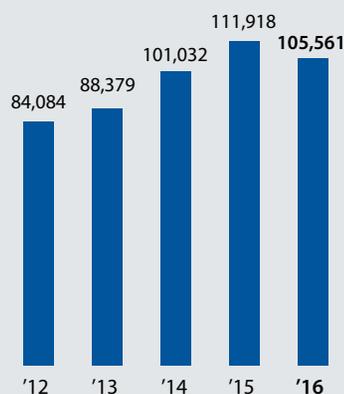
Operating profit margin

## FINANCIAL HIGHLIGHTS

	Millions of yen		
	2015	2016	Net change
<b>FOR THE YEAR:</b>			
Net sales	¥ 111,918	¥ 105,561	¥ -6,357
Domestic	47,218	47,208	-10
Overseas	64,700	58,353	-6,347
Operating income	21,597	18,247	-3,350
Net income attributable to owners of the parent	12,518	10,135	-2,383
EBITDA	29,302	26,132	-3,170
EBITDA margin	26.2%	24.8%	-1.4% points
<b>AT YEAR-END:</b>			
Total assets	¥ 155,130	¥ 156,081	¥ 951
Total equity	113,638	103,059	-10,579
<b>PER SHARE:</b>			
	Yen		
Net income	¥ 131.78	¥ 110.59	¥ -21.19
Diluted net income	120.25	100.62	-19.63
Cash dividends applicable to the year	46.00	50.00	4.00
Payout ratio	34.9%	45.2%	10.3% points
Equity ratio	66.1%	59.1%	-7.0% points

### Net Sales

(Millions of yen)



### Operating Income Operating Income Margin

(Millions of yen/%)



■ Operating Income  
○ Operating Income Margin

### EBITDA EBITDA Margin

(Millions of yen/%)



■ EBITDA  
○ EBITDA Margin

A professional portrait of Norio Ishikawa, President and CEO. He is shown from the chest up, wearing a dark pinstriped suit jacket, a white dress shirt, and a patterned tie. A blue pocket square is visible in his jacket. He is looking slightly to the right of the frame with a neutral expression. The background is a dark, solid color.

*N. Ishikawa*

Norio Ishikawa  
President and CEO

AN INTERVIEW WITH THE PRESIDENT

# **WE KNOW WHAT MAKES US GROW**

**We have begun a new chapter in our growth under our new Medium-term Management Plan—“The Next Stage 17.” Our goals are to improve medium-term corporate value by expanding sales channels and improving production efficiency, and to become the leading global manufacturer of hole-making cutting tools.**

Q.1 >

How would you sum up OSG’s financial results for fiscal 2016? Also, fiscal 2016 was the final year of your medium-term management plan, “The Next Stage 14.” How would you outline OSG’s achievements under that plan?

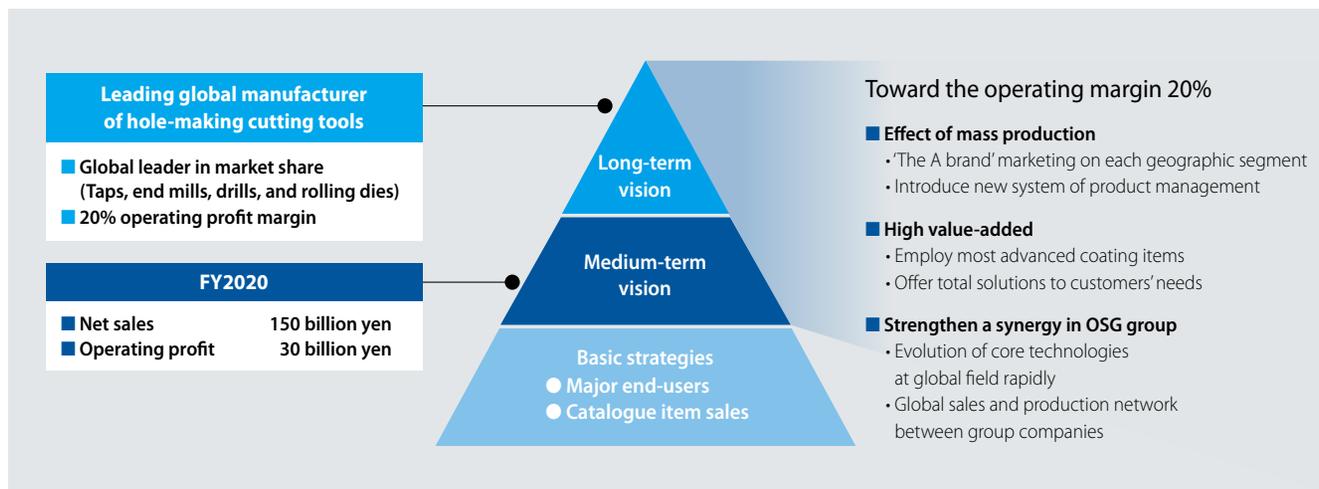
In fiscal 2016 (from December 1, 2015 to November 30, 2016), the world economy continued to show gradual growth driven primarily by developed countries, especially Europe and North America. However, the year also saw the emergence of factors that added to uncertainty about the economic outlook, including BREXIT, China’s economic slowdown, and increasing geopolitical risks. In this environment, we continued to expand and enhance our sales and logistics networks, and to increase our production capacity for carbide tools. We also marketed our products intensively. Unfortunately, our results were affected by slower orders for some products, and by a significant strengthening of the yen compared with its level in the previous fiscal year. Net sales were 5.7% lower year on year

at ¥105.6 billion, while operating profit declined by 15.5% to ¥18.2 billion, and net income attributable to owners of the parent company by 19.0% to ¥10.1 billion. The overseas sales ratio was 55.3%, compared with 57.8% in the previous year.

Our initial targets under “The Next Stage 14” were net sales of ¥100 billion and operating profit of ¥17 billion. After achieving those targets in the first year of the plan (the year ended November 2014), we then adopted a more medium-range target of net sales of ¥150 billion. Our efforts to reach this ambitious target included the development of high-value-added products and coating technologies. We also increased capacity for all processes relating to the production of carbide tools, especially the preparation of

materials, the shaping, and coating of products. Other strategies included the reinforcement of our worldwide logistics systems, and the strengthening of our global network through mergers and acquisitions. At the same time, we focused on the more intangible aspects of our business, such as the enhancement of the OSG brand, and the improvement of our ability to train people capable of working successfully in global markets. As a result of these efforts, we further raised our global presence and laid solid foundations for progress toward net sales of ¥150 billion.

**The Next Stage 17**



## Q.2 > What are the main points of your new medium-term management plan?

Under our new medium-term management plan, which we have called “The Next Stage 17,” we will work toward our long-term vision of becoming the leading global manufacturer of hole-making cutting tools. As a milestone toward that goal, we have set medium-term targets of net sales of ¥150 billion and operating profit of ¥30 billion in the year ending November 2020. Our core strategies for the achievement of our medium-term targets, the major end-users strategy and the catalogue item sales strategy, will not see any significant changes.

Under our major end-users strategy, we work closely with customers and listen to their needs so that we can offer optimal tools and methods. This strategy targets major end-users in the automotive industry, which accounts for

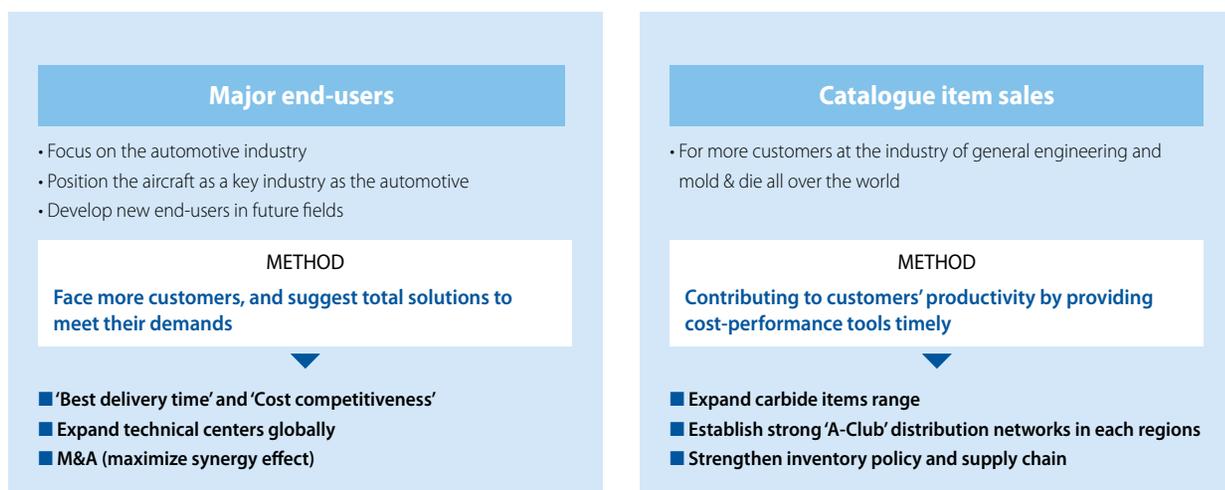
a large share of our sales, the aerospace industry, which is expected to become our next core segment, and other growth sectors. Major end-users process large quantities of parts and need tools capable of providing even better performance than our catalogue items. By providing products and services that meet these requirements, we will build relationships with new major end-users and increase the percentage of OSG tools used by our existing customers.

Our goal under the catalogue item sales strategy is to win orders by helping customers to improve their productivity through the timely supply of attractive tools with excellent cost-performance. Because we rely on distributors to expand sales of catalogue items, we need to offer an attractive range of products. Key factors include performance

characteristics that are easy to understand, a comprehensive product line-up, and salability. We also work to expand sales of catalogue items by holding seminars to inform distributors about the attractive features of OSG tools.

While pursuing these two core strategies to drive sales expansion, we will also implement measures to raise our operating profit margin and strengthen the earning capacity of the entire OSG Group. These measures will include the introduction of new production management systems to increase productivity, the improvement of added value through the introduction of advanced coating products, and the reinforcement of synergies within the OSG Group through the sharing of core design, development, and manufacturing technologies.

### Basic Strategies



Q.3 >

What initiatives are planned for fiscal 2017, which will be the first year of your new medium-term management plan?

In fiscal 2017, we aim to lay foundations for the achievement of our medium-term targets by expanding our sales channels and improving production efficiency.

We will expand our sales channels by using our technical centers in Mexico and Germany, which we opened in 2016, to build relationships with new end-users. We will propose processing methods and provide fine-tuned services, including prototype

fabrication, test processing, and seminars. In Mexico, we will build on our advantage as the only Japanese toolmaker with a local manufacturing site. In Europe, we aim to expand our market share by responding promptly to the needs of end-users in Germany's automotive cluster.

We will also expand our sales by using the OSG Global Network to market aerospace industry products manufactured by Desgranges Holding and general industry products manufactured by Somta Tools of South Africa, which we acquired in 2015 and 2016, respectively.

We will improve production efficiency by continuing to implement a new production management system

that we have been developing since last year. Our efforts under our major end-users strategy will result in increased production of prototypes and custom-made items, bringing about a shift to smaller production lots. We will work to raise facility operating rates even with small production lots. Our new system ensures efficient production even with extremely low-volume production and extremely large product ranges. We will further enhance our production efficiency by extending this system to other plants.

Through these efforts, we aim to achieve net sales of ¥116.5 billion, operating profit of ¥19.5 billion, and net income attributable to owners of the parent company of ¥11.5 billion.



The OSG Technical Center in Mexico



The OSG Technical Center in Germany

## Q.4 > What is your thinking on future capital policy and shareholder returns?

OSG aims to distribute its profits appropriately by achieving a balance between returning profits as shareholder returns and serving the demand for strategic growth investment and financial soundness.

When distributing our profits, we give priority to growth investment, which is essential to the improvement of our corporate value over the medium- to long-term future. In fiscal 2015 and 2016, our capital expenditure was in excess of depreciation. This reflects our efforts to increase production capacity by building and expanding our plants in order to achieve our net sales target of ¥150 billion. Our main capital expenditure items in fiscal 2017 will be the replacement of production facilities, and spending will remain below the level of depreciation. We will continue to give positive consideration

to M&A initiatives, including the acquisition of companies that can help us to move into new markets and regions and expand our customer portfolio, and also companies that have excellent technologies and services.

With our equity ratio at 59.1%, we believe that our financial position is sound. Our EBITDA margin has been over 20% for six straight years, indicating that we have the capacity to generate cash reliably. We have an "A" rating from Rating and Investment Information, Inc.

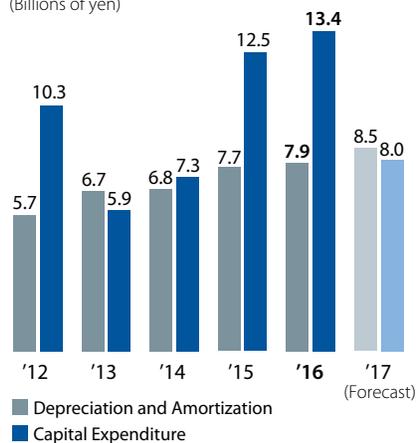
We recognize the distribution of profits to shareholders as an important management priority. Our basic dividend policy is to aim for a consolidated payout ratio of 30% or higher, while also taking other factors into account, including cash flows and our financial position. We have set the dividend for the year ended

November 2016 at ¥50 per share, consisting of an interim dividend of ¥22 and a final dividend of ¥28. We also bought back shares worth ¥9.8 billion, bringing the total return ratio to over 140%. While working to increase the dividend payout ratio, we also want to maximize dividend payments to shareholders by enhancing our earnings per share (EPS). We will also consider share buy-backs, depending on share price trends and other factors.

We will continue our efforts to improve our corporate value by combining an active growth strategy with the maintenance of an optimally sound capital structure, and by strengthening our financial structure and business base from a long-term perspective. We look forward to the continuing support of our shareholders.

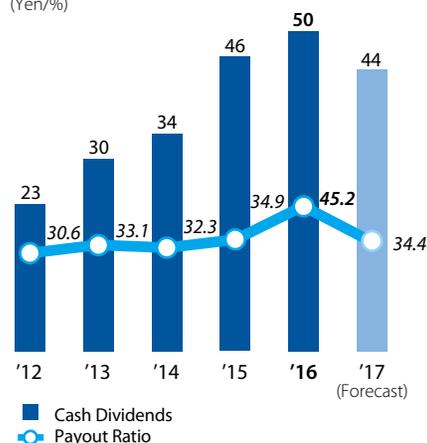
### Capital Expenditure Depreciation and Amortization

(Billions of yen)



### Cash Dividends Payout Ratio

(Yen/%)



SPECIAL FEATURE

# TRIPLE

# A

In general, "Triple A" is a superlative. OSG has prepared a superlative growth scenario: Triple A—Automotive, Aerospace, A Brand.



# A

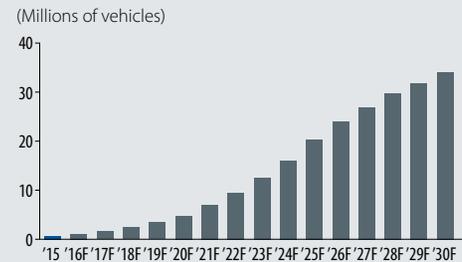
Tools developed by OSG for supply to world markets offer world-class value in terms of both quality and performance. We will continue to strengthen the reputation of the OSG brand by supplying the best products under our “Triple A” concept—products for the automotive industry and the aerospace industry, and the A Brand.

## AUTOMOTIVE INDUSTRY

### Expanding Business Opportunities

Automotive manufacturers are increasingly focusing on the development of environment-friendly vehicles in response to growing environmental awareness as we move toward the creation of a more sustainable society. One of the most important ways to improve a vehicle’s environmental performance is weight reduction. Manufacturers are increasingly using lightweight materials, such as CFRP, in vehicle bodies. In the aerospace industry, which has led the way in the adoption of lightweight materials, OSG has built a reputation as a manufacturer of highly efficient tools. This means that the increased use of CFRP and other lightweight materials in automobile bodies will bring expanding business opportunities for OSG.

