JEOL
Solutions for Innovation

ANNUAL REPORT 2017

Fiscal year ended March 31, 2017

Corporate History

	Corporate History	Product Development History
1949	Japan Electron Optics Laboratory Co., Ltd. established	JEM-1 electron microscope completed
1956		JEM-5G electron microscope first exported to the CEA Saclay Atomic Energy Research Institute, France JNM-1, Japan's first nuclear magnetic resonance (NMR) system, completed
1961	Company name changed to JEOL Ltd.	
1962	JEOL listed on the Second Section of the Tokyo Stock Exchange JEOLCO (USA) INC. established as the first overseas subsidiary	JXA-3 X-ray microanalyzer completed
1963		JMS-01 double-focusing mass spectrometer completed JLC-01 general-purpose automatic recording fluid chromatograph completed
1966	JEOL listed on the First Section of the Tokyo Stock Exchange	JSM-1 scanning electron microscope completed JEM-1000 1000kV ultrahigh voltage electron microscope completed
1967		JEBX-2A electron beam lithography system completed
1968		JLC-5AH, world's first fully automated amino acid analyzer, completed
1972		JCA-1KM "Clinalyzer" clinical chemistry analyzer completed
1974		JAMP-3 Auger microprobe and JESCA-2 photoelectron spectrometer completed
1976	"Tokyo Meeting," first overseas marketing meeting, held	
1982		JEPAS-1000 electron beam measuring instrument completed
1983		JIBL-100 focused ion beam system completed
1989		JSTM-4000XV ultrahigh-vacuum scanning tunnel microscope completed
1993		JEIP-900F high-density reactive ion plating system completed
1995	"BS EN ISO 9001" obtained	
1996	Launch of the JEOL Group website (http://www.jeol.co.jp)	High-speed next-generation clinical chemistry analyzer "BioMajesty™" completed
2001	New JEOL TECHNICS LTD. building completed	
2002	YAMAGATA CREATIVE CO., LTD. (currently JEOL YAMAGATA Co., LTD.) established, and the New Datum Hall completed Obtained ISO 14001 certification for environmental management system	
2003	JEOL Group's Environmental Statement announced	
2004	YAMAGATA CREATIVE CO., LTD. (currently JEOL YAMAGATA Co., LTD.) Tendo Factory completed	
2005	Agreed to set up an industry-academia collaboration office with the University of Tokyo	Ion source for mass spectrometers "DART" completed
2007	New clean room in Building 3 completed	
2009	JEOL DATUM LTD. and JEOL ACTIVE CO., LTD. absorbed	JEM-ARM200F atomic resolution analytical electron microscope completed
2010	JEOL BRASIL INSTRUMENTOS CIENTIFICOS LTDA. established JEOL FINETECH CO., LTD. and JEOL ENGINEERING CO., LTD. absorbed JEOL Group medium-term management plan, "CHALLENGE 5," announced JEOL SYSTEM TECHNOLOGY CO., LTD. absorbed	JMS-S3000 SpiralTOF™, matrix assisted laser desorption/Ionization time-of-flight mass spectrometer, completed InTouchScope™ JSM-6010LA completed
2011	JEOL (RUS) LLC established JEOL INDIA PRIVATE LIMITED established JEOL RESONANCE Inc. established	JIB-4000 focused ion beam milling/imaging system completed
2012		New thermal field emission scanning electron microscope JSM-7100F completed New benchtop scanning electron microscope JCM-6000 "NeoScope™" completed JEM-1400Plus new field emission transmission electron microscope completed
2013	JEOL Group medium-term management plan, "Dynamic Vision," announced	Zero boil-off magnet for NMR system completed
2014	Capital reinforcement implemented 65th anniversary of establishment Riken CLST-JEOL Collaboration Center established JEOL (BEIJING) CO., LTD. moved to new company location JEOL (GULF) FZE established	Ultimate atomic resolution transmission electron microscope JEM-ARM300F completed Nuclear magnetic resonance system JNM-ECZ series completed JSM-7800FPRIME new Schottky field emission scanning electron microscope completed
2015	NIMS-JEOL Center of Excellence for Analytical Technology opened JEOL (GERMANY) GmbH new building completed	JMS-T200GC high-end gas chromatograph time-of-flight mass spectrometer completed JSM-IT100 InTouchScope™ scanning electron microscope completed JEM-F200 multi-purpose electron microscope completed JCA-ZS050 future generation clinical chemistry analyzer completed
2016	JEOL Group medium-term management plan, "Triangle Plan," announced JEOL USA NMR R&D LAB established	JSM-IT300HR series InTouchScope™ scanning electron microscope completed
2017	Jointly with IMS, JEOL announced introduction to market of world's first multi-electron beam lithography system for mass production JEOL estabished CeSPIA Inc. with Dr. Yoshinori Fujiyoshi of Nagoya University Opened of the Keio University - JEOL High-Performance Analytical Equipment Sharing Model Validation & Evaluation Center	ROYAL HFX probe completed JSM-IT500 series InTouchScope™ scanning electron microscope completed JBX-8100FS of spot electron beam lithography systems completed JEM-Z200FSC field emission cryo-electron microscope completed JSM-7900F new Schottky field emission scanning electron microscope completed

Consolidated Financial Highlights

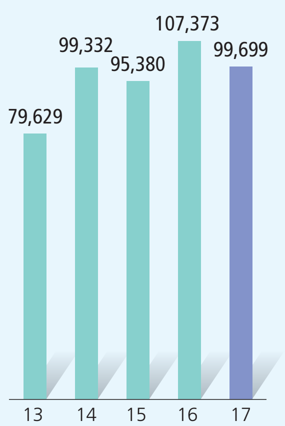
JEOL Ltd. and consolidated subsidiaries, for the years ended March 31, 2017 and 2016

	Millions of yen		Thousands of U.S. dollars (Note)
	2017	2016	2017
For the year:			
Net sales	¥ 99,699	¥ 107,373	$ 888,583
Operating income	2,077	6,145	18,510
Income before income taxes	2,274	5,770	20,274
Net income attributable to owners of the parent	596	4,090	5,312
Per share data (in yen and U.S. dollars):			
Net income attributable to owners of the parent (yen)	6.17	42.32	0.05
Total equity (yen)	334.11	332.05	2.98
At year-end:			
Total assets	109,045	113,501	971,881
Total equity	32,285	32,087	287,745

Note: The U.S. dollar amounts have been translated from yen, for convenience only, at the rate of ¥112.2 to U.S.$1 (the approximate exchange rate on March 31, 2017).

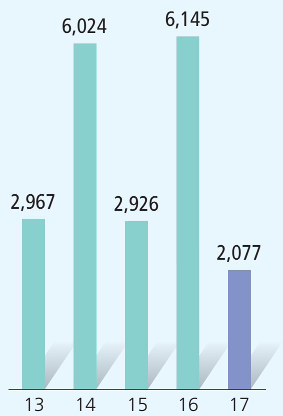
Net sales

(Millions of yen)



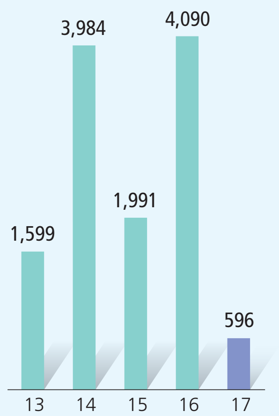
Operating income (loss)

(Millions of yen)



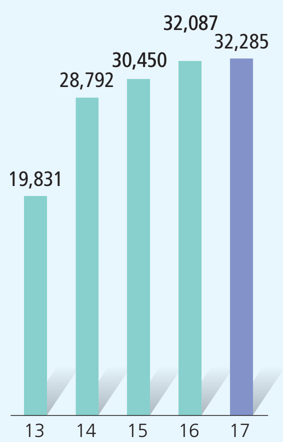
Net income (loss) attributable to owners of the parent

(Millions of yen)



Total equity

(Millions of yen)



Contents

Disclaimer Regarding Forward-Looking Statements

The information contained in this annual report is given for the sole purpose of providing information regarding the business performance of JEOL Ltd. during the fiscal year ended March 31, 2017, and is not intended to solicit investment in any securities issued by the Company. Any statements with respect to JEOL's current plans, strategies and forecasts are forward-looking statements based upon information available as of March 31, 2017, and involve known and unknown risks and uncertainties.

Actual events and results may differ materially from those anticipated in these statements.

President's Message

First of all, let me take this opportunity to express my heartfelt gratitude for your continuous support.

It is a pleasure to deliver my message to our stakeholders in this JEOL Annual Report for the fiscal year ended March 31, 2017.

Gon-emon Kurihara
President and Representative Director

Company Philosophy

On the basis of "Creativity" and "Research and Development," JEOL positively challenges the world's highest technology, thus forever contributing to progress in both science and society through its products.

Solutions for Innovation | JEOL

Business Results during the Fiscal Year Ended March 31, 2017

The economic situation in Japan during the fiscal year under review was characterized by the continuation of a moderate recovery, with the economic policy of the government and the monetary policy of the Bank of Japan underpinning improvements in employment and income. Recent economic conditions have also been relatively firm in the US and Europe, and there have been signs of a pickup in the Chinese economy driven by domestic demand, which has been supported by public works. Business conditions deteriorated in resource-rich countries such as Brazil and Russia, but the recovery in commodity markets suggests that the worst has now passed.

Under these circumstances, the JEOL Group worked hard to implement the prioritized strategies defined in its medium-term management plan, "Triangle Plan," (FY 2016 to FY 2018) to enhance its enterprise value and management base as well as boost orders and sales. We have reported our results in the section of Consolidated Financial Analysis section of this document.

In Pursuit of Higher Corporate Values

The JEOL Group developed the "Triangle Plan," its new medium-term management plan for FY 2016 to FY 2018. Under the plan, we will build on the management structure reforms achieved under "CHALLENGE 5" (the medium-term management plan for FY 2010 to FY 2012), and the growth strategy under "Dynamic Vision" (the medium-term management plan for FY 2013 to FY 2015). While continuing the YOKOGUSHI Strategy (cross-sectional collaboration strategy) implemented in the previous management plans, we will pursue "speed," "difference," and "change" as a new set of keywords to deepen and materialize our growth strategy. Based on these visions and strategies, we will strive to transform the Company into a highly profitable, medium-sized enterprise that continuously generates solid profits.

The JEOL Group will continue to work all-out to renovate its business structure and set up a stable revenue source structure, while promoting environmental conservation, enhancing compliance, maintaining our commitment to corporate ethics, and reinforcing our management base for sustainable growth by fostering a favorable corporate culture on a Group-wide basis.

Shareholder Return and Dividends

Our basic policy for profit distribution is to maintain stable dividends from a long-term perspective based on our efforts to improve our financial standing and corporate structure. For the fiscal year under review, in light of our business performance and financial condition, the year-end dividend was ¥3.50 per share (the full-year dividend including the interim dividend was ¥7 per share).

By pursuing profit-oriented management, we will continue to enhance our enterprise value and improve our earnings base. We look forward to your understanding on these matters.

Triangle Plan

(FY 2016 to FY 2018)

Under the "Triangle Plan," we will further strengthen the management structure reforms achieved under "CHALLENGE 5" (the medium-term management plan for FY 2010 to FY 2012), and the growth strategy under "Dynamic Vision" (the medium-term management plan for FY 2013 to FY 2015). While continuing the YOKOGUSHI Strategy (cross-sectional collaboration strategy) implemented in the previous management plans, we will pursue "speed," "difference" and "change" as a new set of keywords to deepen and achieve our growth strategy. Based on these visions and strategies, we will strive to transform the Company into a highly profitable, medium-sized enterprise that continuously generates solid profits.

Corporate Message

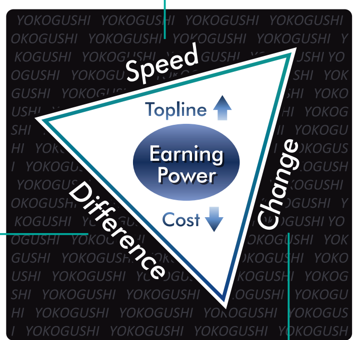
Solutions for Innovation

Providing the solutions to support customer innovation

Our approach to implement the "Triangle Plan"

Speed The one who controls the speed, controls the business

- Achieve a speed-up of development in all product categories
- Strengthen product development ability by improving the high through-put function
- Reduce delivery time and delivery adjustment time
- Achieve prompt supply of consumable parts and prompt service
- Strengthen the response to the needs of the private-sector market where speed is essential



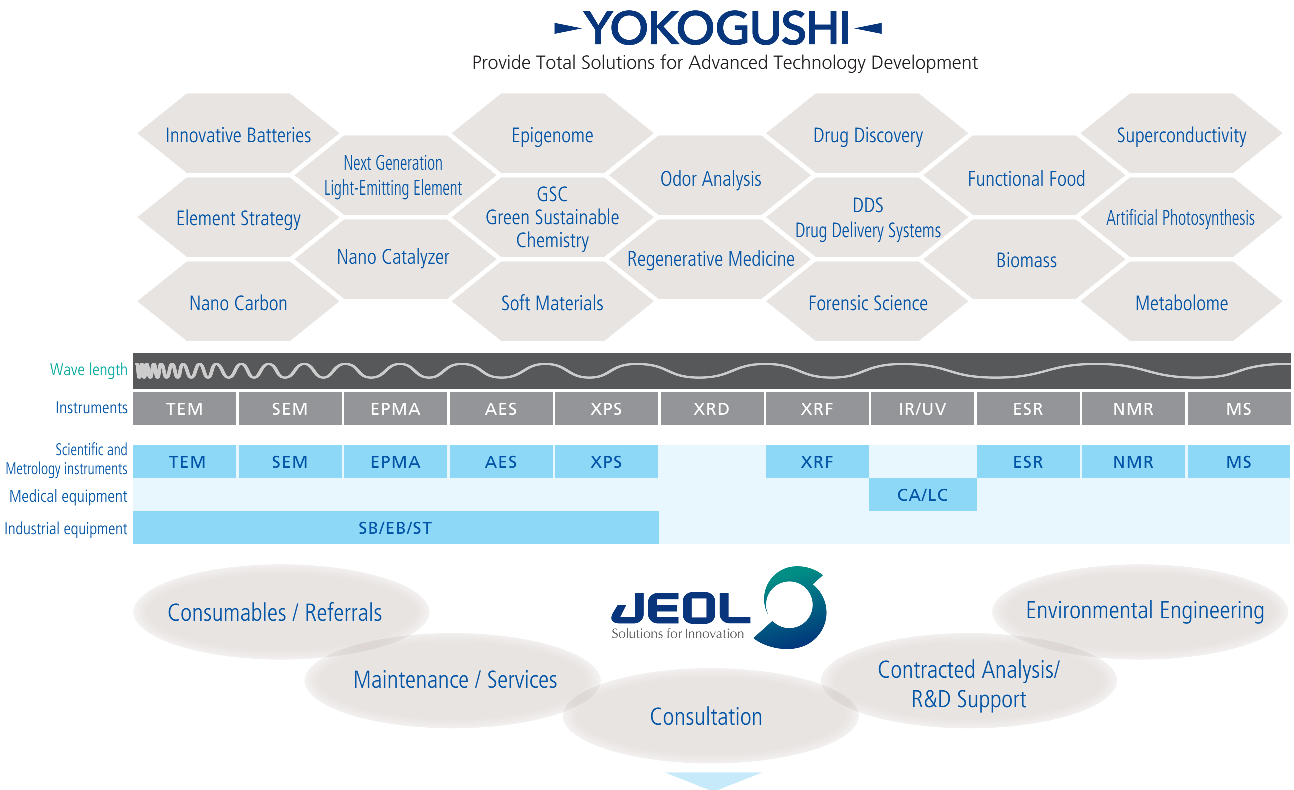
Difference Creation of competitive advantage (which makes the difference)

- Strengthen product development focusing on differentiation from competitor products
- Promote YOKOGUSHI sales promotion
- Implement specific YOKOGUSHI activities that directly bring results to the business
- Further promote the solution business focusing on differentiation from competitor products

Change Adaptation to environmental changes and efforts for self-reform

- Expand the business model from retailing to the aftermarket
- Establish a system to continuously monitor the business environment, detect changes and respond to the changes

Foundation of the Triangle Plan



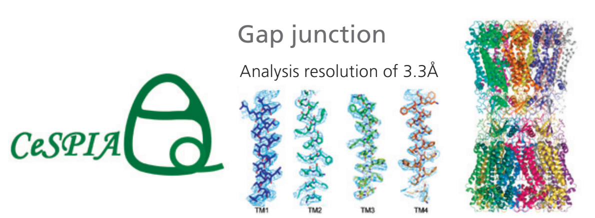
Quantitative Targets

Consolidated net sales of ¥**120** billion and consolidated ordinary profit of ¥**7** billion (ordinary profit ratio: **5.8**%) in FY 2018

New initiatives Solutions Business

Equity investment in CeSPIA Inc.

In a joint equity investment with Nagoya University's Visiting Professor Dr. Yoshinori Fujiyoshi the Company established CeSPIA Inc. to provide contract services for analyzing protein structures based on membrane protein structure methods using cryo-electron microscopes.



Nature Comms, 7, 13681 (2016)

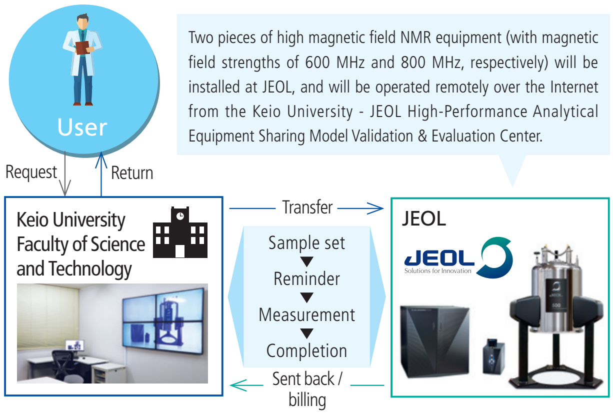
By providing high-level structure analysis contract services, we will broaden the base for protein structure analysis.

Opening of the Keio University - JEOL High-Performance Analytical Equipment Sharing Model Validation & Evaluation Center

- Creating a new business for high-performance analysis equipment -

With our eyes on commercialization in one year, we have begun validating with Keio University a new pay-by-the-hour business involving high magnetic field NMR over the Internet.

[Concept drawing: Pay-by-the-hour service for high-end analysis equipment]



Topics

2016 April

JEOL Employees Received the Prizes for Science and Technology FY 2016 for Two Achievements from the Commendation for Science and Technology by the Minister of Education, Culture, Sports, Science and Technology

Hideyuki Takahashi (SA Business Unit, JEOL) and Ryoji Tanaka (a development group expert from the Engineering Division, JEOL Resonance Inc. (a consolidated subsidiary) received the Prizes for Science and Technology (in the Development Category) FY 2016 from the Commendation for Science and Technology by the Minister of Education, Culture, Sports, Science and Technology. Mr. Takahashi received the prize for development and improvement of a soft X-ray emission spectrometer for electron microscopes. Mr. Tanaka received the prize for development of the world's first over-1GHz NMR system using a high-temperature superconductor.

2017 January

Launched JXA-8530FPlus electron probe micro analyzer

The JXA-8530FPlus represents the third generation in this series for the Company. As well as using a significantly strengthened electron optical system that achieves high throughput analysis, the instrument has new software that allows a greater number of applications to be offered. By using a multipurpose chamber, its enhanced expandability allows it to accommodate a variety of optional attachments.

Launched JIB-4700F, a New Multi-Beam System

By using a hybrid conical objective lens in the scanning electron microscope column, GENTLEBEAM™ (GB) mode, and an in-lens detection system, this product achieves a guaranteed resolution of 1.6nm at a low accelerating voltage of 1kV. In combination with the in-lens Schottky electron gun, which can achieve an electron beam with a probe current of up to 300 nA, this has enabled high-resolution observation and high-speed analysis.

2016 4 > 5 > 6 > 7 > 8 > 9 > 10

2016 September

NMR spectrometer Z receives 2016 Good Design Award

The Company's NMR spectrometer Z received a 2016 Good Design Award (hosted by the Japan Institute for Design Promotion). It received a positive evaluation due to the introduction of a folded plane in one part of a simple rectangular housing, removing the need to worry about an exhaust vent, which was difficult to deal with, and enabling us to create a sense of precision and strength as well as a product identity that is memorable.

GOOD DESIGN AWARD
2016年度受賞

Launched New Scanning Electron Microscope JSM-IT300HR
–A high-performance SEM made possible by a newly developed high-brightness electron gun and optical system–

The use of a newly developed high-brightness electron gun and optical system allowed a new type of scanning electron microscope to be developed. The JSM-IT300HR, enables high-resolution observation and easier acquisition of elemental analysis data in submicron areas. With its high-resolution observation and greater ease for analysis at high spatial resolution, this scanning electron microscope (SEM) surpasses the conventional general-purpose SEMs.

Environmental Activities

JGMS basic policy

Under the company philosophy, the JEOL Group strives to provide total solutions that meet the needs of customers and markets and contribute to the realization of a sustainable recycling society, by providing services and products that include the latest scientific and metrology instruments, semiconductor-related equipment, industrial equipment, medical equipment and other types of equipment.

Providing products that take the environment into account

Regulations restricting substances used in products, including the EU's RoHS Directive, are already in force and the use of similar regulations is expanding to other countries. Going forward, in addition to complying with legal requirements, and with the aim of considering everything from procurement to disposal, and of responding to requests both in Japan and from overseas, we will proactively work on the development, production and supply of environmentally friendly and environmentally aware products. On our "Environment Activities" website (www.jeol.co.jp/en/corporate/envi/report/), we have made available information regarding our environmental initiatives.

Participation in a Network of Enterprises That Consider the Environment in Akishima City

Based on the concept of contribution from the regional level to the global environment, we have actively participated from the beginning in the "Network of Enterprises That Consider the Environment in Akishima City," which was set up in April 2005 and which involves Akishima City in the Tokyo metropolitan area and enterprises in Akishima.

2017 March

Launched new scanning electron microscope series JSM-IT500 InTouchScope™

The JSM-IT500, with further enhanced operability, was developed based on the highly regarded Company's InTouchScope™. Routine analyses are even faster and easier to carry out, and throughput is approximately 35% higher than previous models.

New NMR probe developed for fluorine compounds

(Supply is scheduled to begin from September 2017)

The ROYAL HFX probe is the first NMR probe in the world to be equipped with a function that can switch the high-frequency range (1H and 19 F) from single tune to dual tune mode automatically. It can be used on entry-level and high-end spectrometers.

Launched JBX-8100FS series of spot electron beam lithography systems

For the JBX-8100FS series of electron beam lithography systems, throughput has been improved by cutting time to a minimum during operations and during pattern generation. As well, the footprint is much smaller and energy use has been reduced.

11 12 2017 1 2 3 4 5

2017 February

Introduced the world's first multi-electron beam lithography system for mask production, with production carried out jointly with IMS

The Company reached a long-term agreement with IMS to extend their business alliance, with the aim of manufacturing the world's first MBMW-101 mask patterning multi-electron beam lithography system for mask production. We will supply the MBMW-101 to photomask manufacturers that are at the leading edge of the industry.

2017 April

Launched a field emission cryo-electron microscope JEM-Z200FSC

JEOL has developed a new cryo-electron microscope, the JEM-Z200FSC (CRYO ARM™ 200), that allows image data for single-particle analysis to be acquired automatically over long periods of time.

2017 May

Launched JSM-7900F, a new Schottky field emission scanning electron microscope

JSM-7900F achieves a combination of ultra-high resolution observation and superior operability. It delivers high performance at all times, without being dependent on the skill of the operator.

Expansion of the "Don't-Throw-Away" Campaign (Campaign for Cleaning Up Commuting Routes)

Since 1994, the JEOL Group has conducted a campaign to clean up areas around the Company's premises and routes from the Company to a nearby railway station. The clean-up activity has been held more than 100 times.

CSR

Science Class Support and Science Camp

As part of the commemorative projects for the 60th anniversary of the establishment of the JEOL Group, Science Class Support has been continuously conducted since December 2007 for neighboring elementary schools and others. This special class sees instructors sent from the JEOL Group, and pupils can observe plant pollen and others using desktop scanning electron microscopes.

Since November 2011, special lessons have been given to pupils at elementary schools in Ishinomaki City, Sendai City, Shiogama City, Natori City, and Kesennuma City, which were devastated by the Great East Japan Earthquake. JEOL plans to continue these special lessons in the future.

Kazato Research Foundation

In commemoration of the 20th anniversary of the establishment of the Company, the Kazato Research Foundation was launched in 1969 by a donation from Kenji Kazato, the founder of JEOL, to promote R&D of electron microscopes and related equipment, as well as research using electron microscopes and related equipment.