#### Trends in World Demand for Environment-Friendly Vehicles



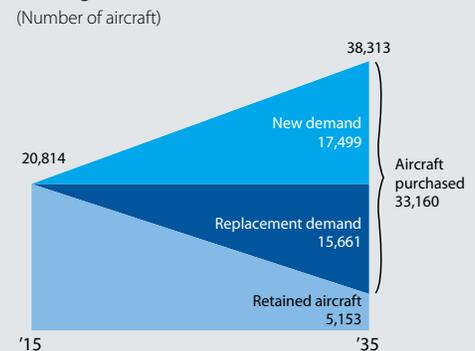
Total number of environment-friendly vehicles (EVs, PHEVs, and FCVs)  
 \*Figures after 2016 are estimates.  
 Source: Nomura Securities Co., Ltd.

## AEROSPACE INDUSTRY

### Creating Synergies

OSG is focusing on the expansion of sales to the aerospace industry. As part of this strategy, we acquired Desgranges Holding of France in 2015 and Amamco Tool & Supply of the United States in 2016. These companies manufacture and sell tools used to process aerospace parts. Their existing sales channels put us in contact with major customers with which OSG had no previous relationships. Our priority now is to maximize the synergy benefits of these acquisitions, including the use of the expanded sales channels to supply high-added-value OSG products, and the use of our global network to market products made by these two companies.

#### Passenger Jet Demand Forecasts



Source: Japan Aircraft Development Corporation

## A BRAND

### Building a Range of Attractive Products

The A Brand is a collection of high-quality products that embody advanced OSG technologies. The superb quality of these premium-value products can deliver high levels of quality, reliability, and satisfaction. They are also extremely versatile and can be used with a wide range of work materials and machine tools. Their performance can be further enhanced by using them on advanced machining centers. In fiscal 2016, OSG began to market A Brand end mills, in addition to taps and drills. We will continue to enhance the OSG brand by expanding our line-up of attractive products.



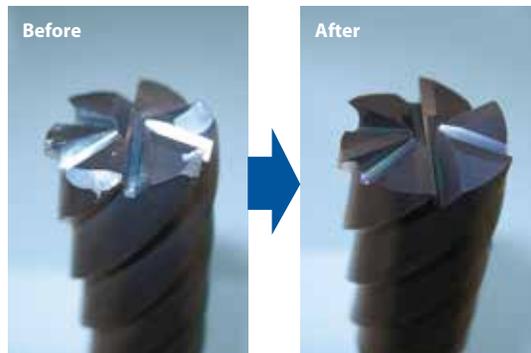
## SOCIAL CONTRIBUTION AND ENVIRONMENTAL PROTECTION

Following the establishment of a three-point declaration in 1996, in which the Company set out to become a “Global Presence,” an “Environment-friendly Company,” and a “Promoter of Total Employee Health,” OSG has actively engaged in environmental protection activities.

### REGRINDING AND RECOATING

#### Used Tools Restored to Same Sharpness as New Products

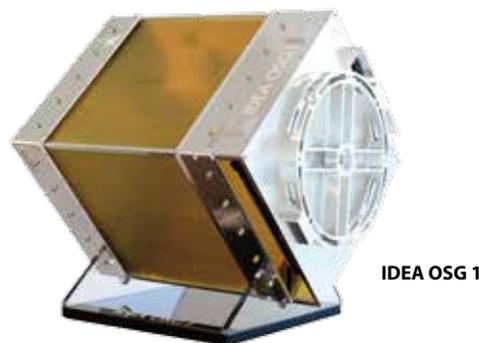
Tool reconditioning services provided by the OSG Group restore used tools to the same sharpness as new products. Because even worn cutting tools and rolling dies can be restored to new condition, reconditioning is more economical for customers than the purchase of new tools. Reconditioning also helps to reduce waste and ensure effective utilization of limited natural resources, including the rare metals used in the manufacture of tools. With regrinding facilities in 15 overseas countries, the OSG Group can respond to customer needs worldwide.



### REMOVAL OF SPACE DEBRIS

#### Helping to Improve Safety in Orbit

Space debris has become a threat to communication, weather, and GPS satellites. OSG has become the official sponsor for Astroscale, a company dedicated to the development and launch of IDEA OSG 1, the first satellite with a mission to collect and monitor data on sub-millimeter sized space debris. OSG is also involved in the processing of some of the components that will be used in the satellite.

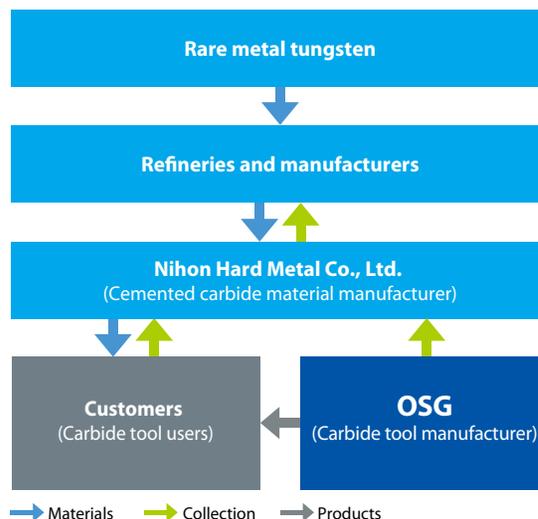


### PROMOTION OF CARBIDE TOOL RECYCLING

#### Effective Utilization of Valuable Resources

Raw materials of carbide tools include rare metals such as tungsten and cobalt. OSG Group promotes recycling of carbide tools. For customers’ CSR activities and zero-emission promotion, we utilize these resources by collecting end-of-life tools from our customers and recycling rare metals.

#### Carbide Material Recycling System





# FINANCIAL SECTION

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## FIVE-YEAR SUMMARY

	Millions of yen					Thousands of U.S. dollars
<b>For the Year</b>	2012	2013	2014	2015	<b>2016</b>	<b>2016</b>
Net sales	¥ 84,084	¥ 88,379	¥ 101,032	¥ 111,918	¥ <b>105,561</b>	\$ <b>942,509</b>
Domestic	43,686	41,106	45,850	47,218	<b>47,208</b>	<b>421,500</b>
Overseas	40,398	47,273	55,182	64,700	<b>58,353</b>	<b>521,009</b>
Cost of sales	49,382	52,777	58,062	61,866	<b>59,179</b>	<b>528,384</b>
Selling, general and administrative expenses	20,748	22,775	25,554	28,455	<b>28,135</b>	<b>251,205</b>
Operating income	13,954	12,827	17,416	21,597	<b>18,247</b>	<b>162,920</b>
Net income attributable to owners of the parent	7,138	8,619	9,990	12,518	<b>10,135</b>	<b>90,491</b>
<b>At Year-End</b>						
Total assets	121,690	134,503	142,302	155,130	<b>156,081</b>	<b>1,393,580</b>
Total equity	71,471	87,622	100,943	113,638	<b>103,059</b>	<b>920,170</b>
Capital expenditure	10,284	5,876	7,327	12,487	<b>13,395</b>	<b>119,598</b>
Depreciation and amortization	5,688	6,716	6,830	7,705	<b>7,886</b>	<b>70,411</b>
<b>Per Share</b>						
	Yen					U.S. dollars
Equity	679.01	842.71	963.15	1,079.12	<b>1,024.34</b>	<b>9.15</b>
Net income	75.16	90.76	105.20	131.78	<b>110.59</b>	<b>0.99</b>
Diluted net income	70.67	82.80	95.96	120.25	<b>100.62</b>	<b>0.90</b>
Cash dividends	23.00	30.00	34.00	46.00	<b>50.00</b>	<b>0.45</b>
Payout ratio (%)	30.6	33.1	32.3	34.9	<b>45.2</b>	
<b>EBITDA</b>						
	Millions of yen					Thousands of U.S. dollars
EBITDA	19,642	19,544	24,246	29,302	<b>26,132</b>	<b>233,321</b>
EBITDA margin (%)	23.4	22.1	24.0	26.2	<b>24.8</b>	
<b>Major Operating Ratios</b>						
Equity ratio (%)	53.0	59.5	64.3	66.1	<b>59.1</b>	
Return on equity (%)	11.5	11.9	11.7	12.9	<b>10.4</b>	
<b>Sales by Products</b>						
Taps	29,379	28,924	34,655	38,240	<b>33,948</b>	<b>303,107</b>
End mills	18,473	20,858	22,886	26,554	<b>24,838</b>	<b>221,768</b>
Drills and other cutting tools	19,839	20,725	23,601	25,744	<b>26,710</b>	<b>238,482</b>
Rolling dies	7,281	7,682	9,166	9,922	<b>9,443</b>	<b>84,313</b>
Gauges	1,176	1,232	1,419	1,539	<b>1,479</b>	<b>13,205</b>
Other products	7,936	8,958	9,305	9,919	<b>9,143</b>	<b>81,634</b>
Total	¥ 84,084	¥ 88,379	¥ 101,032	¥ 111,918	¥ <b>105,561</b>	\$ <b>942,509</b>

\*The translations of Japanese yen amounts into U.S. dollar amounts are included solely for the convenience of readers outside Japan and have been made at the rate of US\$1=¥112.

# CORPORATE GOVERNANCE

## Basic Philosophy

Our corporate philosophy of “tool communication” is reflected in our fundamental management principles, which call for fair and transparent business activities guided both by regulatory compliance and a social conscience. We believe that this philosophy also contributes to the sustainable growth of OSG and to the enhancement of our corporate value. Good corporate governance, including the maintenance of an efficient and transparent management organization and the establishment of systems to ensure the accurate, timely and fair disclosure of information, is vital to achievement of these goals. That is why we regard the continuing enhancement of corporate governance as a vital management priority.

Our approach to the enhancement of corporate governance is based on the OSG Philosophy, a specific code of conduct designed to optimize our corporate ethical standards. We have raised awareness of compliance by disseminating this philosophy to all directors, executive officers and employees of OSG Corporation and OSG Group companies.

## Corporate Governance Structure

### Overview

Pursuant to a motion passed at the 103rd regular general meeting of shareholders on February 20, 2016, OSG Corporation was restructured as of the end of that meeting from a company with auditors to a company with an audit & supervisory committee.

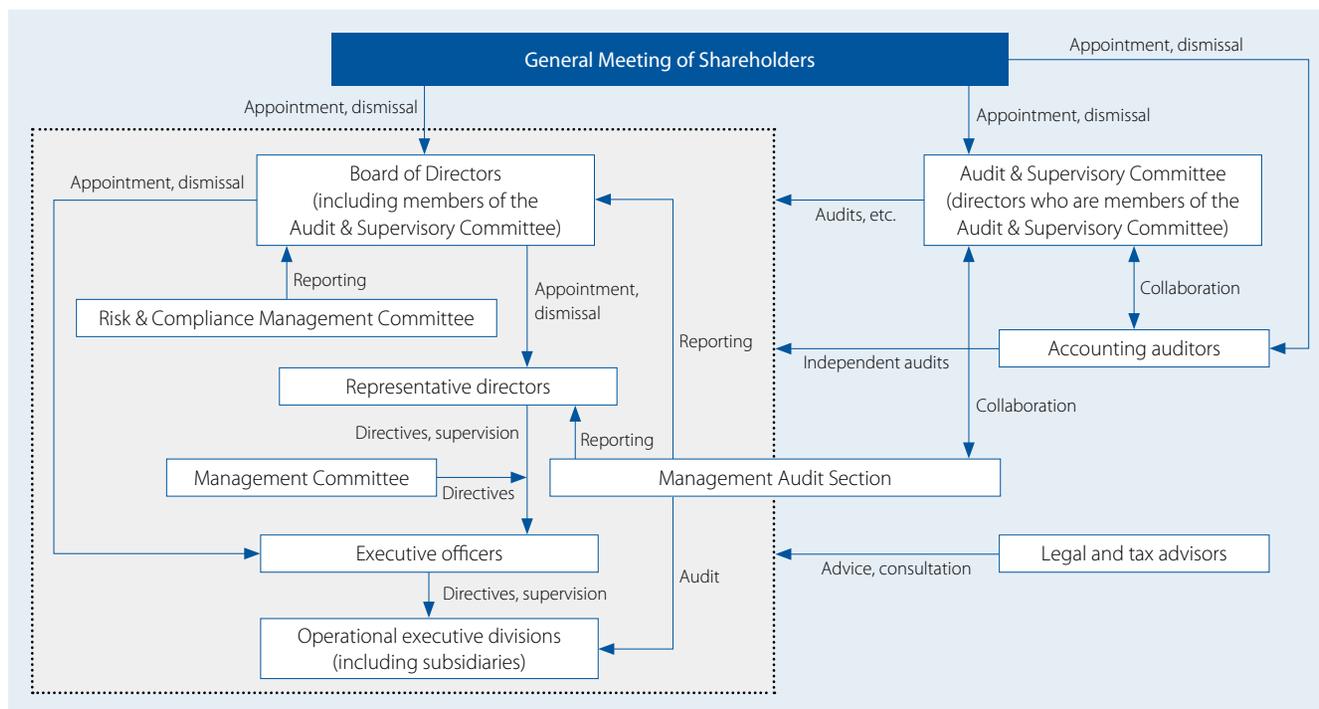
Outside directors make up the majority of the Audit & Supervisory Committee created as a result of this change. By appointing multiple outside directors, we will be able to improve the supervisory functions of the Board of Directors and further strengthen our corporate governance. Following the transition to the new structure, our Board of Directors now consists of 14 directors, including the six directors who are members of the Audit & Supervisory Committee. The Audit & Supervisory Committee consists of six directors, including four outside directors.

Meetings of the Board of Directors are normally convened once a month, but special meetings may be held if necessary. In addition to deliberating on important matters and making management decisions, the Board of Directors also supervises the performance of business operations.

We have adopted an executive officer system to ensure an appropriate response to changing business conditions, clarify operational executive functions and responsibilities, and improve speed and flexibility in the performance of business operations.

Executive officers, heads of divisions, members of the Audit & Supervisory Committee, and directors (excluding members of the Audit & Supervisory Committee) participate in lively discussions at monthly meetings of the Management Committee. The main purpose of these meetings is to disseminate management policies and business plans adopted by the Board of Directors, and to hear reports about business operations from executive officers and heads of divisions.

## Corporate Governance Structure



### **Reasons for the Adoption of the Current Corporate Governance Structure**

By establishing this structure, we have enhanced the capacity of the Board of Directors to make decisions and supervise operational performance. We have also created a management organization that will ensure improved management efficiency and effective strategic decision-making.

The six directors, including four outside directors, who make up the Audit & Supervisory Committee supervise the performance of duties by the directors, except those serving on the Audit & Supervisory Committee. Their responsibilities also include operational and financial auditing. Our four outside directors are independent officers as defined in the exchange listing rules. By allocating four of the six positions on the Audit & Supervisory Committee to these highly independent outside directors, we have created an environment that allows the Committee to supervise management effectively. We believe that this governance structure confirms and ensures transparent and appropriate management.

### **Development of Internal Control Systems**

In June 2006, we strengthened our internal control systems by establishing the Management Audit Section, which reports directly to the President. Under the Basic Policy on the Development of Internal Control Systems, which was adopted through a resolution of the Board of Directors in February 2016, we have formulated corporate ethical guidelines, risk management rules and other internal regulations for OSG Corporation and its subsidiaries to ensure that all directors and employees comply fully with laws and regulations and the Articles of Incorporation. We also set up internal control systems capable of earning and retaining the confidence of our stakeholders.

### **Agreements Limiting Liability**

Under the provisions of Article 427(1) of the Companies Act, OSG Corporation enters into agreements limiting liability with its directors (excluding executive directors, etc.). These agreements limit directors' liabilities for damages under the provisions of Article 423(1) of the Act to the minimum amounts stipulated in Article 425(1) of the Act. This limitation of liability applies only if directors (excluding executive directors, etc.) have performed their duties in good faith and without gross negligence.

### **Development of Risk Management Systems**

In addition to efforts to enhance the transparency and fairness of our corporate management through timely disclosure, we have also established risk management regulations as the basis for a risk management framework designed to ensure financial soundness and good business ethics. In addition, we have created a Risk and

Compliance Management Committee to coordinate effective and efficient risk management measures under these regulations.

The Risk and Compliance Management Committee formulates basic risk management policies, and considers and implements timely countermeasures as required after assessing the significance and urgency of risks.

### **Internal Audits, Audits by the Audit & Supervisory Committee, and Independent Audits**

#### **Internal Audits**

The task of the Management Audit Section is to strengthen internal control functions by verifying that the operations of the OSG Group are being performed in an appropriate manner. Management Audit Section staff regularly check activities for compatibility with management policies, internal regulations and other requirements. They also work with the Audit & Supervisory Committee and the independent auditors to ensure the soundness of business activities and the reliability of financial reports, and to improve internal control functions.