Board of Directors, Audit & Supervisory Board Members and Corporate Officers (As of June 28, 2017)

President & Representative Director

Gon-emon Kurihara

Representative Director & Executive Vice President

Masashi Iwatsuki

Directors & Senior Executive Officers

Koichi Fukuyama

Hideyuki Nimura

Atsumi Nakamura

Directors & Executive Officers

Izumi Oi

Toyohiko Tazawa

Outside Directors

Hiroshi Akao

Satoshi Nagakubo

Standing Audit & Supervisory Board Members

Takashi Wakasa

Kazunori Fukushima

Outside Audit & Supervisory Board Members

Hajime Miyakawa

Akifumi Goto

Executive Officers

Wataru Wakamiya
Yasutoshi Nakagawa
Shin Saito
Katsumoto Yaguchi
Yoshihiro Ohkura

Corporate Officers

Peter Genovese
Hiroaki Fukuda
Atsushi Seki
Mitsuru Takahashi
Yasuo Hijikata
Akihiro Kobayashi
Tadashi Okubo
Tadashi Komagata
Shintaro Yazuka

Consolidated Five-Year Summary

JEOL Ltd. and consolidated subsidiaries, for the years ended March 31, 2017, 2016, 2015, 2014, and 2013

For the year (Millions of yen):	2017	2016	2015	2014	2013
Net sales	**99,699**	107,373	95,380	99,332	79,629
Scientific and metrology instruments	**66,510**	73,909	69,221	72,692	56,452
Industrial equipment	**11,565**	9,988	7,436	9,090	6,612
Medical equipment	**21,624**	23,476	18,723	17,550	16,565
Selling, general and administrative expenses	**32,798**	34,129	31,918	27,632	24,357
Operating income (loss)	**2,077**	6,145	2,926	6,024	2,967
Ordinary profit (loss)	**1,724**	5,370	3,532	3,340	1,909
Net income (loss) attributable to owners of the parent	**596**	4,090	1,991	3,984	1,599
Capital expenditures	**3,267**	2,859	3,014	3,681	3,226
Scientific and metrology instruments	**2,735**	2,216	2,191	1,530	2,177
Industrial equipment	**178**	200	386	1,517	501
Medical equipment	**188**	302	319	258	260
Eliminations/Corporate	**166**	141	118	376	288
Depreciation expense	**2,526**	2,877	2,718	2,528	2,276
Research and development costs	**6,130**	6,479	5,515	4,515	4,291
Scientific and metrology instruments	**4,404**	4,671	4,065	3,550	3,223
Industrial equipment	**787**	668	633	274	450
Medical equipment	**939**	1,140	817	691	618

At year-end (Millions of yen):					
Total assets	**109,045**	113,501	115,869	111,452	98,534
Total equity	**32,285**	32,087	30,450	28,792	19,831

Per share data (Yen):					
Net income (loss) attributable to owners of the parent	**6.17**	42.32	18.58	47.98	19.01
Total equity	**334.11**	332.05	315.10	276.72	213.58
Cash dividends					
Common stock	**7.00**	6.00	5.00	5.00	2.00
Preferred stock	**–**	–	–	50,000.00	36,712.30

Value indicators (%):					
Return on equity (ROE)	**1.9**	13.1	6.7	16.4	9.4
Return on assets (ROA)	**0.5**	3.6	1.8	3.8	1.7

Consolidated Financial Analysis

Overview of the Fiscal Year Ended March 31, 2017

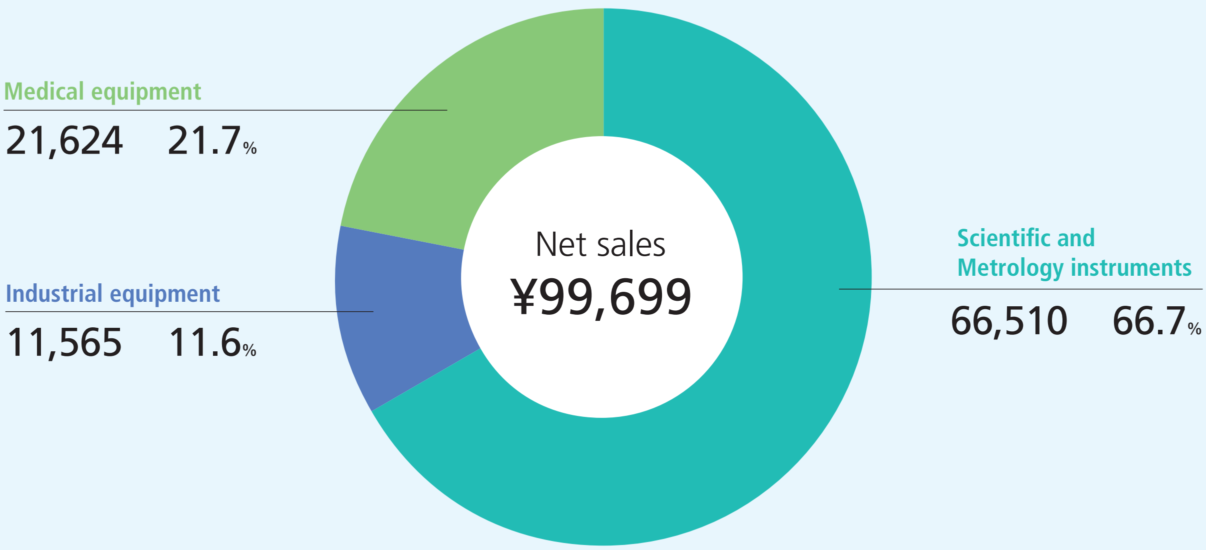
The economic situation in Japan during the fiscal year under review was characterized by the continuation of a moderate recovery, with the economic policy of the government and the monetary policy of the Bank of Japan underpinning improvements in employment and incomes. Recent economic conditions have also been relatively firm in the US and Europe, and there have been signs of a pickup in the Chinese economy driven by domestic demand, which has been supported by public works. Business conditions deteriorated in resource-rich countries such as Brazil and Russia, but the recovery in commodity markets suggests that the worst has now passed.

Under these circumstances, the JEOL Group worked hard to implement the prioritized strategies defined in the medium-term management plan, "Triangle Plan," (FY 2016 to FY 2018) to enhance its enterprise value and management base as well as boost orders and sales.

Net sales for the consolidated fiscal year under review were ¥99,699 million (down 7.1% compared with ¥107,373 million in the previous year). In terms of profit and loss, operating profit was ¥2,077 million (down 66.2% compared with ¥6,145 million in the previous year), ordinary profit was ¥1,724 million (down 67.9% compared with ¥5,370 million in the previous year), and profit attributable to owners of the parent was ¥596 million (down 85.4% compared with ¥4,090 million in the previous year).

Net sales by segment

(Millions of yen)



Segment Information

Information by Business Segment

❶ Scientific and Metrology Instruments Segment

Brisk inquiries for electron microscopes continued, but net sales were sluggish due to intensifying competition in addition to the effects of the yen's appreciation.

Net sales for this segment for the fiscal year were ¥66,510 million (a 10.0% decrease from the previous year).

❷ Industrial Equipment Segment

Sales and orders of electron beam lithography systems and electron sources & power supplies for electron beam deposition remained strong.

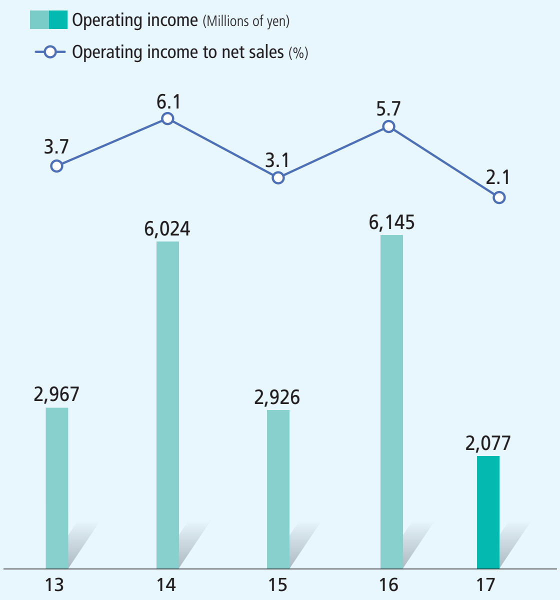
Net sales in this segment for the year were ¥11,565 million (a 15.8% increase over the previous year).

❸ Medical Equipment Segment

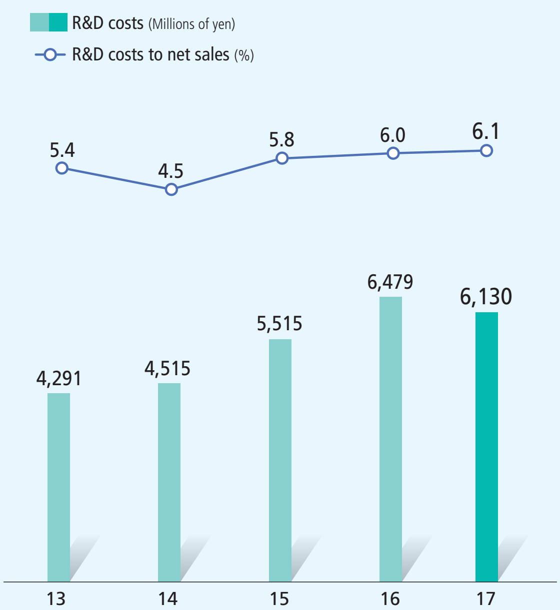
Domestic sales of clinical chemistry analyzers recorded steady growth. Overseas, orders and sales from our OEM partner Siemens were slow.

Net sales of this segment for the year were ¥21,624 million (a 7.9% decrease from the previous year).

▶Operating income / Operating income to net sales



▶R&D costs / R&D costs to net sales



Consolidated Financial Analysis

Financial Position

Total assets at the end of the consolidated fiscal year under review came to ¥109,045 million, down ¥4,456 million from the end of the previous consolidated fiscal year. The major factor for this decline was an increase of ¥301 million in noncurrent assets attributable to an increase in investment securities, while current assets decreased by ¥4,769 million attributable to a decline in cash and cash equivalents and lower inventories, partially offset by an increase in trade notes and account receivables.

Total liabilities were ¥76,760 million, down ¥4,654 million from the end of the previous consolidated fiscal year. This was mainly due to a decline in notes and accounts payable.

Total equity grew ¥198 million, to ¥32,285 million, reflecting the recording of ¥596 million in profit attributable to owners of the parent. As a result, the shareholders' equity ratio as of March 31, 2017 rose 1.3 percentage points, to 29.6%.

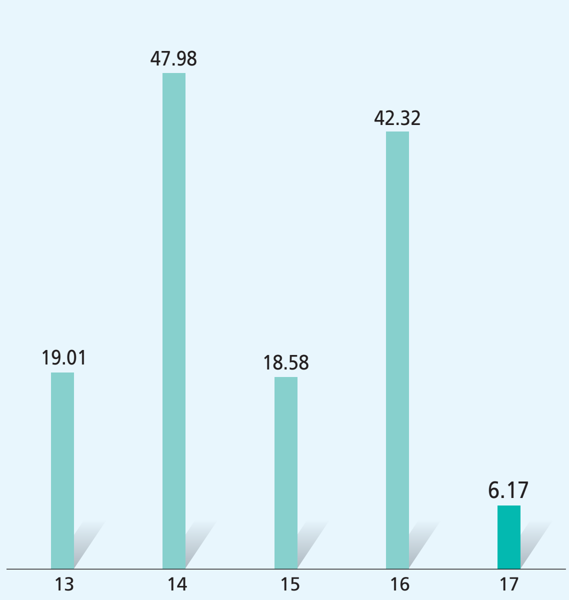
Cash Flows

For the consolidated fiscal year under review, net cash used in operating activities was ¥573 million, compared with an inflow of ¥8,137 million in FY 2016. On the one hand, this decline was the result of a decrease in inventories. On the other hand, this decline was more than offset by decreases in trade payables and payments of items, such as income taxes, etc.

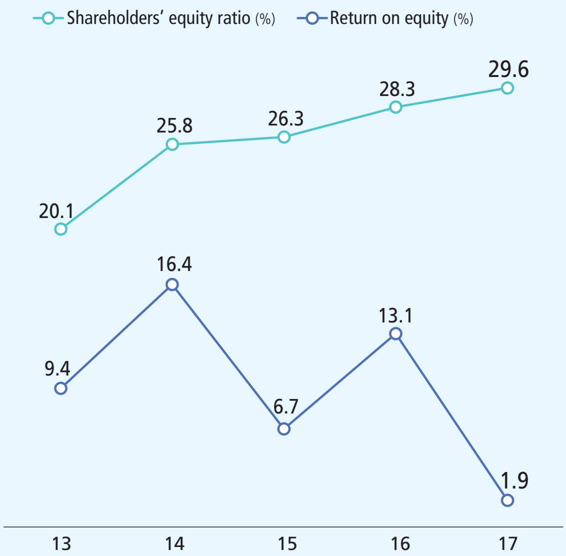
Net cash used in investing activities totaled ¥1,094 million, compared with a net cash outflow of ¥1,697 million in FY 2016. This decline was caused primarily by payments, such as those related to purchases of property, plant and equipment, which more than offset proceeds from sales of property, plant and equipment.