#### **Audits by the Audit & Supervisory Committee**

The six directors on the Audit & Supervisory Committee attend important meetings, including meetings of the Board of Directors and Management Committee, to audit and supervise the performance of duties by directors. The Audit & Supervisory Committee formulates audit guidelines and plans according to standards it has adopted, surveys the operations and assets of OSG Corporation, and seeks business reports from subsidiaries as required.

We have further strengthened management supervisory functions. We also ensured and enhanced the transparency and appropriateness of management by appointing outside directors to four positions on the Audit & Supervisory Committee.

#### **Independent Audits**

OSG has an audit agreement with an audit corporation, Deloitte Touche Tohmatsu LLC, which conducts audits of the OSG Group, including OSG Corporation and its subsidiaries, in accordance of the audit plan. After completing these audits, the auditors discuss their findings with management. The audit corporation also provides regular reports to the Audit & Supervisory Committee.

#### **Relationships among Internal Audits, Audit & Supervisory Committee Audits and Independent Audits, and between these Audits and the Internal Audit Organization**

Regular sharing of information and views has strengthened cooperation between the internal audit organization, in the form of the Management Audit Section, and the Audit & Supervisory Committee and the independent auditors. Representatives of the

Audit & Supervisory Committee and the independent auditors also attend mid-year and year-end stocktaking by manufacturing units. In principle, they also attend audits of overseas subsidiaries.

#### **Outside Directors**

We have strengthened management supervisory functions and ensured the transparency and appropriateness of management

by appointing four outside directors. All four are members of the Audit & Supervisory Committee. There are no specific standards or guidelines for the appointment of outside directors. However, such appointments are based on comprehensive judgments with reference to the listing guidelines and other rules of the Tokyo Stock Exchange. Care is taken to ensure that there are no conflicts of interest with ordinary shareholders.

## **BUSINESS RISKS AND OTHER RISKS**

#### **Demand Risks Arising from the Economic Situation in the Market**

The products of the OSG Group are used in a wide range of industries, and sold in Japan, other Asian countries, Europe and the Americas. The Group's business performance and financial position could therefore be affected by reduced demand in the relevant industries, and by economic recessions in Japan and other parts of the world.

#### **Risks Relating to Exchange Rate Fluctuations**

The OSG Group uses forward exchange contracts to hedge against the risk of exchange rate fluctuations. However, it is possible that the Group's business performance and financial position could be affected by exchange rate fluctuations.

#### **Risks Relating to Changes in Raw Material Prices**

The main products of the OSG Group are cutting tools, made primarily from carbide alloys, high-speed steel and die steel. The raw materials used include rare metals, such as cobalt, vanadium, molybdenum and tungsten. Rare metals must be obtained from a limited range of sources and suppliers, and market prices can fluctuate dramatically. Such fluctuations may affect the procurement costs of the OSG Group.

We endeavor to reflect raw material price increases in our product prices. However, this could affect the Group's business performance, since there may be a time lag between increases

in raw material prices and adjustments to selling prices, and because it is not always possible to fully pass on increases in raw material prices.

#### **Risks Relating to Overseas Business Expansion**

Major users in automotive industries and other sectors are relocating operations overseas. The OSG Group is responding by developing business operations in the Americas, Europe, Asia and elsewhere, and by establishing production and sales systems in optimal locations close to its markets. The business performance and financial position of the OSG Group could be affected if its operations are impeded as a result of changes to legal and tax systems or shifts in social and political conditions in other countries.

#### **Risks Relating to Price Fluctuation of Marketable Securities**

The OSG Group owns marketable securities, such as stock. The business performance and fiscal position of the OSG Group could be affected if the price of these securities falls.

#### **Risks Relating to Earthquakes and Other Natural Disasters**

The head office and production and R&D facilities of the OSG Group are concentrated in the Higashi-Mikawa district of Aichi Prefecture. The business performance and fiscal position of the OSG Group could be affected if this area is struck by a natural disaster, such as a major earthquake.

# MANAGEMENT'S DISCUSSION AND ANALYSIS

## Results of Operations

### Net Sales

In fiscal 2016 (December 1, 2015 to November 30, 2016), the world economy remained on a gradual growth trend driven by developed countries, especially those in Europe and North America. However, the United Kingdom's decision to leave the EU, China's economic slowdown, geopolitical risks, the possibility of policy changes by the new U.S. president, and various other factors caused increasing uncertainty about the future. In the U.S., personal consumption expenditure remained on a steady expansionary trend. The major European economies, including the United Kingdom, Germany and France also stayed on a gradual recovery, led by consumer spending. China and other Asian emerging economies continued to achieve reasonable levels of growth, albeit somewhat lower than in previous years. In Japan, consumer spending continued to stagnate, and there was a growing sense of uncertainty fueled by a strengthening yen and China's economic slowdown.

In this environment, the OSG Group continued to expand its sales and distribution networks, while also working to increase production capacity for carbide products. In addition, we acquired Amamco Tool & Supply Co., Inc. ("Amamco") in March 2016 with the aim of strengthening our ability to market carbide products to the aerospace industry. Amamco has been included in the consolidation since April 2016. Overall demand for tools from the aerospace industry remained steady. However, in the automotive sector, which is a major user of OSG tools, despite a continued firm trend in Europe, overall demand was weakened by economic

slowdowns in the U.S. and China. On a local currency basis, sales of carbide end mills and carbide drills increased, but sales in the core category of taps were lower.

These factors caused net sales to decline with a 5.7% year-on-year fall to ¥105,561 million. The overseas sales ratio also fell from 57.8% in fiscal 2015 to 55.3%, in part because of the effect of exchange rate fluctuations on foreign currency translations.

### Cost and Profits

Lower net sales were reflected in a 4.3% decline in the cost of sales to ¥59,179 million. The gross profit margin decreased by 0.8 percentage points to 43.9% as a result of lower export margins linked to exchange rate factors.

Selling, general and administrative expenses (SG&A) were 1.1% lower at ¥28,135 million due to factors that included a decrease in depreciation, amortization and employee bonuses and the effect of foreign currency translation. The ratio of SG&A to net sales rose from 25.4% in the previous year to 26.7%. As a result, operating income decreased by 15.5% to ¥18,247 million.

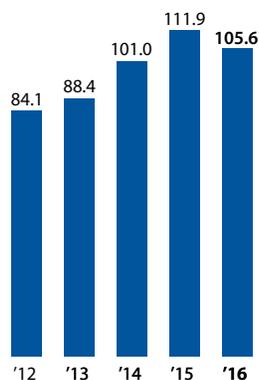
### Regional Overview

#### Japan

While there was solid demand from the aerospace industry, net sales in Japan continued to stagnate due to a flat trend in sales to the automotive industry. Export demand meanwhile declined because of fewer orders from the U.S. and China. Sales of carbide end mills and carbide drills increased year on year, but sales in the core category of taps declined. In addition, a strengthening yen

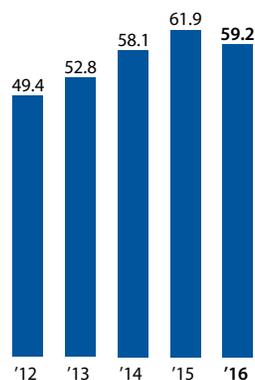
### Net Sales

(Billions of yen)



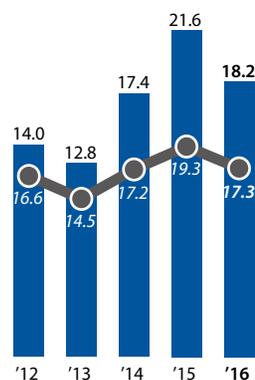
### Cost of Sales

(Billions of yen)



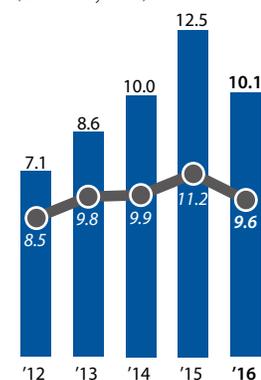
### Operating Income

(Billions of yen/%)



### Net Income Attributable to Owners of the Parent

(Billions of yen/%)



●● Operating income ratio

●● Net income ratio

eroded export margins. These factors contributed to year-on-year declines in both net sales and operating income.

Net sales were 3.1% lower year on year at ¥65,709 million, while operating income decreased by 16.4% to ¥9,529 million.

### The Americas

North America is one of OSG's key markets. While demand from the aerospace industry remained firm, market trends were generally weak as a result of a slowdown in demand from the automotive sector. However, growth in the Mexican automotive industry helped to maintain the stability of market trends. Brazil's domestic economy continued to stagnate, but our sales shifted to a recovery trend led by taps in the second quarter. Although sales on a local currency basis were only marginally lower, net sales and operating income for the Americas segment as a whole decreased year on year due to reduced sales in North America, in contrast with strong sales in fiscal 2015, as well as strengthening of the yen, which had a major impact on foreign currency translations. Amamco was added to the consolidation for April 2016.

Net sales decreased by 10.6% year on year to ¥19,645 million, and operating income by 29.2% to ¥2,471 million.

### Europe

Our financial results for Europe were firm, reflecting continued strong trends in sales to European automotive and aerospace industries. OSG has a relatively low market share in Europe, and we have made the reinforcement of our marketing capabilities there a priority. We aim to lift our market share by increasing sales of new

products in existing markets and by strengthening our marketing systems for the aerospace industry. In addition to increased sales in the core area of taps, there was also growth in sales of carbide end mills and carbide drills to the aerospace industry, and sales on a local currency basis increased year on year. However, operating income was lower, primarily because of increased promotional expenses and the substantial impact of a stronger yen on foreign currency translations. Our marketing capabilities in Europe were strengthened further by the addition of consolidated subsidiaries in France and Belgium at the start of fiscal 2016.

Net sales increased by 7.9% year on year to ¥12,315 million, while operating income decreased by 13.4% to ¥1,079 million.

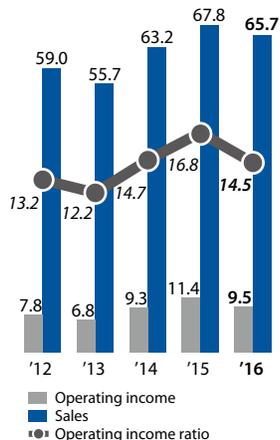
### Asia

Demand from automotive industries in China began to recover toward the end of the fiscal year, but sales declined due to a slump in overall demand caused by China's economic slowdown. Automotive sector demand in South Korea continued to stagnate, while sales to the IT industry fell as sales returned to the mean following the boom in fiscal 2015. In Southeast Asia, first-half results were affected by the economic slowdown in China, but the second half of the year brought steady growth in orders. Net sales and operating income for the Asian segment decreased year on year because of significantly lower revenues in China and South Korea, which account for a large portion of our net sales, as well as the negative impact of a stronger yen on foreign currency translations.

Net sales were 16.2% lower at ¥27,533 million, while operating income decreased by 24.8% to ¥4,734 million.

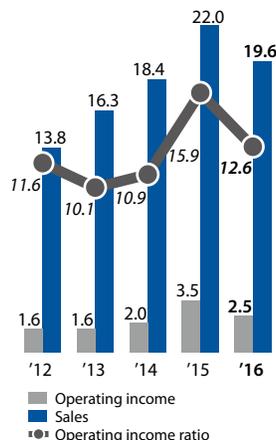
### Sales and Operating Income in Japan

(Billions of yen/%)



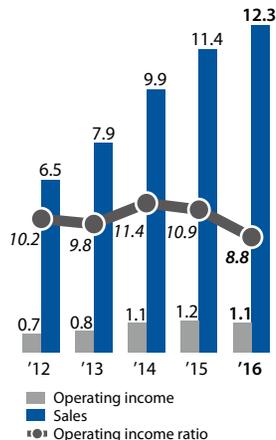
### Sales and Operating Income in the Americas

(Billions of yen/%)



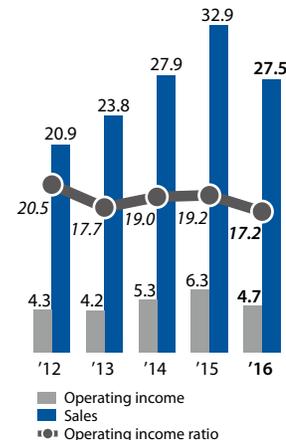
### Sales and Operating Income in Europe

(Billions of yen/%)



### Sales and Operating Income in Asia

(Billions of yen/%)



## Net Income

In fiscal 2016, OSG recorded net other expenses of ¥1,477 million, compared with ¥233 million in fiscal 2015. The main reason for this was the payment of director retirement benefits and condolence benefits totaling ¥1,044 million. As a result, net income before income taxes amounted to ¥16,770 million, a year-on-year decrease of ¥4,594 million.

Total income taxes were ¥1,714 million lower at ¥5,512 million, which is equivalent to a corporate tax rate of 32.9% after the application of tax effects based on net income before income taxes.

Net income attributable to noncontrolling interests, which consists mainly of income attributable to noncontrolling interests in subsidiaries in Japan, Asia and Europe, decreased by ¥497 million year on year to ¥1,123 million. The main factor was a decrease in the net income of the subsidiaries concerned in South Korea.

On this basis, net income attributable to owners of the parent amounted to ¥10,135 million, a year-on-year decrease of ¥2,383 million. Net income per share decreased from ¥131.78 in fiscal 2015 to ¥110.59, and return on equity from 12.9% to 10.4%.

## Financial Position

### Assets

Total assets as of November 30, 2016 amounted to ¥156,081 million, an increase of ¥951 million compared with the position a year earlier. Current assets were ¥3,523 million lower year on year at ¥75,169 million due to a reduction in cash and deposits. Fixed assets, such as net property and plant and equipment, investments, and other assets, increased by ¥4,474 million year on year to ¥80,912 million.

### Liabilities and Equity

Total liabilities as of November 30, 2016 amounted to ¥53,022 million, an increase of ¥11,530 million from the position at the end of fiscal 2015. Current liabilities were ¥1,959 million higher at ¥25,474 million, despite a decrease in income tax payable and other items, due to an increase in short-term borrowing and other items. Long-term liabilities were ¥9,571 million higher at ¥27,548 million, due to an increase in long-term debt and other factors. Despite an increase in retained earnings, net assets as of November 30, 2016 were ¥10,579 million lower at ¥103,059 million because of an increase in treasury stock and decreases in foreign currency translation adjustments and other items. As a result, the equity ratio fell from 66.1% at the end of fiscal 2015 to 59.1%.

## Cash Flows

The balance of consolidated cash and cash equivalents as of November 30, 2016 was ¥16,555 million, which is ¥2,847 million below the level at the end of fiscal 2015.

### Net Cash Provided by Operating Activities

Net cash provided by operating activities was ¥3,255 million lower year on year at ¥16,334 million. The main factor was a decrease in net income before income taxes.

### Net Cash Used in Investing Activities

Net cash used in investing activities amounted to ¥16,843 million, a reduction of ¥133 million from the previous year's figure. The main factor was a decrease in the placement of funds in time deposits.

### Net Cash Used in Financing Activities

Net cash used in financing activities amounted to ¥778 million, a reduction of ¥5,439 million from the previous year's figure. This resulted mainly from higher spending on share repurchasing, and an increase in the amount of funds raised through short-term and long-term borrowing.

## Dividend Policy

We regard the distribution of income to shareholders as an important management priority. Our policy calls for the maintenance of a consolidated payout ratio of 30% or higher, while taking a range of factors, including cash flows and our financial position, into account. Uses for free cash flows include the expansion of existing core business segments, and global business development. We will work to improve investment efficiency from a long-term perspective through the flexible implementation of various measures, including prioritized investment in projects that improve our corporate value, and the repurchasing of shares as a means of returning profits to our shareholders. Retained earnings are used for R&D investment and new product development, and to reinforce and expand domestic and overseas production and sales systems. We will work to strengthen our financial structure and business base from a long-term perspective.

The final dividend for fiscal 2016 was set at ¥28 yen per share. The total dividend, including the interim dividend of ¥22, was ¥4 higher year on year at ¥50 per share.

In fiscal 2017, we plan to pay a dividend of ¥44 per share, consisting of an interim dividend of ¥21, and a final dividend of ¥23.