Net cash used in financing activities was ¥289 million, compared with a net cash outflow of ¥5,820 million in FY 2016. The main cause of this decrease was the payment of dividends.

Net income (loss) per share



Shareholders' equity ratio / Return on equity

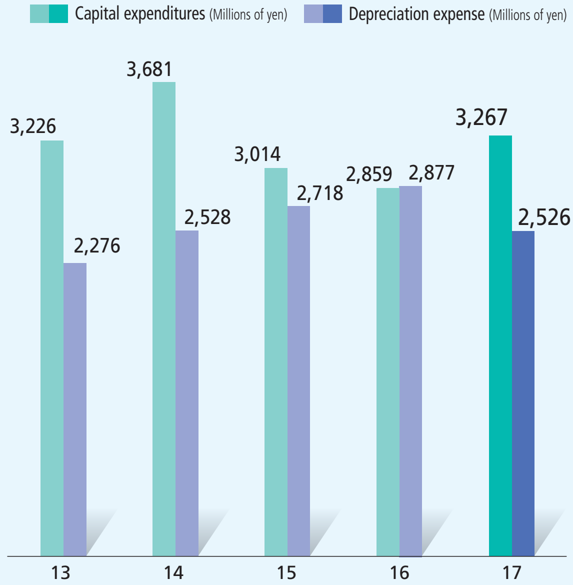


Outlook for the Next Fiscal Year

Looking ahead, although expectations for economic recovery have been increasing, it is anticipated that uncertainty will linger. Under these circumstances, the Group has firmly determined to make the utmost efforts to achieve the set targets by intensively promoting the measures defined in our medium-term management plan, "Triangle Plan" (FY 2016 to FY 2018), and securing order receipts as well as sales while implementing cost improvements.

With respect to the consolidated operating forecasts for the fiscal year ending March 31, 2018, we expect ¥105,000 million in net sales (up 5.3% year on year), ¥3,000 million in operating profit (up 44.5%), ¥2,700 million in ordinary profit (up 56.6%), and ¥1,400 million in profit attributable to owners of the parent (up 134.9%).

Capital expenditures / Depreciation expense



Consolidated Balance Sheet (March 31, 2017)

		Millions of Yen		Thousands of U.S. Dollars (Note 1)
	ASSETS	2017	2016	2017
CURRENT ASSETS:	Cash and cash equivalents (Note 12)	¥ 9,421	¥ 11,717	$ 83,963
	Time deposits (Note 12)	745	724	6,639
	Receivables (Note 12):			
	Trade notes	2,235	941	19,917
	Trade accounts	23,178	23,753	206,577
	Unconsolidated subsidiaries and affiliates	1,424	1,537	12,694
	Other	424	478	3,775
	Allowance for doubtful receivables	(474)	(418)	(4,221)
	Inventories (Note 4)	39,300	41,318	350,267
	Deferred tax assets (Note 8)	1,616	2,157	14,405
	Prepaid expenses and other current assets	2,257	2,688	20,121
	Total current assets	¥ 80,126	¥ 84,895	$714,137
PROPERTY, PLANT AND EQUIPMENT (Notes 5):	Land	1,790	1,834	15,952
	Buildings and structures	21,988	21,875	195,972
	Machinery and equipment	3,757	3,498	33,488
	Tools, furniture and fixtures	18,836	17,978	167,874
	Lease assets	3,702	3,629	32,998
	Construction in progress	293	34	2,607
	Total	50,366	48,848	448,891
	Accumulated depreciation	(36,901)	(35,811)	(328,883)
	Net property, plant and equipment	13,465	13,037	120,008
INVESTMENTS AND OTHER ASSETS:	Investment securities (Notes 3, 5 and 12)	6,871	6,272	61,241
	Investments in and advances to unconsolidated subsidiaries and affiliates (Note 12)	2,578	2,585	22,979
	Software	329	453	2,934
	Software lease	85	115	758
	Goodwill	2,496	2,866	22,253
	Deferred tax assets (Note 8)	356	588	3,170
	Other assets	2,739	2,690	24,401
	Total investments and other assets	15,454	15,569	137,736
TOTAL		¥109,045	¥113,501	$971,881

See notes to consolidated financial statements.

LIABILITIES AND EQUITY		Millions of Yen 2017	Millions of Yen 2016	Thousands of U.S. Dollars (Note 1) 2017
CURRENT LIABILITIES:	Short-term bank loans (Notes 5 and 12)	¥ 6,571	¥ 11,103	$ 58,567
	Current portion of long-term bank loans (Notes 5 and 12)	4,572	5,809	40,751
	Current portion of bonds (Notes 5 and 12)	676	650	6,025
	Current portion of long-term lease obligations (Notes 5 and 11)	436	490	3,889
	Payables (Note 12):			
	Trade notes	10,998	13,524	98,023
	Trade accounts	6,976	8,086	62,175
	Unconsolidated subsidiaries and affiliates	227	314	2,025
	Other	2,036	2,850	18,144
	Income taxes payable	355	530	3,161
	Deferred tax liabilities (Note 8)	61	25	551
	Advances received	7,011	8,176	62,490
	Accrued bonuses to employees	995	1,155	8,870
	Other current liabilities	6,201	5,403	55,253
	Total current liabilities	¥ 47,115	¥ 58,115	$419,924
LONG-TERM LIABILITIES:	Bonds (Notes 5 and 12)	5,387	2,663	48,008
	Long-term bank loans (Notes 5 and 12)	12,594	8,775	112,247
	Long-term lease obligations (Notes 5 and 11)	631	784	5,622
	Deferred tax liabilities (Note 8)	5	25	42
	Liability for employees' retirement benefits (Note 6)	10,265	10,260	91,492
	Retirement allowances for directors, executive officers and Audit & Supervisory Board members (Note 6)	167	190	1,490
	Asset retirement obligations	332	331	2,963
	Other long-term liabilities	264	271	2,348
	Total long-term liabilities	29,645	23,299	264,212
EQUITY (Note 7):	COMMITMENTS AND CONTINGENT LIABILITIES (Notes 11, 13 and 14)			
	Common stock—authorized, 200,000,000 shares; issued, 97,715,600 shares in 2017 and 2016	10,038	10,038	89,463
	Capital surplus	9,386	9,386	83,655
	Retained earnings	13,977	14,058	124,573
	Treasury stock—at cost, 1,085,824 shares in 2017 and 1,083,293 shares in 2016	(538)	(537)	(4,794)
	Accumulated other comprehensive income (loss):			
	Unrealized gain on available-for-sale securities	3,122	2,514	27,818
	Deferred gain on derivatives under hedge accounting	5		49
	Foreign currency translation adjustments	(1,520)	(1,062)	(13,544)
	Defined retirement benefit plans	(2,185)	(2,310)	(19,475)
	Total equity	32,285	32,087	287,745
	TOTAL	¥109,045	¥113,501	$971,881

See notes to consolidated financial statements.

Consolidated Statement of Income (Year Ended March 31, 2017)

		Millions of Yen		Thousands of U.S. Dollars (Note 1)
		2017	2016	2017
	NET SALES (Note 10)	¥99,699	¥107,373	$888,583
	COST OF SALES (Note 10)	64,824	67,099	577,750
	Gross profit	34,875	40,274	310,833
	SELLING, GENERAL AND ADMINISTRATIVE EXPENSES (Notes 9 and 10)	32,798	34,129	292,323
	Operating income	2,077	6,145	18,510
OTHER INCOME (EXPENSES):	Interest and dividend income	163	195	1,450
	Revenue from performance of research and development services	150	150	1,339
	Insurance claim receipt	159	1	1,415
	Interest expense	(367)	(461)	(3,267)
	Foreign exchange loss—net	(587)	(951)	(5,227)
	Loss on sales of trade receivables	(19)	(28)	(171)
	Gain (loss) on sales and disposals of property, plant and equipment—net	305	(59)	2,721
	Loss on liquidation of unconsolidated subsidiary		(161)	
	Gain on sales of investment securities (Note 3)	245	667	2,183
	Equity in gain of unconsolidated subsidiaries and affiliates	166	154	1,482
	Other—net	(18)	118	(161)
	Other income (expenses)—net	197	(375)	1,764
	INCOME TAXES (Note 8):	2,274	5,770	20,274
INCOME TAXES (Note 8):	Current	1,015	1,047	9,049
	Deferred	663	633	5,913
	Total income taxes	1,678	1,680	14,962
	NET INCOME	596	4,090	5,312
	NET INCOME ATTRIBUTABLE TO OWNERS OF THE PARENT	¥ 596	¥ 4,090	$ 5,312

	Yen		U.S. Dollars
	2017	2016	2017
PER SHARE OF COMMON STOCK (Notes 2.u and 15):			
Basic net income	¥6.17	¥42.32	$0.05
Cash dividends applicable to the year	7.00	6.00	0.06

See notes to consolidated financial statements.

Consolidated Statement of Comprehensive Income (Year Ended March 31, 2017)

	Millions of Yen		Thousands of U.S. Dollars (Note 1)
	2017	2016	2017
NET INCOME	¥596	¥4,090	$5,312
OTHER COMPREHENSIVE INCOME (LOSS) (Note 16):			
Unrealized gain (loss) on available-for-sale securities	608	(1,087)	5,410
Deferred gain on derivatives under hedge accounting	5		49
Foreign currency translation adjustments	(298)	(389)	(2,652)
Defined retirement benefit plans	125	(267)	1,117
Share of other comprehensive loss in unconsolidated subsidiaries and affiliates	(160)	(225)	(1,430)
Total other comprehensive income (loss)	280	(1,968)	2,494
COMPREHENSIVE INCOME	¥876	¥2,122	$7,806
TOTAL COMPREHENSIVE INCOME ATTRIBUTABLE TO:			
Owners of the parent	¥876	¥2,122	$7,806
Noncontrolling interests			

See notes to consolidated financial statements.

Consolidated Statement of Changes in Equity (Year Ended March 31, 2017)

	Thousands	Millions of Yen								
	Number of Shares of Common Stock Outstanding	Common Stock	Capital Surplus	Retained Earnings	Treasury Stock	Accumulated Other Comprehensive Income (Loss)				Total Equity
						Unrealized Gain on Available-for-Sale Securities	Deferred Gain on Derivatives under Hedge Accounting	Foreign Currency Translation Adjustments	Defined Retirement Benefit Plans	
BALANCE, APRIL 1, 2015	97,716	¥10,038	¥9,386	¥10,451	¥(535)	¥3,601		¥ (448)	¥(2,043)	¥30,450
Net income attributable to owners of the parent				4,090						4,090
Cash dividends for prior year-end, ¥2.5 per share, for current year interim, ¥2.5 per share				(483)						(483)
Purchase of treasury stock					(2)					(2)
Net change in the year						(1,087)		(614)	(267)	(1,968)
BALANCE, MARCH 31, 2016	97,716	10,038	9,386	14,058	(537)	2,514		(1,062)	(2,310)	32,087
Net income attributable to owners of the parent				596						596
Cash dividends, for prior year-end, ¥3.5 per share, for current year interim, ¥3.5 per share				(677)						(677)
Purchase of treasury stock					(1)					(1)
Net change in the year						608	¥5	(458)	125	280
BALANCE, MARCH 31, 2017	97,716	¥10,038	¥9,386	¥13,977	¥(538)	¥3,122	¥5	¥(1,520)	¥(2,185)	¥32,285

	Thousands of U.S. Dollars (Note 1)								
	Common Stock	Capital Surplus	Retained Earnings	Treasury Stock	Accumulated Other Comprehensive Income (Loss)				Total Equity
					Unrealized Gain on Available-for-Sale Securities	Deferred Gain on Derivatives under Hedge Accounting	Foreign Currency Translation Adjustments	Defined Retirement Benefit Plans	
BALANCE, MARCH 31, 2016	$89,463	$83,655	$125,290	$(4,783)	$22,408		$ (9,462)	$(20,592)	$285,979
Net income attributable to owners of the parent			5,312						5,312
Cash dividends, for prior year-end, $0.03 per share, for current year interim, $0.03 per share			(6,029)						(6,029)
Purchase of treasury stock				(11)					(11)
Net change in the year					5,410	$49	(4,082)	1,117	2,494
BALANCE, MARCH 31, 2017	$89,463	$83,655	$124,573	$(4,794)	$27,818	$49	$(13,544)	$(19,475)	$287,745

See notes to consolidated financial statements.

Consolidated Statement of Cash Flows (Year Ended March 31, 2017)

		Millions of Yen		Thousands of U.S. Dollars (Note 1)
		2017	2016	2017
OPERATING ACTIVITIES:	Income before income taxes	¥2,274	¥ 5,770	$ 20,274
	Adjustments for:			
	Income taxes—paid	(1,318)	(1,193)	(11,751)
	Depreciation and amortization	2,526	2,877	22,510
	Amortization of goodwill	370	370	3,297
	(Loss) gain on sales and disposals of property, plant and equipment—net	(305)	59	(2,721)
	Equity in gain of unconsolidated subsidiaries and affiliates	(166)	(154)	(1,482)
	Gain on sales of investment securities	(245)	(667)	(2,183)
	Loss on liquidation of unconsolidated subsidiary		161	
	Changes in assets and liabilities:			
	(Increase) decrease in trade notes and accounts receivable	(898)	2,521	(8,003)
	Decrease (increase) in inventories	832	(4,086)	7,421
	(Decrease) increase in trade notes and accounts payable	(3,259)	2,725	(29,043)
	(Decrease) increase in advances received	(889)	57	(7,925)
	(Decrease) increase in provision for accrued bonuses to employees	(158)	63	(1,406)
	Increase (decrease) in liability for employees' retirement benefits	126	(95)	1,123
	Decrease in retirement allowances for directors, executive officers and Audit & Supervisory Board members	(22)	(5)	(200)
	Other—net	559	(266)	4,978
	Total adjustments	(2,847)	2,367	(25,385)
	Net cash (used in) provided by operating activities	(573)	8,137	(5,111)
INVESTING ACTIVITIES:	Increase in time deposits—net	(5)	(115)	(46)
	Proceeds from sales of investment securities	418	1,219	3,726
	Proceeds from sales of property, plant and equipment	1,182	126	10,539
	Purchases of property, plant and equipment	(2,514)	(2,525)	(22,409)
	Purchases of intangible assets	(104)	(289)	(929)
	Other—net	(71)	(113)	(629)
	Net cash used in investing activities	(1,094)	(1,697)	(9,748)
FINANCING ACTIVITIES:	Decrease in short-term bank loans—net	(4,532)	(3,968)	(40,392)
	Proceeds from long-term bank loans	8,900	1,300	79,322
	Repayments of long-term bank loans	(6,318)	(3,759)	(56,310)
	Proceeds from bonds issuance	3,355	2,465	29,899
	Payment for redemption of bonds	(650)	(648)	(5,793)
	Purchase of treasury stock	(1)	(2)	(11)
	Cash dividends paid	(677)	(482)	(6,029)
	Other—net	(366)	(726)	(3,264)
	Net cash used in financing activities	(289)	(5,820)	(2,578)
FOREIGN CURRENCY TRANSLATION ADJUSTMENTS ON CASH AND CASH EQUIVALENTS		(340)	(368)	(3,033)
NET (DECREASE) INCREASE IN CASH AND CASH EQUIVALENTS		(2,296)	252	(20,470)
CASH AND CASH EQUIVALENTS, BEGINNING OF YEAR		11,717	11,465	104,433
CASH AND CASH EQUIVALENTS, END OF YEAR		¥9,421	¥11,717	$ 83,963

See notes to consolidated financial statements.

❶ BASIS OF 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 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.

The consolidated financial statements are stated in Japanese yen, the currency of the country in which JEOL Ltd. (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 ¥112.2 to $1, the approximate rate of exchange at March 31, 2017. 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.

❷ SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

a. Consolidation

The consolidated financial statements as of March 31, 2017 and 2016, include the accounts of the Company and its 14 significant 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.

Investments in 14 (13 in 2016) unconsolidated subsidiaries and 3 (3 in 2016) affiliates are accounted for by the equity method.

Goodwill represents the excess of the fair value of the net assets of the acquired subsidiaries at the date of acquisition over their cost.

Goodwill is amortized on a straight line basis over 10 years, with the exception of minor amounts which are charged to income when incurred.

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 eliminated.

b. Unification of Accounting Policies Applied to Foreign Subsidiaries for the Consolidated Financial Statements

Under Accounting Standards Board of Japan ("ASBJ") Practical Issues Task Force ("PITF") No. 18, "Practical Solution on Unification of Accounting Policies Applied to Foreign Subsidiaries for the Consolidated Financial Statements," 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) 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 R&D; and (d) cancellation of the fair value model of accounting for property, plant and equipment and investment properties and incorporation of the cost model of accounting.

c. Unification of Accounting Policies Applied to Foreign Associated Companies for the Equity Method

ASBJ Statement No. 16, "Accounting Standard for Equity Method of Accounting for Investments," 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 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 equity through other comprehensive income; (c) expensing capitalized development costs of R&D; and (d) cancellation of the fair value model of accounting for property, plant and equipment and investment properties and incorporation of the cost model of accounting.

d. Business Combinations

Business combinations are accounted for using the purchase method. Acquisition related costs, such as advisory fees or professional fees, are accounted for as expenses in the periods in which the costs are incurred. 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. 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. The acquirer recognizes any 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. 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. 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 capital surplus as long as the parent retains control over its subsidiary.

e. Cash Equivalents

Cash equivalents are short term investments that are readily convertible into cash and exposed to insignificant risk of changes in value.

Cash equivalents include time deposits, which mature or become due within three months of the date of acquisition.

f. Inventories

Finished products are mainly stated at the lower of cost, determined by the moving average cost method, or net selling value. Finished products of consolidated foreign subsidiaries are stated at the lower of cost, determined by the specific identification method. Work in process is mainly stated at the lower of cost, determined by the specific identification method, or net selling value.

Raw materials and supplies are stated at cost, determined by the moving average cost method, or net selling value.

g. Investment Securities

All securities are classified as available for sale securities and are reported at fair value, with unrealized gains and losses, net of applicable taxes, reported in a separate component of equity. The cost of securities sold is determined based on the moving average method.

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. Property, Plant and Equipment

Property, plant and equipment are stated at cost.

Depreciation of property, plant and equipment of the Company and its consolidated domestic subsidiaries is computed by the declining balance method based on the estimated useful lives of the assets, while the straight line method is applied to all property, plant and equipment of consolidated foreign subsidiaries. The range of useful lives is from 7 to 65 years for buildings and structures and from 2 to 15 years for tools, furniture and fixtures.

Lease assets are depreciated by the straight line method over the respective lease period. The useful lives for lease assets are the terms of the respective leases.

i. Long Lived Assets

The Group reviews its long lived assets for impairment whenever events or changes in circumstance indicate the carrying amount of an asset or asset group may not be recoverable. An impairment loss is 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.

Accumulated depreciation includes the accumulated amounts of impairment losses.

j. Software

Software development costs for internal use are deferred at cost less accumulated amortization, which is calculated by the straight line method over the estimated useful lives (5 years).

k. Stock Issue Costs

Stock issue costs are amortized to income by the straight line method over 3 years.

l. Bond Issue Costs

Bond issue costs which were incurred on or after May 1, 2006, are amortized by the straight line method over the bond term in accordance with ASBJ PITF No. 19, "Tentative Solution on Accounting for Deferred Assets," which was issued by the ASBJ on August 11, 2006, and was effective for fiscal years ending on or after May 1, 2006.

m. Retirement and Pension Plans

Employees of the Company and certain consolidated subsidiaries who retire at or after the age of 60 are entitled to approximately 60% of their benefits in the form of an annuity. The funds for the annuity payments are entrusted to an outside trustee.

The Company accounts for the liability for retirement benefits based on the projected benefit obligations and plan assets at the balance sheet date. The projected benefit obligations are attributed to periods on a benefit formula basis. Actuarial gains and losses and past service costs that are yet to be recognized in profit or loss are recognized within equity (accumulated other comprehensive income), after adjusting for tax effects and are recognized in profit or loss over 12 years and 11 to 12 years, respectively, no longer than the expected average remaining service period of the employees. The discount rate is determined using a single weighted average discount rate reflecting the estimated timing and amount of benefit payment.

n. Asset Retirement Obligations

An asset retirement obligation is recorded for a legal obligation imposed either by law or contract that results from the acquisition, construction, development and normal operation of a tangible fixed asset and is associated with the retirement of such tangible fixed asset. The asset retirement obligation is recognized as the sum of the discounted cash flows required for the future asset retirement and is recorded in the period in which the obligation is incurred if a reasonable estimate can be made. If a reasonable estimate of the asset retirement obligation cannot be made in the period the asset retirement obligation is incurred, the liability should be recognized when a reasonable estimate of the asset retirement obligation can be made. Upon initial recognition of a liability for an asset retirement obligation, an asset retirement cost is capitalized by increasing the carrying amount of the related fixed asset by the amount of the liability. The asset retirement cost is subsequently allocated to expense through depreciation over the remaining useful life of the asset. Over time, the liability is accreted to its present value each period. Any subsequent revisions to the timing or the amount of the original estimate of undiscounted cash flows are reflected as an adjustment to the carrying amount of the liability and the capitalized amount of the related asset retirement cost.

o. Research and Development Costs

Research and development costs are charged to income as incurred.

p. Leases

Finance lease transactions are capitalized to recognize lease assets and lease obligations in the balance sheet. In March 2007, the ASBJ issued ASBJ Statement No. 13, "Accounting Standard for Lease Transactions," which revised the previous accounting standard for lease transactions. Under the previous accounting standard, finance leases that were deemed to transfer ownership of the leased property to the lessee were capitalized. However, other finance leases were permitted to be accounted for as operating lease transactions if certain "as if capitalized" information was disclosed in the notes to the lessee's financial statements. The revised accounting standard permits leases that existed at the transition date and that do not transfer ownership of the leased property to the lessee to continue to be accounted for as operating lease transactions.

The Company applied the revised accounting standard effective April 1, 2008. In addition, the Company continues to account for leases that existed at the transition date and do not transfer ownership of the leased property to the lessee as operating lease transactions.

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 income tax rates to the temporary differences.

The Company applied ASBJ Guidance No. 26, "Guidance on Recoverability of Deferred Tax Assets," effective April 1, 2016. There was no impact from this for the year ended March 31, 2017.

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 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 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 rate.

t. Derivatives and Hedging Activities

The Group uses derivative financial instruments to manage its exposures to fluctuations in foreign exchange and interest rates. Foreign exchange forward contracts and interest rate swaps are utilized by the Group to reduce foreign currency exchange and interest rate risks. The Group does not enter into derivatives for trading or speculative purposes.

Gains or losses on derivatives used for hedging purposes, if qualified for hedge accounting because of a high correlation and effectiveness between the hedging instruments and the hedged items, are deferred until maturity of the hedged transactions.

Forward contracts applied to forecasted (or committed) transactions are also measured at fair value but the unrealized gains/losses are deferred until the underlying transactions are completed.

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.

For the years ended March 31, 2017 and 2016, diluted net income per share is not disclosed because the Company no longer has convertible securities.

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

v. Accounting Changes and Error Corrections

Under 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 are required as follows: (1) Changes in Accounting Policies—When a new accounting policy is applied 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.

3 INVESTMENT SECURITIES

Investment securities as of March 31, 2017 and 2016, consisted of the following:

	Millions of Yen		Thousands of U.S. Dollars
	2017	2016	2017
Non-current:			
Marketable equity securities	¥6,813	¥6,213	$60,723
Nonmarketable securities	58	59	518
Total	¥6,871	¥6,272	$61,241

The costs and aggregate fair values of investment securities at March 31, 2017 and 2016, were as follows:

	Millions of Yen			
	Cost	Unrealized Gains	Unrealized Losses	Fair Value
March 31, 2017				
Securities classified as available-for-sale equity securities	¥2,475	¥4,364	¥26	¥6,813
March 31, 2016				
Securities classified as available-for-sale equity securities	¥2,648	¥3,631	¥66	¥6,213

	Thousands of U.S. Dollars			
	Cost	Unrealized Gains	Unrealized Losses	Fair Value
March 31, 2017				
Securities classified as available-for-sale equity securities	$22,061	$38,892	$230	$60,723

The information for available for sale securities which were sold during the years ended March 31, 2017 and 2016, is as follows:

	Millions of Yen	
March 31, 2017	Proceeds	Realized Gains
Available-for-sale—Equity securities	¥417	¥245

	Millions of Yen	
March 31, 2016	Proceeds	Realized Gains
Available-for-sale—Equity securities	¥1,219	¥667

	Thousands of U.S. Dollars	
March 31, 2017	Proceeds	Realized Gains
Available-for-sale—Equity securities	$3,717	$2,183

There is no impairment loss on available for sale equity securities for the years ended March 31, 2017 and 2016.