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**INDEPENDENT AUDITOR'S REPORT**

To the Board of Directors of OSG Corporation:

We have audited the accompanying consolidated balance sheet of OSG Corporation and its consolidated subsidiaries as of November 30, 2016, and the related consolidated statements of income, comprehensive income, changes in equity, and cash flows for the year then ended, and a summary of significant accounting policies and other explanatory information, all expressed in Japanese yen.

**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 audit. We conducted our audit in accordance with auditing standards generally accepted in Japan. Those standards require that we 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 the auditor's 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, the auditor considers 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, but 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 referred to above present fairly, in all material respects, the consolidated financial position of OSG Corporation and its consolidated subsidiaries as of November 30, 2016, and the consolidated results of their operations and their cash flows for the year then ended in accordance with accounting principles generally accepted in Japan.

**Convenience Translation**

Our audit also comprehended the translation of Japanese yen amounts into U.S. dollar amounts and, in our opinion, such translation has been made in accordance with the basis stated in Note 1 to the consolidated financial statements. Such U.S. dollar amounts are presented solely for the convenience of readers outside Japan.

*Deloitte Touche Tohmatsu LLC*

February 18, 2017

Member of  
Deloitte Touche Tohmatsu Limited

## CONSOLIDATED BALANCE SHEET

OSG Corporation and Consolidated Subsidiaries  
November 30, 2016

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2016	2015	2016
<b>ASSETS</b>			
<b>Current Assets:</b>			
Cash and cash equivalents (Note 16)	¥ 16,555	¥ 19,402	\$ 147,813
Time deposits (Notes 8 and 16)	1,449	2,070	12,938
Notes and accounts receivable (Notes 5 and 16):			
Trade notes and accounts	20,758	21,520	185,339
Other	631	627	5,634
Allowance for doubtful accounts	(192)	(189)	(1,714)
Total	21,197	21,958	189,259
Inventories (Note 6)	31,692	30,674	282,964
Deferred tax assets (Note 12)	1,927	2,238	17,205
Prepaid expenses and other current assets (Note 4)	2,349	2,350	20,973
Total current assets	75,169	78,692	671,152
<b>Property, Plant and Equipment (Note 8):</b>			
Land	14,831	15,108	132,420
Buildings and structures	44,408	41,441	396,500
Machinery and equipment	105,944	101,811	945,928
Tools, furniture and fixtures	7,387	7,241	65,955
Construction in progress	2,019	1,969	18,027
Other	31	32	277
Total	174,620	167,602	1,559,107
Accumulated depreciation	(108,225)	(104,325)	(966,295)
Net property, plant and equipment	66,395	63,277	592,812
<b>Investments and Other Assets:</b>			
Investment securities (Notes 4 and 16)	5,970	6,279	53,304
Investments in unconsolidated subsidiaries and associated companies (Note 16)	2,144	2,672	19,143
Goodwill	2,659	533	23,741
Other intangible assets	829	722	7,401
Deferred tax assets (Note 12)	554	412	4,947
Other assets (Notes 10 and 16)	2,361	2,543	21,080
Total investments and other assets	14,517	13,161	129,616
<b>TOTAL</b>	<b>¥ 156,081</b>	<b>¥ 155,130</b>	<b>\$ 1,393,580</b>

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2016	2015	2016
<b>LIABILITIES AND EQUITY</b>			
<b>Current Liabilities:</b>			
Short-term borrowings (Notes 7, 8, and 16)	¥ 8,001	¥ 4,053	\$ 71,438
Current portion of long-term debt (Notes 7, 8, and 16)	492	446	4,393
Notes and accounts payable (Notes 8, 9, and 16):			
Trade notes and accounts	4,619	4,980	41,241
Other	2,581	1,863	23,045
Total	7,200	6,843	64,286
Income taxes payable (Note 16)	1,437	3,486	12,830
Accrued expenses	7,290	7,749	65,089
Deferred tax liabilities (Note 12)	10	8	89
Other current liabilities	1,044	930	9,321
Total current liabilities	25,474	23,515	227,446
<b>Long-Term Liabilities:</b>			
Long-term debt (Notes 7, 8, and 16)	25,013	15,697	223,330
Liability for employees' retirement benefits (Note 10)	280	245	2,500
Retirement allowances for directors	109	51	973
Deferred tax liabilities (Note 12)	1,351	1,222	12,063
Other long-term liabilities	795	762	7,098
Total long-term liabilities	27,548	17,977	245,964
<b>Contingent Liabilities</b> (Notes 15 and 18)			
<b>Equity</b> (Notes 7 and 11):			
Common stock:			
Authorized—			
200,000 thousand shares at November 30, 2016 and 2015			
Issued—			
95,955 thousand shares at November 30, 2016 and 2015	10,404	10,404	92,893
Capital surplus	12,091	12,091	107,955
Retained earnings	81,841	75,720	730,723
Treasury stock—at cost			
5,910 thousand and 909 thousand shares			
at November 30, 2016 and 2015, respectively	(10,967)	(1,105)	(97,920)
Accumulated other comprehensive income:			
Unrealized gain on available-for-sale securities	2,268	2,710	20,250
Deferred (loss) gain on derivatives under hedge accounting	(1)	2	(9)
Foreign currency translation adjustments	(3,420)	2,745	(30,535)
Total	92,216	102,567	823,357
Stock acquisition rights	13	—	116
Noncontrolling interests	10,830	11,071	96,697
Total equity	103,059	113,638	920,170
<b>TOTAL</b>	<b>¥ 156,081</b>	<b>¥ 155,130</b>	<b>\$ 1,393,580</b>

See notes to consolidated financial statements.

## CONSOLIDATED STATEMENT OF INCOME

OSG Corporation and Consolidated Subsidiaries  
Year Ended November 30, 2016

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2016	2015	2016
<b>Net Sales</b>	<b>¥ 105,561</b>	¥ 111,918	<b>\$ 942,509</b>
<b>Cost of Sales</b> (Note 14)	<b>59,179</b>	61,866	<b>528,384</b>
Gross profit	<b>46,382</b>	50,052	<b>414,125</b>
<b>Selling, General and Administrative Expenses</b> (Notes 13 and 14)	<b>28,135</b>	28,455	<b>251,205</b>
Operating income	<b>18,247</b>	21,597	<b>162,920</b>
<b>Other Income (Expenses):</b>			
Interest and dividend income	<b>342</b>	405	<b>3,054</b>
Interest expense	<b>(119)</b>	(122)	<b>(1,063)</b>
Foreign exchange loss	<b>(357)</b>	(183)	<b>(3,188)</b>
Sales discount	<b>(659)</b>	(661)	<b>(5,884)</b>
Retirement benefits and condolence money for a director (Notes 2(n) and 21)	<b>(1,044)</b>	—	<b>(9,321)</b>
Write-down of investments in unconsolidated subsidiaries and associated companies (Note 4)	—	(40)	—
Provision for doubtful accounts for unconsolidated subsidiaries and associated companies	—	(107)	—
Equity in earnings of associated companies	<b>10</b>	4	<b>89</b>
Other—net	<b>350</b>	471	<b>3,125</b>
Other expenses—net	<b>(1,477)</b>	(233)	<b>(13,188)</b>
<b>Income before Income Taxes</b>	<b>16,770</b>	21,364	<b>149,732</b>
<b>Income Taxes</b> (Note 12):			
Current	<b>4,981</b>	7,465	<b>44,473</b>
Deferred	<b>531</b>	(239)	<b>4,741</b>
Total income taxes	<b>5,512</b>	7,226	<b>49,214</b>
<b>Net Income</b>	<b>11,258</b>	14,138	<b>100,518</b>
<b>Net Income Attributable to Noncontrolling Interests</b>	<b>1,123</b>	1,620	<b>10,027</b>
<b>Net Income Attributable to Owners of the Parent</b>	<b>¥ 10,135</b>	¥ 12,518	<b>\$ 90,491</b>
<b>Per Share of Common Stock</b> (Notes 2(u) and 20):			
Basic net income	<b>¥ 110.59</b>	¥ 131.78	<b>\$ 0.99</b>
Diluted net income	<b>100.62</b>	120.25	<b>0.90</b>
Cash dividends applicable to the year	<b>50.00</b>	46.00	<b>0.45</b>

See notes to consolidated financial statements.

## CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

OSG Corporation and Consolidated Subsidiaries  
Year Ended November 30, 2016

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2016	2015	2016
<b>Net Income</b>	<b>¥ 11,258</b>	¥ 14,138	<b>\$ 100,518</b>
<b>Other Comprehensive (Loss) Income</b> (Note 19):			
Unrealized (loss) gain on available-for-sale securities	(434)	662	(3,875)
Deferred (loss) gain on derivatives under hedge accounting	(3)	2	(27)
Foreign currency translation adjustments	(7,105)	(2,049)	(63,437)
Share of other comprehensive (loss) income in associates	(18)	7	(161)
Total other comprehensive loss	(7,560)	(1,378)	(67,500)
<b>Comprehensive Income</b>	<b>¥ 3,698</b>	¥ 12,760	<b>\$ 33,018</b>
<b>Total Comprehensive Income Attributable to:</b>			
Owners of the parent	¥ 3,507	¥ 11,288	\$ 31,313
Noncontrolling interests	191	1,472	1,705

See notes to consolidated financial statements.

## CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

OSG Corporation and Consolidated Subsidiaries  
Year Ended November 30, 2016

	Thousands			
	Number of Shares of Common Stock Outstanding	Common Stock	Capital Surplus	Retained Earnings
<b>Balance, December 1, 2014</b>	94,957	¥ 10,404	¥ 12,052	¥ 66,838
Adjustment of retained earnings for newly consolidated subsidiaries	—	—	—	(113)
Adjustment of retained earnings due to change in fiscal year of consolidated subsidiaries	—	—	—	845
Net income attributable to owners of the parent	—	—	—	12,518
Cash dividends, ¥46 per share	—	—	—	(4,368)
Purchase of treasury stock	(3)	—	—	—
Disposal of treasury stock	91	—	39	—
Net change in the year	—	—	—	—
<b>Balance, November 30, 2015</b>	95,045	10,404	12,091	75,720
Adjustment of retained earnings for newly consolidated subsidiaries	—	—	—	<b>(126)</b>
Net income attributable to owners of the parent	—	—	—	<b>10,135</b>
Cash dividends, ¥50 per share	—	—	—	<b>(3,888)</b>
Purchase of treasury stock	<b>(5,021)</b>	—	—	—
Net change in the year	—	—	—	—
<b>Balance, November 30, 2016</b>	<b>90,024</b>	<b>¥ 10,404</b>	<b>¥ 12,091</b>	<b>¥ 81,841</b>

	Common Stock	Capital Surplus	Retained Earnings
<b>Balance, November 30, 2015</b>	\$ 92,893	\$ 107,955	\$ 676,071
Adjustment of retained earnings for newly consolidated subsidiaries	—	—	<b>(1,125)</b>
Net income attributable to owners of the parent	—	—	<b>90,491</b>
Cash dividends, \$0.45 per share	—	—	<b>(34,714)</b>
Purchase of treasury stock	—	—	—
Net change in the year	—	—	—
<b>Balance, November 30, 2016</b>	<b>\$ 92,893</b>	<b>\$ 107,955</b>	<b>\$ 730,723</b>

See notes to consolidated financial statements.

Millions of yen

Treasury Stock	Accumulated Other Comprehensive Income				Total	Stock Acquisition Rights	Noncontrolling Interests	Total Equity
	Unrealized Gain on Available-for-Sale Securities	Deferred (Loss) Gain on Derivatives under Hedge Accounting	Foreign Currency Translation Adjustments					
¥ (1,210)	¥ 2,045	—	¥ 1,329	¥ 91,458	—	¥ 9,485	¥ 100,943	
—	—	—	—	(113)	—	—	(113)	
—	—	—	—	845	—	—	845	
—	—	—	—	12,518	—	—	12,518	
—	—	—	—	(4,368)	—	—	(4,368)	
(6)	—	—	—	(6)	—	—	(6)	
111	—	—	—	150	—	—	150	
—	665	¥ 2	1,416	2,083	—	1,586	3,669	
(1,105)	2,710	2	2,745	102,567	—	11,071	113,638	
—	—	—	—	(126)	—	—	(126)	
—	—	—	—	10,135	—	—	10,135	
—	—	—	—	(3,888)	—	—	(3,888)	
(9,862)	—	—	—	(9,862)	—	—	(9,862)	
—	(442)	(3)	(6,165)	(6,610)	¥ 13	(241)	(6,838)	
¥ (10,967)	¥ 2,268	¥ (1)	¥ (3,420)	¥ 92,216	¥ 13	¥ 10,830	¥ 103,059	

Thousands of U.S. dollars (Note 1)

Treasury Stock	Accumulated Other Comprehensive Income				Total	Stock Acquisition Rights	Noncontrolling Interests	Total Equity
	Unrealized Gain on Available-for-Sale Securities	Deferred (Loss) Gain on Derivatives under Hedge Accounting	Foreign Currency Translation Adjustments					
\$ (9,866)	\$ 24,196	\$ 18	\$ 24,509	\$ 915,776	—	\$ 98,848	\$ 1,014,624	
—	—	—	—	(1,125)	—	—	(1,125)	
—	—	—	—	90,491	—	—	90,491	
—	—	—	—	(34,714)	—	—	(34,714)	
(88,054)	—	—	—	(88,054)	—	—	(88,054)	
—	(3,946)	(27)	(55,044)	(59,017)	\$ 116	(2,151)	(61,052)	
\$ (97,920)	\$ 20,250	\$ (9)	\$ (30,535)	\$ 823,357	\$ 116	\$ 96,697	\$ 920,170	

# CONSOLIDATED STATEMENT OF CASH FLOWS

OSG Corporation and Consolidated Subsidiaries  
Year Ended November 30, 2016

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2016	2015	2016
<b>Operating Activities:</b>			
Income before income taxes	¥ 16,770	¥ 21,364	\$ 149,732
Adjustments for:			
Income taxes—paid	(7,123)	(7,964)	(63,598)
Depreciation and amortization	7,886	7,705	70,411
Amortization of goodwill, net of negative goodwill	298	171	2,661
Write-down of investments in unconsolidated subsidiaries and associated companies	—	40	—
Retirement benefits and condolence money for a director	1,044	—	9,321
Equity in earnings of associated companies	(10)	(4)	(89)
Changes in assets and liabilities, net of effects from newly consolidated subsidiaries:			
(Increase) decrease in notes and accounts receivable	(551)	226	(4,920)
Increase in inventories	(2,472)	(2,302)	(22,071)
Increase in notes and accounts payable	322	592	2,875
(Decrease) increase in accrued expenses	(411)	292	(3,670)
Increase (decrease) in liability for employees' retirement benefits	39	(30)	348
Increase in retirement allowances for directors	39	4	348
Decrease (increase) in interest and dividends receivable	21	(7)	188
Increase in allowance for doubtful accounts	66	91	589
Increase (decrease) in interest payable	5	(1)	45
Other—net	411	(588)	3,669
Net cash provided by operating activities	16,334	19,589	145,839
<b>Investing Activities:</b>			
Payments for time deposits	(1,371)	(6,317)	(12,241)
Proceeds from refunds of time deposits	2,040	5,122	18,214
Purchases of investment securities	(415)	(108)	(3,705)
Acquisitions of property, plant and equipment	(13,395)	(12,487)	(119,598)
Acquisitions of intangible assets	(205)	(323)	(1,830)
Proceeds from sales of property, plant and equipment	246	90	2,196
Acquisition of subsidiary's stock with changes in consolidation scope	(2,132)	—	(19,036)
Payments for purchases of subsidiaries' stock	(1,198)	(2,138)	(10,696)
Other—net	(413)	(815)	(3,687)
Net cash used in investing activities	(16,843)	(16,976)	(150,383)
<b>Financing Activities:</b>			
Increase (decrease) in short-term borrowings—net	4,105	(135)	36,652
Proceeds from long-term debt	10,519	752	93,920
Repayments of long-term debt	(1,280)	(516)	(11,428)
Repayments of long-term accounts payable	—	(1,390)	—
Dividends paid	(3,884)	(4,368)	(34,679)
Dividends paid to noncontrolling interests	(417)	(553)	(3,723)
Purchases of treasury stock	(9,834)	(7)	(87,804)
Proceeds from issuance of stock acquisition rights	13	—	116
Net cash used in financing activities	(778)	(6,217)	(6,946)
<b>Foreign Currency Translation Adjustments on Cash and Cash Equivalents</b>	(1,918)	(855)	(17,125)
<b>Net Decrease in Cash and Cash Equivalents</b>	(3,205)	(4,459)	(28,615)
<b>Cash and Cash Equivalents of Newly Consolidated Subsidiaries, Beginning of Year</b>	358	183	3,196
<b>Increase in Cash and Cash Equivalents Due to Change in Fiscal Year of Consolidated Subsidiaries</b>	—	2,204	—
<b>Cash and Cash Equivalents, Beginning of Year</b>	19,402	21,474	173,232
<b>Cash and Cash Equivalents, End of Year</b>	¥ 16,555	¥ 19,402	\$ 147,813
Additional information:			
Acquisitions of Amamco Tool & Supply Co., Inc.			
Current assets acquired	¥ 422	—	\$ 3,768
Noncurrent assets acquired	363	—	3,241
Goodwill	1,557	—	13,902
Current liabilities assumed	(122)	—	(1,089)
Long-term liabilities assumed	(270)	—	(2,411)
Loans to newly acquired subsidiary	211	—	1,884
Cash and cash equivalents	(29)	—	(259)
Acquisitions of subsidiary's stock with changes in consolidation scope	¥ 2,132	—	\$ 19,036

See notes to consolidated financial statements.