4 INVENTORIES

Inventories at March 31, 2017 and 2016, consisted of the following:

	Millions of Yen		Thousands of U.S. Dollars
	2017	2016	2017
Finished products	¥10,309	¥11,423	$ 91,884
Work in process	27,485	27,944	244,964
Raw materials and supplies	1,506	1,951	13,419
Total	¥39,300	¥41,318	$350,267

5 SHORT TERM BANK LOANS AND LONG TERM DEBT

Short term bank loans at March 31, 2017 and 2016, consisted of notes to banks and bank overdrafts. The annual interest rates applicable to the short term bank loans ranged from 0.98% to 1.60% and 0.29% to 1.88% at March 31, 2017 and 2016, respectively.

Long term debt at March 31, 2017 and 2016, consisted of the following:

	Millions of Yen		Thousands of U.S. Dollars
	2017	2016	2017
Unsecured 0.60% yen bonds, due 2017		¥ 100	
Unsecured 0.45% yen bonds, due 2018	¥ 200	400	$ 1,783
Unsecured 0.10% yen bonds, due 2018	250	375	2,228
Unsecured 0.10% yen bonds, due 2019	313	438	2,785
Unsecured 0.53% yen bonds, due 2020	1,500	1,500	13,369
Unsecured 0.32% yen bonds, due 2020	400	500	3,565
Unsecured 0.16% yen bonds, due 2021	1,500		13,369
Unsecured 0.10% yen bonds, due 2021	1,000		8,913
Unsecured 0.07% yen bonds, due 2023	900		8,021
Loans from banks and insurance companies, due serially to 2023 with interest rates ranging from 0.29% to 1.88% (2017) and from 0.63% to 1.95% (2016):			
Collateralized	8,705	10,270	77,585
Unsecured	8,461	4,314	75,413
Lease obligations	1,067	1,274	9,511
Total	24,296	19,171	216,542
Less current portion	(5,684)	(6,949)	(50,665)
Long-term debt, less current portion	¥18,612	¥12,222	$165,877

Annual maturities of long term debt, excluding finance leases (see Note 11), at March 31, 2017, were as follows:

Year Ending March 31	Millions of Yen	Thousands of U.S. Dollars
2018	¥ 5,248	$ 46,776
2019	5,582	49,750
2020	4,068	36,255
2021	3,567	31,791
2022	4,494	40,053
2023 and thereafter	270	2,406
Total	¥23,229	$207,031

The carrying amounts of assets pledged as collateral for short term bank loans of ¥1,271 million ($11,330 thousand), current portion of long term bank loans of ¥1,455 million ($12,968 thousand) and long term bank loans of ¥7,250 million ($64,617 thousand) at March 31, 2017, were as follows:

	Millions of Yen		Thousands of U.S. Dollars
	2017	2016	2017
Land	¥ 535	¥ 535	$ 4,771
Buildings and structures—net of accumulated depreciation	3,295	3,332	29,368
Investment securities	2,581	2,161	23,002
Total	¥6,411	¥6,028	$57,141

In addition to the above loan balances, in order to increase liquidity, the Company entered into a committed loan facility agreement, for an aggregated amount of ¥9,000 million ($80,214 thousand), with a syndicate of six Japanese banks, arranged by The Bank of Tokyo Mitsubishi UFJ, Ltd. The details at March 31, 2017 and 2016, were as follows:

	Millions of Yen		Thousands of U.S. Dollars
	2017	2016	2017
Total amount of commitment-line contract	¥9,000	¥9,000	$80,214
Utilized amount		(2,000)	
Net	¥9,000	¥7,000	$80,214

The committed loan facility agreement includes financial covenants, with which the Company is in compliance. The financial covenants are as follows. As of March 31, 2017, there is no infringement of the debt covenants.

(a) The amount of the Group's net assets at the end of the fiscal year
(b) The amount of the Group's net assets at the end of the previous fiscal year
(c) The amount of the Group's net assets at the end of the fiscal year 2011—¥14,388 million
(a) must not fall below 75% of the larger of (b) and (c).

6 RETIREMENT AND PENSION PLANS

The Company and certain consolidated subsidiaries have severance payment plans for employees, directors, executive officers and Audit & Supervisory Board members. Certain consolidated foreign subsidiaries also have pension plans.

Under most circumstances, employees terminating their employment are entitled to retirement benefits determined based on the rate of pay at the time of termination, years of service and certain other factors. Such retirement benefits are made in the form of a lump sum severance payment from the Company or from certain consolidated subsidiaries and annuity payments from a trustee. Employees are entitled to larger payments if the termination is involuntary, by retirement at the mandatory retirement age, by death, or by voluntary retirement at certain specific ages prior to the mandatory retirement age.

The liability for retirement benefits at March 31, 2017 and 2016, for directors and Audit & Supervisory Board members is ¥167 million ($1,490 thousand) and ¥190 million, respectively. The retirement benefits for directors and Audit & Supervisory Board members are paid subject to the approval of the shareholders.

(1) The changes in defined benefit obligation for the years ended March 31, 2017 and 2016, were as follows:

	Millions of Yen		Thousands of U.S. Dollars
	2017	2016	2017
Balance at beginning of year	¥17,141	¥18,845	$152,774
Current service cost	971	951	8,650
Interest cost	166	251	1,482
Actuarial losses	262	603	2,337
Benefits paid	(698)	(783)	(6,217)
Plan termination benefits paid		(2,299)	
Others	(196)	(427)	(1,745)
Balance at end of year	¥17,646	¥17,141	$157,281

(2) The changes in plan assets for the years ended March 31, 2017 and 2016, were as follows:

	Millions of Yen		Thousands of U.S. Dollars
	2017	2016	2017
Balance at beginning of year	¥7,321	¥8,814	$65,247
Expected return on plan assets	132	206	1,178
Actuarial losses	(28)	(124)	(245)
Contributions from the employer	1,010	1,367	9,006
Benefits paid	(464)	(549)	(4,139)
Plan termination benefits paid		(2,299)	
Others	(132)	(94)	(1,182)
Balance at end of year	¥7,839	¥7,321	$69,865

(3) The changes in liability for retirement benefits under the simplified method for the years ended March 31, 2017 and 2016, were as follows:

	Millions of Yen		Thousands of U.S. Dollars
	2017	2016	2017
Balance at beginning of year	¥440	¥410	$3,921
Net periodic benefit costs	39	32	346
Benefits paid	(21)	(2)	(191)
Balance at end of year	¥458	¥440	$4,076

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

	Millions of Yen		Thousands of U.S. Dollars
	2017	2016	2017
Funded defined benefit obligation	¥18,324	¥17,804	$163,315
Plan assets	(8,285)	(7,752)	(73,840)
Total	10,039	10,052	89,475
Unfunded defined benefit obligation	226	208	2,017
Net liability arising from defined benefit obligation	¥10,265	¥10,260	$ 91,492

	Millions of Yen		Thousands of U.S. Dollars
	2017	2016	2017
Liability for retirement benefits	¥10,265	¥10,260	$91,492
Net liability arising from defined benefit obligation	¥10,265	¥10,260	$91,492

(5) The components of net periodic benefit costs for the years ended March 31, 2017 and 2016, were as follows:

	Millions of Yen		Thousands of U.S. Dollars
	2017	2016	2017
Service cost	¥ 971	¥ 951	$ 8,650
Interest cost	166	251	1,482
Expected return on plan assets	(132)	(206)	(1,178)
Recognized actuarial losses	285	204	2,543
Amortization of prior service cost	(10)	(10)	(87)
Benefit costs accounted for the simplified method	39	32	346
Total	1,319	1,222	11,756
Settlement loss		290	
Net periodic benefit costs	¥1,319	¥1,512	$11,756

(6) Amounts recognized in other comprehensive income (before income tax effect) in respect of defined retirement benefit plans for the years ended March 31, 2017 and 2016, were as follows:

	Millions of Yen		Thousands of U.S. Dollars
	2017	2016	2017
Prior service cost	¥ (10)	¥ (9)	$ (87)
Actuarial losses	135	(258)	1,204
Total	¥125	¥(267)	$1,117

(7) Amounts recognized in accumulated other comprehensive income (before income tax effect) in respect of defined retirement benefit plans as of March 31, 2017 and 2016, were as follows:

	Millions of Yen		Thousands of U.S. Dollars
	2017	2016	2017
Unrecognized prior service cost	¥ (51)	¥ (61)	$ (455)
Unrecognized actuarial losses	2,236	2,371	19,930
Total	¥2,185	¥2,310	$19,475

(8) Plan assets

a. Components of plan assets

Plan assets as of March 31, 2017 and 2016, consisted of the following:

	2017	2016
Debt investments	11%	9%
Equity investments	41	43
Cash and cash equivalents		1
General account	41	38
Others	7	9
Total	100%	100%

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.

(9) Assumptions used for the years ended March 31, 2017 and 2016, are set forth as follows:

	2017	2016
Discount rate	1.0%	1.0%
Expected rate of return on plan assets	1.8	1.9

(10) Defined contribution plans

Retirement benefit cost of defined contribution plans as of March 31, 2017 and 2016, were as follows:

	Millions of Yen		Thousands of U.S. Dollars
	2017	2016	2017
Retirement benefit cost of defined contribution plans	¥135	¥178	$1,207

7 EQUITY

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, for 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 the 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 does not meet all the above criteria.

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 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 aggregate amount of legal reserve and additional paid in capital equals 25% of the 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 within equity 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.

8 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 30.9% and 33.1% for the years ended March 31, 2017 and 2016, respectively.

The tax effects of significant temporary differences and tax loss carryforwards which resulted in deferred tax assets and liabilities at March 31, 2017 and 2016, are as follows:

	Millions of Yen		Thousands of U.S. Dollars
	2017	2016	2017
Deferred tax assets—Current:			
Accrued bonuses to employees	¥ 285	¥ 333	$ 2,538
Research and development costs	468	512	4,172
Accrued enterprise taxes	74	76	663
Unrealized intercompany profits of inventories	143	555	1,265
Loss on write-down of inventories	296	495	2,640
Tax loss carryforwards	107	136	952
Other	682	639	6,081
Less valuation allowance	(253)	(332)	(2,255)
Total	1,802	2,414	16,056
Deferred tax liabilities—Current	(186)	(257)	(1,651)
Net deferred tax assets—Current	¥ 1,616	¥ 2,157	$ 14,405
Deferred tax assets—Non-current:			
Property, plant and equipment	¥ 272	¥ 261	$ 2,427
Amortization of software	909	873	8,097
Impairment loss	72	257	643
Loss on write-down of investment securities	198	198	1,766
Liability for employees' retirement benefits	2,693	2,688	23,999
Retirement allowances for directors, executive officers and Audit & Supervisory Board members	52	59	459
Tax loss carryforwards	1,335	872	11,898
Other	443	322	3,952
Less valuation allowance	(4,079)	(3,578)	(36,355)
Total	1,895	1,952	16,886
Deferred tax liabilities—Non-current	(1,539)	(1,364)	(13,716)
Net deferred tax assets—Non-current	¥ 356	¥ 588	$ 3,170
Deferred tax liabilities—Current—other	¥ (247)	¥ (283)	$ (2,202)
Total	(247)	(283)	(2,202)
Deferred tax assets—Current	186	258	1,651
Net deferred tax liabilities—Current	¥ (61)	¥ (25)	$ (551)
Deferred tax liabilities—Non-current:			
Unrealized gain on available-for-sale securities	¥(1,217)	¥(1,051)	$(10,843)
Undistributed earnings of affiliates	(256)	(249)	(2,283)
Other	(71)	(89)	(632)
Total	(1,544)	(1,389)	(13,758)
Deferred tax assets—Non-current	1,539	1,364	13,716
Net deferred tax liabilities—Non-current	¥ (5)	¥ (25)	$ (42)

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 March 31, 2017, with the corresponding figures for 2016, is as follows:

	2017	2016
Normal effective statutory tax rate	30.9%	33.1%
Expenses not deductible for income tax purposes	3.0	2.1
Inhabitant tax on per capita basis	1.9	0.8
Unrealized intercompany profits	9.0	(5.4)
Difference in tax rates of foreign subsidiaries	2.6	0.2
Foreign tax credit	3.0	1.2
Less valuation allowance	18.2	(6.0)
Adjustment on deferred tax assets due to change in income tax rate		2.8
Other—net	5.2	0.3
Actual effective tax rate	73.8%	29.1%

At March 31, 2017, the Company has tax loss carryforwards aggregating approximately ¥4,527 million ($40,344 thousand) which are available to be offset against taxable income of such subsidiaries in future years. These tax loss carryforwards, if not utilized, will expire as follows:

Year Ending March 31	Millions of Yen	Thousands of U.S. Dollars
2019	¥ 321	$ 2,856
2021	2,710	24,157
2022	386	3,438
2023 and thereafter	1,110	9,893
Total	¥4,527	$40,344

9 SELLING, GENERAL AND ADMINISTRATIVE EXPENSES

Depreciation and amortization, research and development costs, net periodic retirement benefit costs and amortization of goodwill for the years ended March 31, 2017 and 2016, were as follows:

	Millions of Yen		Thousands of U.S. Dollars
	2017	2016	2017
Depreciation and amortization	¥ 837	¥1,186	$ 7,459
Research and development costs	6,130	6,479	54,634
Net periodic retirement benefit costs	512	489	4,561
Amortization of goodwill	370	370	3,297

10 RELATED PARTY DISCLOSURES

Transactions of the Group with unconsolidated subsidiaries and affiliates for the years ended March 31, 2017 and 2016, were as follows:

	Millions of Yen		Thousands of U.S. Dollars
	2017	2016	2017
Sales	¥4,906	¥6,508	$43,723
Purchases	1,132	687	10,088
Selling, general and administrative expenses	1,206	1,310	10,750

11 LEASES

The Group leases certain machinery, computer equipment, office space and other assets.