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

OSG Corporation and Consolidated Subsidiaries  
Year Ended November 30, 2016

## 1. BASIS FOR THE PRESENTATION OF CONSOLIDATED FINANCIAL STATEMENTS

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

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

2015 consolidated financial statements to conform to the classifications used in 2016.

The consolidated financial statements are stated in Japanese yen, the currency of the country in which OSG Corporation (the "Company") is incorporated and operates. The translations of Japanese yen amounts into U.S. dollar amounts are included solely for the convenience of readers outside Japan and have been made at the rate of ¥112 to \$1, the approximate rate of exchange at November 30, 2016. Such translations should not be construed as representations that the Japanese yen amounts could be converted into U.S. dollars at that or any other rate.

## 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

### (a) Consolidation

The consolidated financial statements as of November 30, 2016, include the accounts of the Company and its 57 significant (52 in 2015) subsidiaries (together, the "Group").

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

Effective December 1, 2015, five subsidiaries were newly consolidated due to increases in their materiality. Prior years' accounts of the newly consolidated subsidiaries were not retrospectively adjusted in the consolidated financial statements. The effect of the newly consolidated subsidiaries was included in the adjustment of retained earnings in the consolidated statement of changes in equity as of December 1, 2015. FUDIAN CO., LTD. was excluded from the scope of the consolidation due to a sale of shares during the year ended November 30, 2016.

Amamco Tool & Supply Co., Inc. became a consolidated subsidiary due to purchase of shares during the year ended November 30, 2016.

Investments in three associated companies were accounted for by the equity method in 2016 and 2015.

Investments in the remaining 21 (22 in 2015) unconsolidated subsidiaries and one associated company (none in 2015) are stated at cost. If the equity method of accounting had been applied to the investments in these companies, the effect on the accompanying consolidated financial statements would not be material.

The differences between the cost and the fair value of the net assets of the acquired subsidiaries at the date of the acquisition are accounted for as goodwill. Goodwill arising from domestic

consolidated companies is amortized by the straight-line method over five years and that from foreign consolidated companies over 10 years.

All significant intercompany balances and transactions have been eliminated in consolidation. All material unrealized profit included in assets resulting from transactions within the Group is also eliminated.

The accounts of those subsidiaries that have fiscal periods differing from that of the Company have been adjusted for significant transactions to properly reflect their financial positions at November 30 of each year and their results of operations for the years then ended.

For the year ended November 30, 2016, 14 consolidated subsidiaries (16 consolidated subsidiaries in 2015) provisionally closed their accounts at November 30 for the consolidation to enable a fairer presentation of the consolidated financial statements.

### (b) Unification of Accounting Policies Applied to Foreign Subsidiaries for the Consolidated Financial Statements

In May 2006, the Accounting Standards Board of Japan (the "ASBJ") issued ASBJ Practical Issues Task Force (PITF) No. 18, "Practical Solution on Unification of Accounting Policies Applied to Foreign Subsidiaries for the Consolidated Financial Statements" which was subsequently revised in February 2010 and March 2015 to reflect revision of the relevant Japanese GAAP or accounting standards in other jurisdictions. PITF No. 18 prescribes that the accounting policies and procedures applied to a parent company and its subsidiaries for similar transactions and events under similar circumstances should in principle be unified for the preparation of the consolidated financial statements. However, financial statements prepared by foreign subsidiaries in accordance with

either International Financial Reporting Standards or generally accepted accounting principles in the United States of America (Financial Accounting Standards Board Accounting Standards Codification—"FASB ASC") tentatively may be used for the consolidation process, except for the following items that should be adjusted in the consolidation process so that net income is accounted for in accordance with Japanese GAAP, unless they are not material: (a) amortization of goodwill; (b) scheduled amortization of actuarial gain or loss of pensions that has been recorded in equity through other comprehensive income; (c) expensing capitalized development costs of research and development (R&D); and (d) cancellation of the fair value model accounting for property, plant and equipment and investment properties and incorporation of cost model accounting.

### **(c) Unification of Accounting Policies Applied to Foreign Associated Companies for the Equity Method**

In March 2008, the ASBJ issued ASBJ Statement No. 16, "Accounting Standard for Equity Method of Accounting for Investments" which was subsequently revised in line with the revision to PTIF No.18 above. The standard requires adjustments to be made to conform the associate's accounting policies for similar transactions and events under similar circumstances to those of the parent company when the associate's financial statements are used in applying the equity method, unless it is impracticable to determine such adjustments. In addition, financial statements prepared by foreign associated companies in accordance with either International Financial Reporting Standards or the generally accepted accounting principles in the United States of America tentatively may be used in applying the equity method if the following items are adjusted so that net income is accounted for in accordance with Japanese GAAP, unless they are not material: (a) amortization of goodwill; (b) scheduled amortization of actuarial gain or loss of pensions that has been recorded in the equity through other comprehensive income; (c) expensing capitalized development costs of R&D; and (d) cancellation of the fair value model accounting for property, plant and equipment and investment properties and incorporation of the cost model accounting.

### **(d) Business Combinations**

In October 2003, the Business Accounting Council issued a Statement of Opinion, "Accounting for Business Combinations," and in December 2005, the ASBJ issued ASBJ Statement No. 7, "Accounting Standard for Business Divestitures" and ASBJ Guidance No. 10, "Guidance for Accounting Standard for Business Combinations and Business Divestitures."

In December 2008, the ASBJ issued a revised accounting standard for business combinations, ASBJ Statement No. 21,

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

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

- (a) **Transactions with noncontrolling interest**—A parent's ownership interest in a subsidiary might change if the parent purchases or sells ownership interests in its subsidiary. The carrying amount of noncontrolling interest is adjusted to reflect the change in the parent's ownership interest in its subsidiary while the parent retains its controlling interest in its subsidiary. Under the previous accounting standard, any difference between the fair value of the consideration received or paid and the amount by which the noncontrolling interest is adjusted is accounted for as an adjustment of goodwill or as profit or loss in the consolidated statement of income. Under the revised accounting standard, such difference is accounted for as capital surplus as long as the parent retains control over its subsidiary.
- (b) **Presentation of the consolidated balance sheet**—In the consolidated balance sheet, "minority interest" under the previous accounting standard is changed to "noncontrolling interest" under the revised accounting standard.
- (c) **Presentation of the consolidated statement of income**—In the consolidated statement of income, "income before minority interest" under the previous accounting standard is changed

to “net income” under the revised accounting standard, and “net income” under the previous accounting standard is changed to “net income attributable to owners of the parent” under the revised accounting standard.

**(d) Provisional accounting treatments for a business combination**—If the initial accounting for a business combination is incomplete by the end of the reporting period in which the business combination occurs, an acquirer shall report in its financial statements provisional amounts for the items for which the accounting is incomplete. Under the previous accounting standard guidance, the impact of adjustments to provisional amounts recorded in a business combination on profit or loss is recognized as profit or loss in the year in which the measurement is completed. Under the revised accounting standard guidance, during the measurement period, which shall not exceed one year from the acquisition, the acquirer shall retrospectively adjust the provisional amounts recognized at the acquisition date to reflect new information obtained about facts and circumstances that existed as of the acquisition date and that would have affected the measurement of the amounts recognized as of that date. Such adjustments shall be recognized as if the accounting for the business combination had been completed at the acquisition date.

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

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

Either retrospective or prospective application of the revised

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

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

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

The Company applied the revised accounting standards and guidance for (a) transactions with noncontrolling interest, (b) presentation of the consolidated balance sheet, (c) presentation of the consolidated statement of income, and (e) acquisition-related costs above, effective December 1, 2015, and (d) provisional accounting treatments for a business combination above for a business combination which occurred on or after December 1, 2015. The revised accounting standards and guidance for (a) transactions with noncontrolling interest and (e) acquisition-related costs were applied prospectively.

With respect to (b) presentation of the consolidated balance sheet and (c) presentation of the consolidated statement of income, the applicable line items in the 2015 consolidated financial statements have been accordingly reclassified and presented in line with those in 2016.

In the consolidated statement of cash flows for the year ended November 31, 2016, cash flows for purchases or sales of ownership interests in a subsidiary without a change in consolidation scope are presented under financing activities, and cash flows for acquisition-related costs are presented under operating activities.

The effect of these changes in the consolidated financial statements was immaterial.

#### **(e) Cash Equivalents**

Cash equivalents are short-term investments that are readily convertible into cash and that are exposed to insignificant risk of

changes in value. Cash equivalents include time deposits and short-term investments, all of which mature or become due within three months of the date of acquisition.

#### **(f) Inventories**

The inventories of the Company and domestic consolidated subsidiaries are stated at the lower of cost, determined principally by the average method, or net selling value.

The inventories of foreign consolidated subsidiaries are stated at the lower of cost, determined principally by the average method or first-in first-out method, or net selling value.

#### **(g) Marketable and Investment Securities**

Marketable and investment securities are classified and accounted for as available-for-sale securities and are reported at fair value, with unrealized gains and losses, net of applicable taxes, reported as a separate component of equity.

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

#### **(h) Allowance for Doubtful Accounts**

To provide for the loss from doubtful accounts, the Company and domestic consolidated subsidiaries determine allowance for doubtful accounts using the historical rate of actual losses for normal receivables and the estimated irrecoverable amount for specific doubtful receivables after considering the recoverability of each account. Foreign consolidated subsidiaries record allowance for doubtful accounts based on the estimated bad debt expense.

#### **(i) Property, Plant, and Equipment**

Property, plant and equipment are stated at cost. Prior to December 1, 2015, depreciation of property, plant and equipment of the Company and domestic consolidated subsidiaries was computed by the declining-balance method, while the straight-line method was applied to buildings acquired after April 1, 1998. Effective December 1, 2015, depreciation of property, plant, and equipment of the Company and domestic consolidated subsidiaries was computed by the declining-balance method, while the straight-line method is applied to buildings acquired after April 1, 1998, and building attachment and structures acquired after April 1, 2016. The effect of the change was immaterial to the consolidated financial statements. Foreign consolidated subsidiaries mainly utilize the straight-line method. The range of useful lives is principally three to 50 years for buildings and structures and principally four to 12 years for machinery and equipment. Leased assets are depreciated by the straight-line method with residual value of zero.

#### **(j) Long-Lived Assets**

The Group reviews its long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset or asset group may not be recoverable. An impairment loss would be recognized if the carrying amount of an asset or asset group exceeds the sum of the undiscounted future cash flows expected to result from the continued use and eventual disposition of the asset or asset group.

The impairment loss would be measured as the amount by which the carrying amount of the asset exceeds its recoverable amount, which is the higher of the discounted cash flows from the continued use and eventual disposition of the asset or the net selling price at disposition. In 2016 and 2015, the Group did not recognize any impairment losses.

#### **(k) Other Intangible Assets**

Intangible assets are amortized by the straight-line method.

#### **(l) Bonuses to Directors**

Bonuses to directors are accrued at the year-end to which such bonuses are attributable.

#### **(m) Liability for Employees' Retirement Benefits**

The Company has a defined contribution plan for a majority of employees and an unfunded retirement benefit plan for certain employees. Certain consolidated subsidiaries have funded or unfunded defined benefit pension plans, unfunded retirement benefit plans and defined contribution plans. The Company and certain consolidated subsidiaries, which have defined benefit plans, applied the simplified method to record the liability at the amount that would be paid if the employees retired at the consolidated balance sheet date. Certain subsidiaries, which have defined benefit pension plans, account for the liability for retirement benefits based on projected benefit obligations and plan assets at the consolidated balance sheet date.

The projected benefit obligations are attributed to the periods based on a benefit formula basis. Actuarial gains and losses are recognized when incurred.

#### **(n) Retirement Allowances for Directors**

Certain domestic consolidated subsidiaries provide for retirement allowances to directors. The liability is recorded at the amount that would be paid if they retired at the consolidated balance sheet date in accordance with internal policies.

In addition to allowance above, during the year ended November 30, 2016, retirement benefits of ¥941 million (\$8,402 thousand) and condolence money of ¥103 million (\$919 thousand) was paid to Mr. Teruhide Osawa, former representative director of the Company and director of subsidiaries. A related

balance of ¥67 million (\$598 thousand) was included in the other current liabilities as of November 30, 2016.

#### **(o) Research and Development Costs**

Research and development costs are charged to costs and expenses as incurred.

#### **(p) Leases**

ASBJ Statement No. 13, "Accounting Standard for Lease Transactions" requires that all finance lease transactions be capitalized by recognizing lease assets and lease obligations in the balance sheet.

All other leases are accounted for as operating leases.

#### **(q) Income Taxes**

The provision for income taxes is computed based on the pretax income included in the consolidated statement of income. The asset and liability approach is used to recognize deferred tax assets and liabilities for the expected future tax consequences of temporary differences between the carrying amounts and the tax bases of assets and liabilities. Deferred taxes are measured by applying currently enacted tax rates to the temporary differences.

#### **(r) Foreign Currency Transactions**

All short-term and long-term monetary receivables and payables denominated in foreign currencies are translated into Japanese yen at the exchange rates at the consolidated balance sheet date. The foreign exchange gains and losses from translation are recognized in the consolidated statement of income to the extent that they are not hedged by forward exchange contracts.

#### **(s) Foreign Currency Financial Statements**

The balance sheet accounts of the consolidated foreign subsidiaries are translated into Japanese yen at the current exchange rate as of the balance sheet date except for equity, which is translated at the historical exchange rate. Differences arising from such translation are shown as "Foreign currency translation adjustments" under accumulated other comprehensive income in a separate component of equity. Revenue and expense accounts of consolidated foreign subsidiaries are translated into yen at the average exchange rates.

#### **(t) Derivatives and Hedging Activities**

The Company and certain subsidiaries use derivative financial instruments to manage their exposure to fluctuations in foreign exchange. The Group does not enter into derivatives for trading or speculative purposes.

Derivative financial instruments and foreign currency transactions are classified and accounted for as follows: a) all

derivatives are recognized as either assets or liabilities and measured at fair value, and gains or losses on derivative transactions are recognized in the consolidated statement of income and b) for derivatives used for hedging purposes, if such derivatives qualify for hedge accounting because of high correlation and effectiveness between the hedging instruments and the hedged items, gains or losses on those derivatives are deferred until the maturity of the hedged transactions.

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

Long-term debt denominated in foreign currencies for which interest rate and currency swaps are used to hedge the foreign currency fluctuations is translated at the contracted rate if the swaps qualify for hedge accounting. Interest rate swaps which qualify for hedge accounting and meet specific matching criteria are not remeasured at market value but the differential paid or received under the swap agreements is recognized and included in interest expense.

#### **(u) Per Share Information**

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

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

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

#### **(v) Accounting Changes and Error Corrections**

In December 2009, the ASBJ issued ASBJ Statement No. 24, "Accounting Standard for Accounting Changes and Error Corrections," and ASBJ Guidance No. 24, "Guidance on Accounting Standard for Accounting Changes and Error Corrections." Accounting treatments under this standard and guidance are as follows:

(1) Changes in Accounting Policies—When a new accounting

policy is applied the following revision of an accounting standard, the new policy is applied retrospectively, unless the revised accounting standard includes specific transitional provisions, in which case the entity shall comply with the specific transitional provisions.