Total rental expenses including lease payments under finance leases for the years ended March 31, 2017 and 2016, were ¥1,641 million ($14,629 thousand) and ¥1,700 million, respectively.

Obligations under finance leases and future minimum payments under noncancelable operating leases were as follows:

	Millions of Yen				Thousands of U.S. Dollars	
	2017		2016		2017	
	Finance Leases	Operating Leases	Finance Leases	Operating Leases	Finance Leases	Operating Leases
Due within one year	¥436	¥178	¥490	¥163	$3,889	$1,588
Due after one year	631	284	784	227	5,622	2,532
Total	¥1,067	¥462	¥1,274	¥390	$9,511	$4,120

Pro forma Information of Leased Property Whose Lease Inception Was before March 31, 2008

ASBJ Statement No. 13, "Accounting Standard for Lease Transactions" requires that all finance lease transactions be capitalized to recognize lease assets and lease obligations in the balance sheet. However, ASBJ Statement No. 13 permits leases without ownership transfer of the leased property to the lessee and whose lease inception was before March 31, 2008, to continue to be accounted for as operating lease transactions if certain "as if capitalized" information is disclosed in the notes to the financial statements. The Company applied ASBJ Statement No. 13 effective April 1, 2008, and accounted for such leases as operating lease transactions. Pro forma information of leased property whose lease inception was before March 31, 2008, was as follows:

	Millions of Yen	
	2017	
	Machinery and Equipment	Total
Acquisition cost	¥41	¥41
Accumulated depreciation	34	34
Net leased property	¥ 7	¥ 7

	Millions of Yen	
	2016	
	Machinery and Equipment	Total
Acquisition cost	¥41	¥41
Accumulated depreciation	30	30
Net leased property	¥11	¥11

	Thousands of U.S. Dollars	
	2017	
	Machinery and Equipment	Total
Acquisition cost	$364	$364
Accumulated depreciation	301	301
Net leased property	$ 63	$ 63

Obligations under finance leases:

	Millions of Yen		Thousands of U.S. Dollars
	2017	2016	2017
Due within one year	¥4	¥ 4	$39
Due after one year	4	9	37
Total	¥8	¥13	$76

Depreciation expense, interest expense and other information under finance leases:

	Millions of Yen		Thousands of U.S. Dollars
	2017	2016	2017
Depreciation expense	¥4	¥4	$33
Interest expense		1	4
Total	¥4	¥5	$37
Lease payments	¥5	¥5	$41

Depreciation expense and interest expense, which are not reflected in the accompanying consolidated statement of income, are computed by the declining balance method and the interest method, respectively.

12 FINANCIAL INSTRUMENTS AND RELATED DISCLOSURES

(1) Group Policy for Financial Instruments

The Group uses financial instruments, mainly long term debt including bank loans and bonds to finance capital investment for scientific instrument and industrial equipment. Cash surpluses, if any, are invested in low risk financial assets. Bank loans are used to fund the Company's ongoing operations. Derivatives are not used for speculative purposes, but to manage exposure to financial risks as described in (2) below.

(2) Nature, Extent of Risks and Risk Management for 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 market risk of fluctuation in foreign currency exchange rates, the position, net of payables in foreign currencies, is hedged by using forward foreign currency contracts. 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.

Maturities of bank loans, bonds and lease obligations are less than seven years after the consolidated balance sheet date. Although a part of such bank loans and bonds are exposed to market risks from changes in variable interest rates, those risks are mitigated by using derivatives of interest rate swaps.

Derivatives mainly include forward foreign currency contracts and interest rate swaps, which are used to manage exposure to market risks from changes in foreign currency exchange rates of receivables, and from changes in interest rates of bank loans and bonds.

Derivative transactions entered into by the Group have been made in accordance with internal policies which regulate the authorization and credit limit amount. Please see Note 13 for more details about derivatives.

(3) Fair Values of Financial Instruments

Fair values of financial instruments are based on quoted prices in active markets. If a quoted price is not available, another rational valuation technique is used instead. The results of valuation may differ in assumptions because the rational valuation techniques include variable factors. Also, please see Note 13 for the details of fair value for derivatives.

(a) Fair value of financial instruments

	Millions of Yen		
March 31, 2017	Carrying Amount	Fair Value	Unrealized Gain/Loss
Cash and cash equivalents	¥ 9,421	¥ 9,421	
Time deposits	745	745	
Receivables	26,787	26,787	
Investment securities	6,813	6,813	
Total	¥43,766	¥43,766	
Short-term bank loans	¥ 6,571	¥ 6,571	
Payables	20,237	20,237	
Long-term debt	23,229	23,309	¥80
Total	¥50,037	¥50,117	¥80

	Millions of Yen		
March 31, 2016	Carrying Amount	Fair Value	Unrealized Gain/Loss
Cash and cash equivalents	¥11,717	¥11,717	
Time deposits	724	724	
Receivables	26,291	26,291	
Investment securities	6,213	6,213	
Total	¥44,945	¥44,945	
Short-term bank loans	¥11,103	¥11,103	
Payables	24,774	24,774	
Long-term debt	17,897	18,019	¥122
Total	¥53,774	¥53,896	¥122

	Thousands of U.S. Dollars		
March 31, 2017	Carrying Amount	Fair Value	Unrealized Gain/Loss
Cash and cash equivalents	$83,963	$83,963	
Time deposits	6,639	6,639	
Receivables	238,742	238,742	
Investment securities	60,723	60,723	
Total	$390,067	$390,067	
Short-term bank loans	$ 58,567	$ 58,567	
Payables	180,367	180,367	
Long-term debt	207,030	207,746	$716
Total	$445,964	$446,680	$716

Cash and Cash Equivalents and Time Deposits

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

Investment Securities

The fair values of investment securities are measured at the quoted market price of the stock exchange for the equity instruments, and at the quoted price obtained from the financial institution for certain debt instruments. Fair value information for investment securities by classification is included in Note 3.

Receivables, Payables and Short Term Bank Loans

The fair values of receivables, payables and short term bank loans are measured at the amount to be received or paid at maturity discounted at the Group's assumed corporate discount rate.

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.

Derivatives

Fair value information for derivatives is included in Note 13.

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

	Millions of Yen		Thousands of U.S. Dollars
	2017	2016	2017
Investments in equity instruments that do not have a quoted market price in an active market	¥2,366	¥2,373	$21,091

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

	Millions of Yen
March 31, 2017	Due in 1 Year or Less
Cash and cash equivalents	¥ 9,421
Time deposits	745
Receivables	26,787
Total	¥36,953

	Millions of Yen
March 31, 2016	Due in 1 Year or Less
Cash and cash equivalents	¥11,717
Time deposits	724
Receivables	26,291
Total	¥38,732

	Thousands of U.S. Dollars
March 31, 2017	Due in 1 Year or Less
Cash and cash equivalents	$ 83,963
Time deposits	6,639
Receivables	238,742
Total	$329,344

Please see Note 5 for annual maturities of long term debt and Note 11 for obligations under finance leases.

13 DERIVATIVES

The Group enters into foreign currency forward contracts to hedge foreign exchange risk associated with certain assets denominated in foreign currencies. The Group also enters into interest rate swap contracts to manage its interest rate exposures on certain liabilities.

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

Because the counterparties to these derivatives are limited to major international financial institutions, the Group does not anticipate any losses arising from credit risk.

With respect to derivative transactions, basic policies are decided by the Board of Directors. Derivative transactions are executed within the necessary range and managed by the financial affairs division.

Derivative Transactions to Which Hedge Accounting Is Applied

		Millions of Yen		
March 31, 2017	Hedged Item	Contract Amount	Contract Amount Due after One Year	Fair Value
Foreign currency forward contracts—Selling U.S.$	Receivables	¥1,015		¥ 8
Interest rate swaps (fixed rate payment, floating rate receipt)	Long-term debt	6,455	¥4,245	

		Millions of Yen		
March 31, 2016	Hedged Item	Contract Amount	Contract Amount Due after One Year	Fair Value
Interest rate swaps (fixed rate payment, floating rate receipt)	Long-term debt	¥10,175	¥5,535	

		Thousands of U.S. Dollars		
March 31, 2017	Hedged Item	Contract Amount	Contract Amount Due after One Year	Fair Value
Foreign currency forward contracts—Selling U.S.$	Receivables	$ 9,050		$ 71
Interest rate swaps (fixed rate payment, floating rate receipt)	Long-term debt	57,531	$37,834	

The fair value of derivative transactions is measured at the quoted price obtained from the financial institution.

The above 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 or income. In addition, the fair value of such interest rate swaps is included in that of hedged items (i.e., long term debt).

14 CONTINGENT LIABILITIES

At March 31, 2017 and 2016, the Group had the following contingent liabilities:

	Millions of Yen		Thousands of U.S. Dollars
	2017	2016	2017
Guarantees of advance received and bank loans of unconsolidated subsidiary	¥500	¥433	$4,457

15 NET INCOME PER SHARE

Reconciliation of the differences between basic and diluted net income per share ("EPS") for the years ended March 31, 2017 and 2016, is as follows:

	Millions of Yen	Thousands of Shares	Yen	U.S. Dollars
	Net Income Attributable to Owners of the Parent	Weighted-Average Shares	EPS	
Year Ended March 31, 2017				
Basic EPS—Net income available to common shareholders	¥596	96,631	¥6.17	$0.05
Year Ended March 31, 2016				
Basic EPS—Net income available to common shareholders	¥4,090	96,634	¥42.32	

For the years ended March 31, 2017 and 2016, diluted EPS is not disclosed because the Company no longer has convertible securities.

16 OTHER COMPREHENSIVE INCOME (LOSS)

The components of other comprehensive income (loss) for the years ended March 31, 2017 and 2016, were as follows:

	Millions of Yen		Thousands of U.S. Dollars
	2017	2016	2017
Unrealized gain (loss) on available-for-sale securities:			
Gains (losses) arising during the year	¥ 976	¥(1,550)	$8,702
Reclassification adjustments to profit or loss	(245)		(2,183)
Amount before income tax effect	731	(1,550)	6,519
Income tax effect	(123)	(463)	(1,109)
Total	¥ 608	¥(1,087)	$5,410
Deferred gain on derivatives under hedge accounting:			
Losses arising during the year	¥(258)		$(2,295)
Reclassification adjustments to profit or loss	265		2,366
Amount before income tax effect	7		71
Income tax effect	(2)		(22)
Total	¥5		$49
Foreign currency translation adjustments	¥(298)	¥ (389)	$(2,652)
Defined retirement benefit plans:			
Adjustments arising during the year	¥(290)	¥ (727)	$(2,582)
Reclassification adjustments to profit or loss	415	460	3,699
Amount before income tax effect	125	(267)	1,117
Total	¥ 125	¥ (267)	$ 1,117
Share of other comprehensive loss in unconsolidated subsidiaries and affiliates—Losses arising during the year	¥(160)	¥ (225)	$(1,430)
Total other comprehensive income (loss)	¥ 280	¥(1,968)	$ 2,494

17 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 decisionmaker 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's reportable segments are those for which separate financial information is available and regular evaluation by the Company's management is being performed in order to decide how resources are allocated among the Group. Therefore, the Group's reportable segments consist of the industry scientific instruments, industrial equipment, and medical equipment. Industry scientific instruments consist of Transmission Electron Microscopes, NMR Spectrometers, Scanning Electron Microscopes, Mass Spectrometers, etc.; Industry industrial equipment consists of Electron Beam Lithography Systems, Wafer Inspection Systems, High Frequency Plasma Generators, etc.; Industry medical equipment consists of Clinalyzers, etc.

(2) Methods of Measurement for the Amounts of Sales, Profit (Loss), 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."

The segment profit is based on operating income.

(3) Information about Sales, Profit (Loss), Assets and Other Items

	Millions of Yen					
	2017					
	Reportable Segment					
	Scientific Instruments	Industrial Equipment	Medical Equipment	Total	Reconciliations	Consolidated
Sales:						
Sales to external customers	¥66,510	¥11,565	¥21,624	¥99,699		¥ 99,699
Intersegment sales or transfers						
Total	¥66,510	¥11,565	¥21,624	¥99,699		¥ 99,699
Segment profit	¥ 1,272	¥ 2,664	¥ 2,153	¥ 6,089	¥ (4,012)	¥ 2,077
Segment assets	61,480	9,788	18,432	89,700	19,345	109,045
Other:						
Depreciation	1,798	282	166	2,246	280	2,526
Increase in property, plant and equipment and intangible assets	2,735	178	188	3,101	166	3,267

Notes: 1. Reconciliations of:

— Segment profit amounting to ¥(4,012) million includes common costs which are not distributed to any reportable segment. The common costs are mainly the back office expenses.

— Segment assets amounting to ¥19,345 million include common assets which are not distributed to any reportable segment. The common assets are mainly cash surplus (cash and cash equivalents and time deposits) and long term investments (investment securities).

— Depreciation amounting to ¥280 million includes depreciation of the general administration section that is not attributable to any reportable segment.

— Increase in property, plant and equipment and intangible assets amounting to ¥166 million includes common assets which are not distributed to any reportable segment.

2. Segment profit is the same as operating income in the consolidated statement of income.

	Millions of Yen					
	2016					
	Reportable Segment					
	Scientific Instruments	Industrial Equipment	Medical Equipment	Total	Reconciliations	Consolidated
Sales:						
Sales to external customers	¥73,909	¥9,988	¥23,476	¥107,373		¥107,373
Intersegment sales or transfers						
Total	¥73,909	¥9,988	¥23,476	¥107,373		¥107,373
Segment profit	¥ 4,621	¥1,504	¥ 4,128	¥ 10,253	¥ (4,108)	¥ 6,145
Segment assets	64,063	10,061	18,349	92,473	21,028	113,501
Other:						
Depreciation	1,767	376	174	2,317	560	2,877
Increase in property, plant and equipment and intangible assets	2,216	200	302	2,718	141	2,859

Notes: 1. Reconciliations of:

— Segment profit amounting to ¥(4,108) million includes common costs which are not distributed to any reportable segment. The common costs are mainly the back office expenses.

— Segment assets amounting to ¥21,028 million include common assets which are not distributed to any reportable segment. The common assets are mainly cash surplus (cash and cash equivalents and time deposits) and long term investments (investment securities).

— Depreciation amounting to ¥560 million includes depreciation of the general administration section that is not attributable to any reportable segment.

— Increase in property, plant and equipment and intangible assets amounting to ¥141 million includes common assets which are not distributed to any reportable segment.

2. Segment profit is the same as operating income in the consolidated statement of income.

	Thousands of U.S. Dollars					
	2017					
	Reportable Segment					
	Scientific Instruments	Industrial Equipment	Medical Equipment	Total	Reconciliations	Consolidated
Sales:						
Sales to external customers	$592,783	$103,070	$192,730	$888,583		$888,583
Intersegment sales or transfers						
Total	$592,783	$103,070	$192,730	$888,583		$888,583
Segment profit	$ 11,334	$ 23,746	$ 19,189	$ 54,269	$ (35,759)	$ 18,510
Segment assets	547,951	87,239	164,276	799,466	172,415	971,881
Other:						
Depreciation	16,026	2,512	1,480	20,018	2,492	22,510
Increase in property, plant and equipment and intangible assets	24,380	1,582	1,679	27,641	1,480	29,121

Notes: 1. Reconciliations of:

— Segment profit amounting to $(35,759) thousand includes common costs which are not distributed to any reportable segment. The common costs are mainly the back office expenses.

— Segment assets amounting to $172,415 thousand include common assets which are not distributed to any reportable segment. The common assets are mainly cash surplus (cash and cash equivalents and time deposits) and long term investments (investment securities).

— Depreciation amounting to $2,492 thousand includes depreciation of the general administration section that is not attributable to any reportable segment.

— Increase in property, plant and equipment and intangible assets amounting to $1,480 thousand includes common assets which are not distributed to any reportable segment.

2. Segment profit is the same as operating income in the consolidated statement of income.

Related Information

(1) *Information about Products and Services*

This information is omitted because it is provided as part of the reportable segment information.

(2) *Information about Geographical Areas*

a. Sales

Millions of Yen			
2017			
Japan	U.S.A.	Other	Total
¥40,339	¥23,582	¥35,778	¥99,699

Millions of Yen			
2016			
Japan	U.S.A.	Other	Total
¥41,140	¥26,803	¥39,430	¥107,373

Thousands of U.S. Dollars			
2017			
Japan	U.S.A.	Other	Total
$359,532	$210,175	$318,876	$888,583

b. Property, plant and equipment

Millions of Yen		
2017		
Japan	Other	Total
¥10,901	¥2,564	¥13,465

Millions of Yen			
2016			
Japan	Germany	Other	Total
¥10,332	¥1,321	¥1,384	¥13,037

Millions of Yen		
2017		
Japan	Other	Total
$97,154	$22,854	$120,008

(3) *Information about Major Customers*

The information for the year ended March 31, 2017, is not disclosed because no customers represent 10% or more of the consolidated sales.

	2016	
	Millions of Yen	Related Segment Name
Name of Customers	Sales	
SIEMENS HEALTHCARE DIAGNOSTICS INC.	¥12,649	Medical equipment

(4) *Information about Impairment Loss of Fixed Assets by Reportable Segment*

There is no impairment loss for the years ended March 31, 2017 and 2016.

(5) *Information about Goodwill by Reportable Segment*

	Millions of Yen					
	2017					
	Reportable Segment				Reconcil-iations	Consol-idated
	Scientific Instruments	Industrial Equipment	Medical Equipment	Total		
Amortization of goodwill	¥ 370			¥ 370		¥ 370
Goodwill at March 31, 2017	2,496			2,496		2,496

	Millions of Yen					
	2016					
	Reportable Segment				Reconcil-iations	Consol-idated
	Scientific Instruments	Industrial Equipment	Medical Equipment	Total		
Amortization of goodwill	¥ 370			¥ 370		¥ 370
Goodwill at March 31, 2016	2,866			2,866		2,866

	Thousands of U.S. Dollars					
	2017					
	Reportable Segment				Reconcil-iations	Consol-idated
	Scientific Instruments	Industrial Equipment	Medical Equipment	Total		
Amortization of goodwill	$ 3,297			$ 3,297		$ 3,297
Goodwill at March 31, 2017	22,253			22,253		22,253

(6) *Information about Negative Goodwill by Reportable Segment*

There is no negative goodwill.

Deloitte.

Deloitte Touche Tohmatsu LLC
Shinagawa Intercity
2-15-3 Konan
Minato-ku, Tokyo 108-6221
Japan

Tel: +81 (3) 6720 8200
Fax: +81 (3) 6720 8205
www.deloitte.com/jp/en

INDEPENDENT AUDITOR'S REPORT

To the Board of Directors of JEOL Ltd.:

We have audited the accompanying consolidated balance sheet of JEOL Ltd. and its consolidated subsidiaries as of March 31, 2017, 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 JEOL Ltd. and its consolidated subsidiaries as of March 31, 2017, 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

June 28, 2017

Member of
Deloitte Touche Tohmatsu Limited

Corporate Outline (As of March 31, 2017)

Corporate Name	JEOL Ltd.
Address	1-2, Musashino 3-chome, Akishima, Tokyo 196-8558, Japan TEL: +81-42-543-1111 FAX: +81-42-546-3353
Establishment	May 30, 1949
Capital	¥10,038 million
Number of Employees	Consolidated: 2,976 Non-consolidated: 1,909

JEOL Solutions for Innovation

Stock Information	Authorized shares	200,000,000
	Issued shares	97,715,600
	Number of shareholders	6,494

Head Office and Branch Offices

Head Office: Factory
Tokyo Office
Tokyo Second Office
Yokohama Office
Tokyo Branch
Sapporo Branch
Sendai Branch
Tsukuba Branch
Nagoya Branch
Osaka Branch
West Japan Solution Center
Hiroshima Branch
Takamatsu Branch
Fukuoka Branch

Domestic Subsidiaries and Affiliated Companies

JEOL TECHNICS LTD.
JEOL TECHNOSERVICE CO., LTD.
JEOL YAMAGATA CO., LTD.
JEOL INSTRUMENTS INC.
JEOL RESONANCE Inc.

Overseas Subsidiaries

JEOL USA, INC. [USA]	11 Dearborn Road Peabody, MA 01960, USA TEL. 1-978-535-5900
JEOL (EUROPE) SAS [France]	Espace Claude Monet 1 Allée de Giverny 78290 Croissy Sur Seine, France TEL. 33-13015-3737
JEOL (U.K.) LTD. [U.K.]	JEOL House, Silvercourt, Watchmead, Welwyn Garden City, Herts AL7 1LT, England TEL. 44-1707-377117
JEOL (EUROPE) B. V. [the Netherlands]	Lireweg 4 2153 PH Nieuw-Vennep, The Netherlands TEL. 31-252-623-500
JEOL (Nordic) AB [Sweden]	Hammarbacken 6A, P.O. BOX 716, 191 27 Sollentuna, Sweden TEL. 46-8-28-2800
JEOL (GERMANY) GmbH [Germany]	Gute Änger 30 85356 Freising, Germany TEL. 49-8161-9845-0
JEOL (ITALIA) S.p.A. [Italy]	Palazzo Pacinotti Milano 3 City Via Ludovico il Moro, 6/A 20080 Basiglio (MI), Italy TEL. 39-02-9041431
JEOL ASIA PTE. LTD. [Singapore]	2 Corporation Road #01-12 Corporation Place, Singapore 618494 TEL. 65-6565-9989
JEOL TAIWAN SEMICONDUCTORS LTD. [Taiwan]	2F-2, No.192,Dongguang Rd. East Dist., Hsinchu City 30069 Taiwan (R.O.C.) TEL. 886-3-571-5656
JEOL (AUSTRALASIA) PTY. LTD. [Australia]	Suite 1, L2 18 Aquatic Drive Frenchs Forest NSW 2086, Australia TEL. 61-2-9451-3855
JEOL DE MEXICO S.A. DE C.V. [Mexico]	Arkansas 11 Piso 2 Colonia Napoles Delegacion Benito Juarez C.P.03810, Mexico D.F. TEL. 52-5-55-211-4511
JEOL CANADA, INC. [Canada]	3275 1ere Rue, Local #8, St-Hubert, QC J3Y-8Y6, Canada TEL. 1-450-676-8776
JEOL BRASIL Instrumentos Cientificos Ltda. [Brazil]	Av. Jabaquara, 2958-5°andar-cj 52 04046-500 Sao Paulo SP, Brazil TEL. 55-11-5070-4000
JEOL (MALAYSIA) SDN. BHD. [Malaysia]	508, Block A, Level 5 Kelana Business Center 97, Jalan SS 7/2 Kelana Jaya Petaling Jaya 47301, Selangor, Malaysia TEL. 60-3-7492-7722
JEOL (BEIJING) CO., LTD. [China]	Zhongkeziyuan Building South Tower 2F, Zhongguancun Nansanjie Street No. 6, Haidian District, Beijing 100190, China TEL. 86-10-6804-6321
JEOL Shanghai Semiconductors Ltd. [China]	2F, Bl.12 Dream Valley, No. 589 QuWu Rd, Shanghai, 200241, China TEL. 86-21-6888-0770
JEOL DATUM Shanghai Co., Ltd. [China]	Room 1507&1508 Ben Ben Mansion, No. 300 Xikang Road, Jingan Area, Shanghai 200040, China TEL. 86-21-5836-6350
JEOL (RUS) LLC [Russia]	Krasnoproletarskaya Street 16, Bld. 2, 127473, Moscow, Russian Federation TEL. 7-495-748-7791
JEOL INDIA PVT. LTD. [India]	Elegance Tower, Level 2, 212B Old Mathura Road, Jasola Business District, Jasola, New Delhi-110025, Delhi, India TEL. 91-11-6472-2578
JEOL GULF FZE [UAE]	P.O. Box No. 371107 Dubai Airport Free Trade Zone East Wing 5EA No. 404, Dubai, UAE TEL. 971-4-609-1497
JEOL KOREA LTD. [Korea]	Dongwoo Bldg. 7F, 1443, Yangjae Daero, Gangdong-Gu, Seoul, 134-814, Korea TEL. 82-2-511-5501

JEOL

1-2, Musashino 3-chome, Akishima, Tokyo 196-8558, Japan
TEL: +81-42-543-1111 FAX: +81-42-546-3353
www.jeol.com