- (2) Changes in Presentation—When the presentation of financial statements is changed, prior-period financial statements are reclassified in accordance with the new presentation.
- (3) Changes in Accounting Estimates—A change in an accounting estimate is accounted for in the period of the change if the change affects that period only and is accounted for prospectively if the change affects both the period of the change and future periods.
- (4) Corrections of Prior-Period Errors—When an error in prior-period financial statements is discovered, those statements are restated.

#### **(w) New Accounting Pronouncements**

Tax Effect Accounting—On March 28, 2016, the ASBJ issued ASBJ Guidance No. 26, “Guidance on Recoverability of Deferred Tax Assets,” which included certain revisions of the previous accounting and auditing guidance issued by the Japanese Institute of Certified Public Accountants. While the new guidance continues to follow the basic framework of the previous guidance, it provides new guidance for the application of judgment in

assessing the recoverability of deferred tax assets.

The previous guidance provided a basic framework which included certain specific restrictions on recognizing deferred tax assets depending on the company’s classification in respect of its profitability, taxable profit and temporary differences, etc.

The new guidance does not change such basic framework but, in limited cases, allows companies to recognize deferred tax assets even for a deductible temporary difference for which it was specifically prohibited to recognize a deferred tax asset under the previous guidance, if the company can justify, with reasonable grounds, that it is probable that the deductible temporary difference will be utilized against future taxable profit in some future period.

The new guidance is effective for the beginning of annual periods beginning on or after April 1, 2016. Earlier application is permitted for annual periods ending on or after March 31, 2016. The new guidance shall not be applied retrospectively and any adjustments from the application of the new guidance at the beginning of the reporting period shall be reflected within retained earnings or accumulated other comprehensive income at the beginning of the reporting period.

The Company expects to apply the new guidance on recoverability of deferred tax assets effective December 1, 2016, and is in the process of measuring the effects of applying the new guidance in future applicable periods.

### **3. BUSINESS COMBINATION**

On March 31, 2016, OSG USA INC., a consolidated subsidiary, acquired 100% of the shares of Amamco Tool & Supply Co., Inc. The Group was aiming to increase global shares of its products in the aerospace industry and to increase the enterprise value of the Group. The results of operations for Amamco Tool & Supply Co., Inc. are included in the Company’s consolidated statements of income from April 1, 2016.

The Company accounted for this business combination by the purchase method of accounting.

The acquisition cost was ¥1,950 million (\$17,411 thousand) in cash. The total cost of acquisition has been allocated to the assets acquired and the liabilities assumed based on their respective fair values. Goodwill recorded in connection with the acquisition totaled ¥1,557 million (\$13,902 thousand). The excess of the cost of acquisition over the fair value of the net assets of Amamco Tool & Supply Co., Inc. is amortized over 10 years. Acquisition related costs, such as advisory fees of ¥11 million (\$98 thousand), were

accounted for as expenses for the year ended November 30, 2016.

The fair values of the assets acquired and the liabilities assumed at the acquisition date are as follows:

	Millions of yen	Thousands of U.S. dollars
Current assets	¥ 422	\$ 3,768
Noncurrent assets	363	3,241
Total assets acquired	¥ 785	\$ 7,009
Current liabilities	¥ 122	\$ 1,089
Long-term liabilities	270	2,411
Total liabilities assumed	¥ 392	\$ 3,500

If this business combination had been completed as of December 1, 2015, the unaudited effects on the consolidated statement of income for the year ended November 30, 2016 would be immaterial.

#### 4. MARKETABLE AND INVESTMENT SECURITIES

Marketable securities, which were included in other current assets, and investment securities at November 30, 2016 and 2015 consisted of the following:

	Millions of yen		Thousands of U.S. dollars
	2016	2015	2016
Current:			
Debt securities	¥ 0	¥ 78	\$ 0
Total	¥ 0	¥ 78	\$ 0
Noncurrent:			
Equity securities	¥ 5,850	¥ 6,158	\$ 52,232
Debt securities	120	121	1,072
Total	¥ 5,970	¥ 6,279	\$ 53,304

The costs and aggregate fair values of securities at November 30, 2016 and 2015 were as follows:

November 30, 2016	Millions of yen			Fair Value
	Cost	Unrealized Gains	Unrealized Losses	
Available-for-sale:				
Equity securities	¥ 2,768	¥ 2,795	¥ 15	¥ 5,548
Debt securities	117	3	—	120

November 30, 2015	Millions of yen			Fair Value
	Cost	Unrealized Gains	Unrealized Losses	
Available-for-sale:				
Equity securities	¥ 2,626	¥ 3,420	¥ —	¥ 6,046
Debt securities	196	3	—	199

November 30, 2016	Thousands of U.S. dollars			Fair Value
	Cost	Unrealized Gains	Unrealized Losses	
Available-for-sale:				
Equity securities	\$ 24,714	\$ 24,955	\$ 134	\$ 49,536
Debt securities	1,045	27	—	1,072

Information on available-for-sale securities which were sold during the years ended November 30, 2016 and 2015 is as follows:

November 30, 2016	Millions of yen		
	Proceeds	Realized Gains	Realized Losses
Available-for-sale:			
Equity securities	¥ —	¥ —	¥ —
Total	¥ —	¥ —	¥ —

November 30, 2015	Millions of yen		
	Proceeds	Realized Gains	Realized Losses
Available-for-sale:			
Equity securities	¥ 32	¥ 18	¥ —
Total	¥ 32	¥ 18	¥ —

November 30, 2016	Thousands of U.S. dollars		
	Proceeds	Realized Gains	Realized Losses
Available-for-sale:			
Equity securities	\$ —	\$ —	\$ —
Total	\$ —	\$ —	\$ —

Impairment losses on investments in unconsolidated subsidiaries for the years ended November 30, 2016 and 2015 were nil and ¥40 million, respectively.

Impairment losses on investments securities and other assets for the years ended November 30, 2016 and 2015 were ¥27 million (\$241 thousand) and nil, respectively.

## 5. NOTES AND ACCOUNTS RECEIVABLE

Trade notes and accounts at November 30, 2016 and 2015 consisted of the following:

	Millions of yen		Thousands of U.S. dollars
	2016	2015	2016
Trade notes	¥ 3,143	¥ 3,443	\$ 28,062
Trade accounts	17,615	18,077	157,277
Total	¥ 20,758	¥ 21,520	\$ 185,339

## 6. INVENTORIES

Inventories at November 30, 2016 and 2015 consisted of the following:

	Millions of yen		Thousands of U.S. dollars
	2016	2015	2016
Merchandise and finished products	¥ 20,978	¥ 19,293	\$ 187,304
Work in process	4,879	5,297	43,563
Raw materials and supplies	5,835	6,084	52,097
Total	¥ 31,692	¥ 30,674	\$ 282,964

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

Short-term borrowings at November 30, 2016 and 2015 mainly consisted of notes to banks and bank overdrafts. The weighted-average interest rates on short-term borrowings were 0.6% as of November 30, 2016 and 1.1% as of November 30, 2015.

Long-term debt at November 30, 2016 and 2015 consisted of the following:

	Millions of yen		Thousands of U.S. dollars
	2016	2015	2016
Unsecured zero-coupon convertible bonds with stock acquisition rights, due 2022	¥ 14,850	¥ 14,850	\$ 132,589
Borrowings from banks and other financial institutions, due serially to 2027 with weighted-average interest rates of 0.2% (2016) and 2.1% (2015)	10,655	1,293	95,134
Total	25,505	16,143	227,723
Less: Portion due within one year	(492)	(446)	(4,393)
Long-term debt, less current portion	¥ 25,013	¥ 15,697	\$ 223,330

The stock acquisition rights issued with the zero-coupon convertible bonds entitle the holders to acquire shares of the Company's common stock through March 21, 2022 at the conversion price of ¥1,635.2 (\$14.6) per share at November 30, 2016. If all these outstanding stock acquisition rights had been exercised at November 30, 2016, 9,081,458 shares of common stock would have been issued.

However, prior to October 4, 2021, the stock acquisition rights may be exercised by the holders of a bond during any particular calendar quarter (or, in case of the calendar quarter commencing on October 1, 2021, until October 3, 2021) only if the closing price of the shares for any 20 trading days in a period of 30 consecutive trading days ending on the last trading day of the immediately preceding calendar quarter is more than 120% of the conversion price in effect on the last trading day of such immediately preceding calendar quarter.

The conversion price is subject to adjustments to reflect stock splits and certain other events.

Effective December 1, 2016, the conversion price is ¥1,633.2 (\$14.58) in accordance with the moving strike clause of the convertible bonds due to ¥50 of cash dividends applicable to the year ended November 30, 2016.

The annual maturities of long-term debt at November 30, 2016 for the next five years and thereafter were as follows:

Years ending November 30	Millions of yen	Thousands of U.S. dollars
2017	¥ 492	\$ 4,393
2018	379	3,384
2019	948	8,464
2020	350	3,125
2021	7,959	71,063
2022 and thereafter	15,377	137,294
Total	¥ 25,505	\$ 227,723

## 8. PLEDGED ASSETS

The carrying amounts of assets pledged as collateral for notes and accounts payable of ¥310 million (\$2,768 thousand), short-term borrowings of ¥53 million (\$473 thousand) and long-term debt (including current portion) of ¥798 million (\$7,125 thousand) as of November 30, 2016 were as follows:

	Millions of yen	Thousands of U.S. dollars
Time deposits	¥ 25	\$ 223
Property, plant and equipment:		
Land	409	3,652
Buildings and structures	1,452	12,964
Machinery and equipment	1,675	14,956
Tools, furniture and fixtures	181	1,616
Total	¥ 3,742	\$ 33,411

## 9. NOTES AND ACCOUNTS PAYABLE

Trade notes and accounts at November 30, 2016 and 2015 consisted of the following:

	Millions of yen		Thousands of U.S. dollars
	2016	2015	2016
Trade notes	¥ 661	¥ 805	\$ 5,902
Trade accounts	3,958	4,175	35,339
Total	¥ 4,619	¥ 4,980	\$ 41,241

## 10. LIABILITY FOR EMPLOYEES' RETIREMENT BENEFITS

The Company has a defined contribution plan for a majority of employees and an unfunded retirement benefit plan for certain employees. Certain consolidated subsidiaries have funded or unfunded defined benefit pension plans, unfunded retirement benefit plans and defined contribution plans. The Company and certain consolidated subsidiaries that have defined benefit plans

applied the simplified method to record the liability at the amount that would be paid if the employees retired at the consolidated balance sheet date. Contributions to the defined contribution plans for the years ended November 30, 2016 and 2015, were ¥670 million (\$5,982 thousand) and ¥675 million, respectively.

(1) The changes in defined benefit obligation for the years ended November 30, 2016 and 2015 were as follows:

	Millions of yen		Thousands of U.S. dollars
	2016	2015	2016
Balance at beginning of year	¥ 256	¥ 232	\$ 2,286
Current service cost	7	10	63
Interest cost	4	6	36
Actuarial losses	23	40	205
Benefits paid	(27)	(43)	(241)
Others	(15)	11	(135)
Balance at end of year	¥ 248	¥ 256	\$ 2,214

(2) The changes in plan assets for the years ended November 30, 2016 and 2015 were as follows:

	Millions of yen		Thousands of U.S. dollars
	2016	2015	2016
Balance at beginning of year	¥ 295	¥ 265	\$ 2,634
Expected return on plan assets	5	8	45
Actuarial (losses) gain	(2)	(1)	(18)
Contributions from the employer	40	54	357
Benefits paid	(27)	(43)	(241)
Others	(17)	12	(152)
Balance at end of year	¥ 294	¥ 295	\$ 2,625

(3) The changes in liability for retirement benefits for which the simplified method was applied to record the liability for the years ended November 30, 2016 and 2015 were as follows:

	Millions of yen		Thousands of U.S. dollars
	2016	2015	2016
Balance at beginning of year	¥ 244	¥ 262	\$ 2,179
Retirement benefit costs	181	211	1,616
Benefits paid	(16)	(67)	(143)
Contributions to pension funds	(126)	(160)	(1,125)
Others	(3)	(1)	(27)
Balance at end of year	¥ 280	¥ 245	\$ 2,500

(4) Reconciliation between the liability recorded in the consolidated balance sheet and the balances of defined benefit obligation and plan assets

	Millions of yen		Thousands of U.S. dollars
	2016	2015	2016
Defined benefit obligation	¥ 1,174	¥ 1,097	\$ 10,482
Plan assets	(1,020)	(963)	(9,107)
Total	154	134	1,375
Unfunded defined benefit obligation	79	71	705
Net liability arising from defined benefit obligation	¥ 233	¥ 205	\$ 2,080

	Millions of yen		Thousands of U.S. dollars
	2016	2015	2016
Liability for retirement benefits	¥ 280	¥ 245	\$ 2,500
Asset for retirement benefits	(47)	(40)	(420)
Net liability arising from defined benefit obligation	¥ 233	¥ 205	\$ 2,080

(5) The components of net periodic benefit costs for the years ended November 30, 2016 and 2015 were as follows:

	Millions of yen		Thousands of U.S. dollars
	2016	2015	2016
Service cost	¥ 7	¥ 10	\$ 63
Interest cost	4	6	36
Expected return on plan assets	(5)	(8)	(45)
Recognized actuarial losses	25	41	223
Retirement benefit costs calculated by the simplified method	181	211	1,616
Net periodic benefit costs	¥ 212	¥ 260	\$ 1,893

(6) Plan assets

[a. Components of plan assets](#)

Plan assets as of November 30, 2016 and 2015 consisted of the following:

	2016	2015
Debt investments and investment trusts	59.11%	51.52%
Equity investments	7.91	11.75
Cash and cash equivalents	20.83	17.71
Others	12.15	19.02
Total	100.00%	100.00%

[b. Method of determining the expected rate of return on plan assets](#)

The expected rate of return on plan assets is determined considering the long-term rates of return which are expected currently and in the future from the various components of the plan assets.

(7) Assumptions used for the years ended November 30, 2016 and 2015 were set forth as follows:

	2016	2015
Discount rate	1.50%	1.75%
Expected rate of return on plan assets	1.50	1.75
Salary increase rate	2.00	2.00

The Company and certain domestic consolidated subsidiaries participate in a multi-employer plan for which the Group cannot reasonably calculate the amount of plan assets corresponding to the contributions made by the Company and the consolidated subsidiaries. Therefore, it is accounted for using the same method as a defined contribution plan.

The contributions to such multi-employer plan, which are

accounted for using the same method as a defined contribution plan, were ¥279 million (\$2,491 thousand) and ¥575 million for the years ended November 30, 2016 and 2015, respectively.

On November 1, 2016, the dissolution of the multi-employer plan in which the Group had been participating was completed. No additional contributions to the plan due to the dissolution was expected to be incurred.

## 11. EQUITY

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

### (a) Dividends

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

The Companies Act permits companies to distribute dividends-in-kind (noncash assets) to shareholders subject to a certain limitation and additional requirements.

Semiannual interim dividends may also be paid once a year upon resolution by the board of directors if the articles of incorporation of the company so stipulate. The Companies Act also provides certain limitations on the amounts available for dividends or the purchase of treasury stock. The limitation is defined as the amount available for distribution to the shareholders, but the amount of net assets after dividends must be maintained at no less than ¥3 million.

### (b) Increases/Decreases and Transfer of Common Stock, Reserve, and Surplus

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

### (c) Treasury Stock and Treasury Stock Acquisition Rights

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

By June 6, 2016, the Company had acquired its 5,000 thousand treasury stocks based on the resolutions of the board of directors on January 20 and March 3, 2016, as a result, treasury stocks increased by ¥9,833 million (\$87,795 thousand).

## 12. INCOME TAXES

The Company and its domestic subsidiaries are subject to Japanese national and local income taxes, which, in the aggregate, resulted in normal effective statutory tax rates of approximately 32.4% and 34.9% for the years ended November 30, 2016 and 2015, respectively. The tax effects of significant temporary differences and tax loss carryforwards, which resulted in deferred tax assets and liabilities at November 30, 2016 and 2015 were as follows:

	Millions of yen		Thousands of U.S. dollars
	2016	2015	2016
<b>Deferred tax assets:</b>			
Retirement benefits for employees	¥ 77	¥ 80	\$ 687
Retirement allowances for directors	43	16	384
Unrealized gains on inventories and property, plant and equipment	1,593	1,827	14,223
Tax loss carryforwards	123	145	1,098
Enterprise taxes payable	90	204	804
Bad debt allowance	109	102	973
Depreciation	83	86	741
Write-down of inventories	460	417	4,107
Write-down of memberships	34	35	304
Write-down of securities	451	469	4,027
Other	817	830	7,295
Deferred tax assets subtotal	3,880	4,211	34,643
Less valuation allowance	(687)	(720)	(6,134)
Total	3,193	3,491	28,509
<b>Deferred tax liabilities:</b>			
Deferred gains on property, plant and equipment	90	99	803
Unrealized gains on available-for-sale securities	439	645	3,920
Depreciation in foreign subsidiaries	1,236	1,001	11,036
Other	308	326	2,750
Total	2,073	2,071	18,509
Net deferred tax assets	¥ 1,120	¥ 1,420	\$ 10,000

A reconciliation between the normal effective statutory tax rates and the actual effective tax rates reflected in the accompanying consolidated statement of income for the year ended November 30, 2016, with the corresponding figures for 2015 is as follows:

	2016	2015
Normal effective statutory tax rate	32.4%	34.9%
Expenses not deductible for income tax purposes	1.3	2.3
Income not taxable for income tax purposes	(0.1)	(0.2)
Per capita tax	0.3	0.2
Lower income tax rates applicable to income in certain foreign countries	(2.4)	(3.9)
Amortization of goodwill	0.6	0.3
Unrecognized deferred taxes on unrealized intercompany profit	0.8	(0.1)
Net change in valuation allowance	0.1	0.0
Other—net	(0.1)	0.3
Actual effective tax rate	32.9%	33.8%

New tax reform laws enacted in 2016 in Japan changed the normal effective statutory tax rate for the fiscal year beginning on or after December 1, 2016 and 2017 from 31.7% to 30.3%, and for the fiscal year beginning on or after December 1, 2018 to 30.1%. The effect of this change on the consolidated statement of income for the year ended November 30, 2016 was immaterial.

### 13. SELLING, GENERAL AND ADMINISTRATIVE EXPENSES

Selling, general and administrative expenses for the years ended November 30, 2016 and 2015 consisted of the following:

	Millions of yen		Thousands of U.S. dollars
	2016	2015	2016
Depreciation	¥ 1,179	¥ 1,566	\$ 10,527
Net periodic benefit costs	380	408	3,393
Provision for bonuses to directors	455	637	4,062
Salaries and bonuses to employees	10,958	11,185	97,839
Sales incentives	1,041	767	9,295
Amortization of goodwill	298	171	2,661
Other	13,824	13,721	123,428
Total	¥ 28,135	¥ 28,455	\$ 251,205

### 14. RESEARCH AND DEVELOPMENT COSTS

Research and development costs charged to costs and expenses were ¥1,607 million (\$14,348 thousand) and ¥1,495 million for the years ended November 30, 2016 and 2015, respectively.

### 15. LEASES

#### (As Lessee)

The Group leases certain machinery, equipment, tools, furniture and fixtures as a lessee.

Future minimum payments under noncancelable operating leases subsequent to November 30, 2016 and 2015 were as follows:

	Millions of yen		Thousands of U.S. dollars
	2016	2015	2016
Due within one year	¥ 139	¥ 189	\$ 1,241
[amount of sublease]	[12]	[11]	[107]
Due after one year	248	282	2,214
[amount of sublease]	[26]	[31]	[232]
Total	¥ 387	¥ 471	\$ 3,455
[amount of sublease]	[38]	[42]	[339]

#### (As Lessor)

Expected lease revenues to be received under the noncancelable operating leases subsequent to November 30, 2016 and 2015 were as follows:

	Millions of yen		Thousands of U.S. dollars
	2016	2015	2016
Due within one year	¥ 100	¥ 88	\$ 893
[amount of sublease]	[100]	[88]	[893]
Due after one year	198	157	1,768
[amount of sublease]	[198]	[157]	[1,768]
Total	¥ 298	¥ 245	\$ 2,661
[amount of sublease]	[298]	[245]	[2,661]

## 16. FINANCIAL INSTRUMENTS AND RELATED DISCLOSURES

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### (1) Group Policy for Financial Instruments

The Group uses financial instruments, mainly long-term debt, including bank loans and bonds, based on its capital financing plan. Cash surpluses, if any, are invested in low-risk financial assets. Derivatives are used not for speculative purposes, but to manage exposure to financial risks as described in (2) below.

### (2) Nature and Extent of Risks Arising from Financial Instruments

Receivables, such as trade notes and trade accounts, are exposed to customer credit risk. Although receivables in foreign currencies are exposed to the risk of fluctuation in foreign currency exchange rates, the positions are hedged by using forward foreign currency contracts in accordance with internal policy. Marketable and investment securities, mainly equity instruments of customers and suppliers of the Group, are exposed to the risk of market price fluctuations.

Payment terms of payables, such as trade notes and trade accounts, are less than one year. Although payables in foreign currencies are exposed to the risk of fluctuation in foreign currency exchange rates, those risks are hedged by using forward foreign currency contracts in accordance with internal policy.

Derivatives mainly include forward foreign currency contracts and interest rate and currency swaps which are used to manage exposure to market risks from changes in foreign currency exchange rates of receivables and payables and from changes in foreign currency exchange and interest rates of debt. Please see Note 17 for more details about derivatives.

### (3) Risk Management for Financial Instruments

#### Credit risk management

Credit risk is the risk of economic loss arising from a counterparty's failure to repay or service debt according to the contractual terms. The Group manages its credit risk from receivables on the basis of internal guidelines, which include monitoring of payment terms and balances of customers to identify default risk of customers at an early stage. Please see Note 17 for more details about

derivatives.

The maximum credit risk exposure of financial assets is limited to their carrying amounts as of November 30, 2016.

#### Market risk management (foreign exchange risk and interest rate risk)

Foreign currency trade receivables and payables are exposed to risks resulting from fluctuations in foreign currency exchange rates. Such foreign exchange risks are hedged principally by forward foreign currency contracts. In addition, when foreign currency trade receivables and payables are expected from forecasted transactions, forward foreign currency contracts may be used under the limited contract term of one year.

The Company and certain consolidated subsidiaries utilize interest rate and currency swaps to hedge market risks from changes in foreign currencies and interest rates.

Marketable and investment securities are managed by monitoring market values and the financial position of issuers on a regular basis.

Internal guidelines stating the basic principles for derivative transactions have been prepared and are required to be followed. Reconciliation of the transactions and balances with customers is made, and the transaction data is reported to the director in charge of the operations and the management meeting on a monthly basis.

#### Liquidity risk management

Liquidity risk comprises the risk that the Group cannot meet its contractual obligations in full on maturity dates. The Company manages its liquidity risk by holding adequate volumes of liquid assets along with adequate financial planning by the finance group.

### (4) Fair Values of Financial Instruments

Fair values of financial instruments are based on quoted prices in active markets. If quoted prices are not available, other rational valuation techniques are used instead. Please see Note 17 for details of the fair value of derivatives.

**(a) Fair value of financial instruments**

November 30, 2016	Millions of yen		
	Carrying Amount	Fair Value	Unrealized Loss
Cash and cash equivalents	¥ 16,555	¥ 16,555	—
Time deposits	1,449	1,449	—
Trade notes and accounts receivable	20,758		
Allowance for doubtful accounts	(192)		
	20,566	20,566	—
Marketable and investment securities	5,668	5,668	—
Total	¥ 44,238	¥ 44,238	—
Short-term borrowings	¥ 8,001	¥ 8,001	—
Trade notes and accounts payable	4,619	4,619	—
Income taxes payable	1,437	1,437	—
Long-term debt, including current portion	25,505	31,696	¥ (6,191)
Total	¥ 39,562	¥ 45,753	¥ (6,191)

November 30, 2015	Millions of yen		
	Carrying Amount	Fair Value	Unrealized Loss
Cash and cash equivalents	¥ 19,402	¥ 19,402	—
Time deposits	2,070	2,070	—
Trade notes and accounts receivable	21,520		
Allowance for doubtful accounts	(189)		
	21,331	21,331	—
Marketable and investment securities	6,245	6,245	—
Total	¥ 49,048	¥ 49,048	—
Short-term borrowings	¥ 4,053	¥ 4,053	—
Trade notes and accounts payable	4,980	4,980	—
Income taxes payable	3,486	3,486	—
Long-term debt, including current portion	16,143	23,876	¥ (7,733)
Total	¥ 28,662	¥ 36,395	¥ (7,733)

November 30, 2016	Thousands of U.S. dollars		
	Carrying Amount	Fair Value	Unrealized Loss
Cash and cash equivalents	\$ 147,813	\$ 147,813	—
Time deposits	12,938	12,938	—
Trade notes and accounts receivable	185,339		
Allowance for doubtful accounts	(1,714)		
	183,625	183,625	—
Marketable and investment securities	50,607	50,607	—
Total	\$ 394,983	\$ 394,983	—
Short-term borrowings	\$ 71,438	\$ 71,438	—
Trade notes and accounts payable	41,241	41,241	—
Income taxes payable	12,830	12,830	—
Long-term debt, including current portion	227,723	283,000	\$ (55,277)
Total	\$ 353,232	\$ 408,509	\$ (55,277)

### Cash and Cash Equivalents and Time Deposits

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

### Marketable and Investment Securities

The fair values of equity securities are measured at the quoted market price of the stock exchange for the equity instruments. Information about the fair value of marketable and investment securities by classification is included in Note 4.

### Trade Notes and Accounts Receivable and Payable, Short-Term Borrowings, and Income Taxes Payable

The carrying values of trade notes and accounts receivable and payable, short-term borrowings, and income taxes payable approximate fair value because of their short maturities.

### Long-Term Debt

The fair value of long-term debt is determined by discounting the cash flows related to the debt at the Group's assumed corporate borrowing rate. The fair value of convertible bonds is measured at the market price obtained from financial institutions.

### Derivatives

Fair value information for derivatives is included in Note 17.

### (b) Carrying amount of financial instruments whose fair value cannot be reliably determined

	Millions of yen		Thousands of U.S. dollars
	2016	2015	2016
Investments in equity instruments that do not have a quoted market price in an active market	¥ 302	¥ 112	\$ 2,696
Investments in unconsolidated subsidiaries and associated companies	2,144	2,672	19,143
Other assets	82	22	732

### (5) Maturity Analysis for Financial Assets and Securities with Contractual Maturities

November 30, 2016	Millions of yen			
	Due in One Year or Less	Due After One Year Through Five Years	Due After Five Years Through 10 Years	Due After 10 Years
Cash and cash equivalents	¥ 16,555	¥ —	¥ —	—
Time deposits	1,449	—	—	—
Trade notes and accounts receivable	20,758	—	—	—
Available-for-sale securities with contractual maturities	0	14	100	—
Total	¥ 38,762	¥ 14	¥ 100	—

November 30, 2016	Thousands of U.S. dollars			
	Due in One Year or Less	Due After One Year Through Five Years	Due After Five Years Through 10 Years	Due After 10 Years
Cash and cash equivalents	\$ 147,813	\$ —	\$ —	—
Time deposits	12,938	—	—	—
Trade notes and accounts receivable	185,339	—	—	—
Available-for-sale securities with contractual maturities	0	125	893	—
Total	\$ 346,090	\$ 125	\$ 893	—

Please see Note 7 for annual maturities of long-term debt.

## 17. DERIVATIVES

The Company and certain subsidiaries enter into foreign currency forward contracts to hedge foreign exchange risk associated with certain assets and liabilities denominated in foreign currencies.

The Company and certain consolidated subsidiaries utilize interest rate and currency swaps to hedge market risks from changes in foreign currencies and interest rates.

All derivative transactions are entered into to hedge foreign currency exposures incorporated within its business. Accordingly,

market risk in these derivatives is basically offset by opposite movements in the value of hedged assets or liabilities.

Because the counterparties to these derivatives are limited to major international financial institutions, the Company and subsidiaries do not anticipate any losses arising from credit risk.

Derivative transactions entered into by the Company and subsidiaries have been made in accordance with internal policies which regulate the authorization and credit limit amount.

### Derivative Transactions to Which Hedge Accounting is Not Applied

November 30, 2016	Millions of yen			
	Contract Amount	Contract Amount Due After One Year	Fair Value	Unrealized Gains (Losses)
Foreign currency forward contracts:				
Selling U.S. dollars	¥ 1,471	¥ —	¥ (41)	¥ (41)
Selling Euros	171	—	(8)	(8)
Buying Swiss francs	786	—	45	45
Buying British pounds	100	—	7	7
Currency option contracts:				
Selling U.S. dollars	176	—	(164)	(164)
Interest rate and currency swaps: (fixed rate payment, floating rate receipt)	756	562	77	77

November 30, 2015	Millions of yen			
	Contract Amount	Contract Amount Due After One Year	Fair Value	Unrealized Gains (Losses)
Foreign currency forward contracts:				
Selling U.S. dollars	¥ 2,660	¥ —	¥ (23)	¥ (23)
Selling Euros	255	—	9	9
Interest rate and currency swaps: (fixed rate payment, floating rate receipt)	997	792	32	32

November 30, 2016	Thousands of U.S. dollars			
	Contract Amount	Contract Amount Due After One Year	Fair Value	Unrealized Gains (Losses)
Foreign currency forward contracts:				
Selling U.S. dollars	\$ 13,134	\$ —	\$ (366)	\$ (366)
Selling Euros	1,527	—	(71)	(71)
Buying Swiss francs	7,018	—	402	402
Buying British pounds	893	—	63	63
Currency option contracts:				
Selling U.S. dollars	1,571	—	(1,464)	(1,464)
Interest rate and currency swaps: (fixed rate payment, floating rate receipt)	6,750	5,018	688	688

### Derivative Transactions to Which Hedge Accounting is Applied

November 30, 2016	Millions of yen			
	Hedged Item	Contract Amount	Contract Amount Due After One Year	Fair Value
Foreign currency forward contracts:				
Selling Euros	Receivables	¥ 58	¥ —	¥ (1)
Interest rate and currency swaps: (fixed rate payment, floating rate receipt)	Long-term debt	3,865	3,865	(Note)

November 30, 2015	Millions of yen			
	Hedged Item	Contract Amount	Contract Amount Due After One Year	Fair Value
Foreign currency forward contracts:				
Buying Euros	Payables	¥ 40	—	¥ (1)
Selling U.S. dollars	Receivables	4,527	—	4
Selling Euros	Receivables	14	—	0

November 30, 2016	Thousands of U.S. dollars			
	Hedged Item	Contract Amount	Contract Amount Due After One Year	Fair Value
Foreign currency forward contracts:				
Selling Euros	<b>Receivables</b>	<b>\$ 518</b>	<b>\$ —</b>	<b>¥ (9)</b>
Interest rate and currency swaps: (fixed rate payment, floating rate receipt)	<b>Long-term debt</b>	<b>34,509</b>	<b>34,509</b>	<b>(Note)</b>

Note: Fair values of derivatives qualified for hedge accounting, which are not remeasured at market value, are included in the fair values of hedged items in Note 16.

## 18. CONTINGENT LIABILITIES

At November 30, 2016, the Group had contingent liabilities for notes endorsed with recourse of ¥32 million (\$286 thousand).

## 19. OTHER COMPREHENSIVE INCOME (LOSS)

The components of other comprehensive income (loss) for the years ended November 30, 2016 and 2015 were as follows:

	Millions of yen		Thousands of U.S. dollars
	2016	2015	2016
Unrealized (loss) gain on available-for-sale securities:			
(Losses) Gains arising during the year	¥ (640)	¥ 860	\$ (5,714)
Reclassification adjustments to profit or loss	—	(18)	—
Amount before income tax effect	(640)	842	(5,714)
Income tax effect	206	(180)	1,839
Total	¥ (434)	¥ 662	\$ (3,875)
Deferred (loss) gain on derivatives under hedge accounting:			
Gains arising during the year	¥ 554	¥ 3	\$ 4,946
Reclassification adjustments to profit or loss	(558)	—	(4,982)
Amount before income tax effect	(4)	3	(36)
Income tax effect	1	(1)	9
Total	¥ (3)	¥ 2	\$ (27)
Foreign currency translation adjustments:			
Adjustments arising during the year	¥ (7,100)	¥ (2,049)	\$ (63,393)
Reclassification adjustments to profit or loss	(5)	—	(44)
Total	¥ (7,105)	¥ (2,049)	\$ (63,437)
Share of other comprehensive income in associates—			
(Losses) Gains arising during the year	¥ (18)	¥ 7	\$ (161)
Total	¥ (18)	¥ 7	\$ (161)
Total other comprehensive loss	¥ (7,560)	¥ (1,378)	\$ (67,500)

## 20. NET INCOME PER SHARE

Reconciliation of the differences between basic and diluted net income per share ("EPS") for the years ended November 30, 2016 and 2015 is as follows:

	Millions of yen	Thousands of Shares	Yen	U.S. dollars
For the year ended November 30, 2016				
	Net Income	Weighted-Average Shares		EPS
Basic EPS				
Net income available to common shareholders	¥ 10,135	91,640	¥ 110.59	\$ 0.99
Effect of dilutive securities				
Convertible bonds	—	9,082		
Diluted EPS				
Net income for computation	¥ 10,135	100,722	¥ 100.62	\$ 0.90

	Millions of yen	Thousands of Shares	Yen
For the year ended November 30, 2015			
	Net Income	Weighted-Average Shares	EPS
Basic EPS			
Net income available to common shareholders	¥12,518	94,991	¥ 131.78
Effect of dilutive securities			
Convertible bonds	—	9,108	
Diluted EPS			
Net income for computation	¥12,518	104,099	¥ 120.25

## 21. RELATED-PARTY TRANSACTIONS

(Transactions of the Company with directors of the Company for the year ended November 30, 2016)

The Company paid condolence money to the bereaved family of Mr. Teruhide Osawa, a former representative director of the Company. During the year ended November 30, 2016, ¥36 million (\$321 thousand) was paid to Mr. Nobuaki Osawa, a senior director of the Company. The amount was determined based on internal rules of the Company.

During the year ended November 30, 2016, the Company purchased treasury stock of the Company from Mr. Gohei Osawa, a director of the Company, in the amount of ¥138 million (\$1,232 thousand). The transaction price was determined based on Tokyo stock exchange ToSTNeT-3 on April 11, 2016.

(Transactions of consolidated subsidiaries with directors of the Company for the year ended November 30, 2016)

The consolidated subsidiaries also paid condolence money to the bereaved family of Mr. Teruhide Osawa, a former representative director of the Company. During the year ended November 30, 2016, ¥67 million (\$598 thousand) was paid to Mr. Nobuaki Osawa, a senior director of the Company. The amount was approved by the Board of Directors of the consolidated subsidiaries. A related balance of ¥67 million (\$598 thousand) was included in the other current liabilities as of November 30, 2016.

During the year ended November 30, 2015, no related party transactions occurred.

## 22. SUBSEQUENT EVENTS

Appropriation of retained earnings

The following appropriation of retained earnings at November 30, 2016 was approved at the Company's shareholders' meeting held on February 18, 2017:

	Millions of yen	Thousands of U.S. dollars
Year-end cash dividends, ¥28 (\$0.25) per share	<b>¥ 2,521</b>	<b>\$ 22,509</b>

## 23. SEGMENT INFORMATION

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

### 1. Description of Reportable Segments

The Group is engaged in the manufacture and sale of cutting tools for industrial applications and has key entities in each region in Japan, the Americas (USA, Canada, Mexico and Brazil), Europe (UK, Belgium, France, Netherlands, Denmark, Spain, Germany, Italy, Romania and Turkey) and Asia (China, Singapore, Thailand, Taiwan, South Korea, India, Indonesia, Philippines and Vietnam). Such key entities are independent management units, which develop and execute a comprehensive regional product strategy. Therefore, the Group consists of four regional segments (Japan, the Americas, Europe and Asia).

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

The accounting policies of each reportable segment are consistent with those disclosed in Note 2, "Summary of Significant Accounting Policies."

### 3. Information about Sales, Profit, Assets and Other Items

2016	Millions of yen					Reconciliations	Consolidated
	Reportable Segment						
	Japan	The Americas	Europe	Asia	Total		
Sales							
Sales to external customers	<b>¥ 48,258</b>	<b>¥ 19,478</b>	<b>¥ 12,269</b>	<b>¥ 25,556</b>	<b>¥ 105,561</b>	—	<b>¥ 105,561</b>
Intersegment sales or transfers	<b>17,451</b>	<b>167</b>	<b>46</b>	<b>1,977</b>	<b>19,641</b>	<b>¥ (19,641)</b>	—
Total	<b>¥ 65,709</b>	<b>¥ 19,645</b>	<b>¥ 12,315</b>	<b>¥ 27,533</b>	<b>¥ 125,202</b>	<b>¥ (19,641)</b>	<b>¥ 105,561</b>
Segment profit	<b>¥ 9,529</b>	<b>¥ 2,471</b>	<b>¥ 1,079</b>	<b>¥ 4,734</b>	<b>¥ 17,813</b>	<b>¥ 434</b>	<b>¥ 18,247</b>
Segment assets	<b>97,508</b>	<b>24,112</b>	<b>13,624</b>	<b>50,508</b>	<b>185,752</b>	<b>(29,671)</b>	<b>156,081</b>
Other:							
Depreciation and amortization	<b>4,305</b>	<b>848</b>	<b>286</b>	<b>2,674</b>	<b>8,113</b>	<b>(227)</b>	<b>7,886</b>
Amortization of goodwill	—	<b>101</b>	<b>215</b>	—	<b>316</b>	—	<b>316</b>
Amount of investment in equity of affiliates	<b>125</b>	<b>2</b>	—	—	<b>127</b>	—	<b>127</b>
Increase in property, plant and equipment and intangible assets	<b>7,926</b>	<b>1,567</b>	<b>917</b>	<b>3,605</b>	<b>14,015</b>	<b>(285)</b>	<b>13,730</b>

2015	Millions of yen						
	Reportable Segment					Reconciliations	Consolidated
	Japan	The Americas	Europe	Asia	Total		
Sales							
Sales to external customers	¥ 48,151	¥ 21,758	¥ 11,382	¥ 30,627	¥ 111,918	—	¥ 111,918
Intersegment sales or transfers	19,689	226	31	2,230	22,176	¥ (22,176)	—
Total	¥ 67,840	¥ 21,984	¥ 11,413	¥ 32,857	¥ 134,094	¥ (22,176)	¥ 111,918
Segment profit	¥ 11,401	¥ 3,488	¥ 1,247	¥ 6,296	¥ 22,432	¥ (835)	¥ 21,597
Segment assets	90,580	22,097	11,909	54,955	179,541	(24,411)	155,130
Other:							
Depreciation and amortization	4,209	794	249	2,619	7,871	(166)	7,705
Amortization of goodwill	—	—	189	—	189	—	189
Amount of investment in equity of affiliates	153	12	—	—	165	—	165
Increase in property, plant, and equipment and intangible assets	6,653	1,390	471	5,606	14,120	(631)	13,489

2016	Thousands of U.S. dollars						
	Reportable Segment					Reconciliations	Consolidated
	Japan	The Americas	Europe	Asia	Total		
Sales							
Sales to external customers	\$ 430,875	\$ 173,911	\$ 109,545	\$ 228,178	\$ 942,509	—	\$ 942,509
Intersegment sales or transfers	155,813	1,491	410	17,652	175,366	\$(175,366)	—
Total	\$ 586,688	\$ 175,402	\$ 109,955	\$ 245,830	\$ 1,117,875	\$(175,366)	\$ 942,509
Segment profit	\$ 85,080	\$ 22,063	\$ 9,634	\$ 42,268	\$ 159,045	\$ 3,875	\$ 162,920
Segment assets	870,607	215,286	121,643	450,964	1,658,500	(264,920)	1,393,580
Other:							
Depreciation and amortization	38,438	7,571	2,554	23,875	72,438	(2,027)	70,411
Amortization of goodwill	—	901	1,920	—	2,821	—	2,821
Amount of investment in equity of affiliates	1,116	18	—	—	1,134	—	1,134
Increase in property, plant and equipment and intangible assets	70,768	13,991	8,188	32,187	125,134	(2,545)	122,589

Notes:

1. The reconciliation amount for segment profit; segment assets; depreciation and amortization; increase in property, plant and equipment and intangible assets is the elimination of intersegment transactions.

2. Segment profit is reconciled to operating income in the consolidated statement of income.

## Associated Information

### 1. Information about products and services

	Millions of yen						
	2016						Total
	Taps	End mills	Drills and other	Rolling dies	Gauges	Other	
Sales to external customers	¥ 33,948	¥ 24,838	¥ 26,710	¥ 9,443	¥ 1,479	¥ 9,143	¥ 105,561

	Millions of yen						
	2015						Total
	Taps	End mills	Drills and other	Rolling dies	Gauges	Other	
Sales to external customers	¥ 38,240	¥ 26,554	¥ 25,744	¥ 9,922	¥ 1,539	¥ 9,919	¥ 111,918

	Thousands of U.S. dollars						
	2016						Total
	Taps	End mills	Drills and other	Rolling dies	Gauges	Other	
Sales to external customers	\$ 303,107	\$ 221,768	\$ 238,482	\$ 84,313	\$ 13,205	\$ 81,634	\$ 942,509

## 2. Geographical information

### (1) Sales

Millions of yen							
2016							
Japan	USA	Other Americas	Europe	China	Other Asia	Other	Total
¥ 47,208	¥ 14,635	¥ 4,740	¥ 12,321	¥ 10,515	¥ 16,132	¥ 10	¥ 105,561

Millions of yen							
2015							
Japan	USA	Other Americas	Europe	China	Other Asia	Other	Total
¥ 47,218	¥ 16,859	¥ 4,795	¥ 11,528	¥ 12,780	¥ 18,738	¥ 0	¥ 111,918

Thousands of U.S. dollars							
2016							
Japan	USA	Other Americas	Europe	China	Other Asia	Other	Total
\$ 421,500	\$ 130,670	\$ 42,321	\$ 110,009	\$ 93,884	\$ 144,036	\$ 89	\$ 942,509

Note: Sales are classified by country or area based on the location of customers.

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

Millions of yen					
2016					
Japan	The Americas	Europe	Korea	Other Asia	Total
¥ 37,420	¥ 6,621	¥ 2,261	¥ 9,997	¥ 10,096	¥ 66,395

Millions of yen					
2015					
Japan	The Americas	Europe	Korea	Other Asia	Total
¥ 33,845	¥ 6,117	¥ 1,713	¥ 10,795	¥ 10,807	¥ 63,277

Thousands of U.S. dollars					
2016					
Japan	The Americas	Europe	Korea	Other Asia	Total
\$ 334,107	\$ 59,116	\$ 20,188	\$ 89,258	\$ 90,143	\$ 592,812

Information about goodwill and negative goodwill by reportable segment

	Millions of yen					
	2016					
	Japan	The Americas	Europe	Asia	Corporate/ Elimination	Total
Amortization of goodwill	—	¥ 101	¥ 215	—	—	¥ 316
Amount of goodwill at November 30, 2016	—	¥ 1,450	¥ 1,209	—	—	¥ 2,659

	Millions of yen					
	2015					
	Japan	The Americas	Europe	Asia	Corporate/ Elimination	Total
Amortization of goodwill	—	—	¥ 189	—	—	¥ 189
Amount of goodwill at November 30, 2015	—	—	¥ 533	—	—	¥ 533

	Thousands of U.S. dollars					
	2016					
	Japan	The Americas	Europe	Asia	Corporate/ Elimination	Total
Amortization of goodwill	—	\$ 902	\$ 1,919	—	—	\$ 2,821
Amount of goodwill at November 30, 2016	—	\$ 12,946	\$ 10,795	—	—	\$ 23,741

The amount and amortization of negative goodwill allocated by business combinations completed before December 1, 2010, are as follows:

	Millions of yen					
	2016					
	Japan	The Americas	Europe	Asia	Corporate/ Elimination	Total
Amortization of negative goodwill	—	¥ 2	—	¥ 16	—	¥ 18
Amount of negative goodwill at November 30, 2016	—	¥ 6	—	¥ 16	—	¥ 22

	Millions of yen					
	2015					
	Japan	The Americas	Europe	Asia	Corporate/ Elimination	Total
Amortization of negative goodwill	—	¥ 2	—	¥ 16	—	¥ 18
Amount of negative goodwill at November 30, 2015	—	¥ 7	—	¥ 32	—	¥ 39

	Thousands of U.S. dollars					
	2016					
	Japan	The Americas	Europe	Asia	Corporate/ Elimination	Total
Amortization of negative goodwill	—	\$ 18	—	\$ 143	—	\$ 161
Amount of negative goodwill at November 30, 2016	—	\$ 54	—	\$ 143	—	\$ 197

## BOARD OF DIRECTORS

(February 18, 2017)

### Directors

President Chief Executive Officer	<b>Norio Ishikawa</b>
Managing Director	<b>Koji Sonobe</b>
Managing Director	<b>Toru Endo</b>
Managing Director	<b>Nobuaki Osawa</b>
Managing Director	<b>Tetsuro Hayasaka</b>
Managing Director	<b>Jiro Osawa</b>
Managing Director	<b>Toshitaka Yoshizaki</b>
Managing Director	<b>Hideaki Osawa</b>
Director (Full-time Audit & Supervisory Committee Member)	<b>Gohei Osawa</b>
Director (Audit & Supervisory Committee Member)	<b>Takeo Nakagawa*</b>
Director (Audit & Supervisory Committee Member)	<b>Hiroyuki Ohmori*</b>
Director (Audit & Supervisory Committee Member)	<b>Koji Kato</b>
Director (Audit & Supervisory Committee Member)	<b>Kyoshiro Ono*</b>
Director (Audit & Supervisory Committee Member)	<b>Yoshiyuki Sakaki*</b>

\* Outside Director

### Executive Officers

Senior Executive Officer	<b>Taeil Chung</b>
Senior Executive Officer	<b>Koji Takeo</b>
Senior Executive Officer	<b>Mike Grantham</b>
Senior Executive Officer	<b>Mitsuyoshi Hikosaka</b>
Senior Executive Officer	<b>Yasutaka Yoneda</b>
Executive Officer	<b>Kazumasa Koike</b>
Executive Officer	<b>Hiromi Ohno</b>
Executive Officer	<b>Jeffrey Tennant</b>
Executive Officer	<b>Kazuhisa Sawada</b>
Executive Officer	<b>Takehiro Tomiyoshi</b>
Executive Officer	<b>Toshihiro Hisadome</b>
Executive Officer	<b>Yasushi Suzuki</b>

## INVESTOR INFORMATION

(November 30, 2016)

### Corporate Data

#### Date Established:

March 26, 1938

#### Capital:

¥10,404,381,114

#### Headquarters:

3-22, Honnogahara, Toyokawa,  
Aichi Prefecture 442-8543, Japan

URL: <http://www.osg.co.jp/>

<http://www.osg-global.jp/>

Telephone: (+81) 533-82-1113

Fax: (+81) 533-82-1131

#### Number of Employees:

5,866 (Consolidated)

#### Number of Shares of Common Stock Issued and Outstanding:

95,955,226 shares

#### Minimum Purchasing Unit of Shares:

100 shares

#### Number of Shareholders:

8,045

#### Transfer Agent for Shares:

Sumitomo Mitsui Trust Bank, Limited

### Major Shareholders

	Number of Shares Held (Thousands)	Percent Ownership (%)
State Street Bank and Trust Company	4,138	4.60
The Master Trust Bank of Japan, Co., Ltd. (Trust Account)	3,553	3.95
Japan Trustee Services Bank, Ltd. (Trust Account)	3,203	3.56
Osawa Scientific Studies Grants Foundation	3,073	3.41
OSG Agent Association	2,981	3.31
OSG Stock Holding Association	2,428	2.70
Sumitomo Mitsui Banking Corporation	2,100	2.33
Toyota Motor Corporation	2,100	2.33
The Nomura Trust and Banking Co., Ltd. (Investment Trust Account)	2,076	2.31
The Bank of New York, Non-Treaty Jasdec Account	1,801	2.00

### Stock Listings

Tokyo Stock Exchange, Nagoya Stock Exchange



*shaping your dreams*

## **OSG Corporation**

3-22, Honnogahara, Toyokawa, Aichi Prefecture 442-8543, Japan

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