

## THE MARK OF LINEAR MOTION

Annual Report 2014



## **ABOUT THK**

THK CO., LTD. manufactures and supplies vital machinery components around the world. THK products help to convert slippage into controlled rotary motion, enabling parts of machinery to move smoothly, easily and precisely in a straight line. Driven by a business philosophy that emphasizes the Company's business philosophy, which is "providing innovative products to the world and generating new trends to contribute to the creation of an affluent society," THK has continued to focus on the development of a variety of products including LM guides, as a creative development-driven enterprise since our establishment in 1971.

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### Originator of World-First Products

THK pioneered the development of the world's first linear motion (LM) guide on the back of its original concepts and innovative technologies. By providing the necessary components that help increase precision, rigidity and speed across such wide-ranging fields as machines tools and industrial robots, the Company has consistently played a major role in the ongoing development of industry.

PIONEER

## Commanding a Leading Share of the Global Market

Since successfully developing the world's first LM guide, THK has commanded a leading share of the global market. LM guides that facilitate a controlled rolling motion so that parts of machinery will move in a straight line has long been in demand from the industrial machinery sector for use in machine tools as well as in semiconductor production and other equipment. Looking ahead, demand is expected to surge in a broad spectrum of consumer-related areas, including seismic isolation and damping systems, medical equipment, automotive parts and energy-related products.

## Expanding Our Global Sales, Production and Development Structure

THK has actively promoted the development of an integrated production and sales structure with facilities and operations closer to centers of demand. The Company currently maintains a local production and sales network that covers its four principal markets, Japan, the Americas, Europe and Asia. As a result of this endeavor, we set up direct representation in 25 countries around the world. The Company is targeting raising its overseas sales ratio, which already stands at 46% in fiscal 2013, and we are soundly on target 50%.

COUNTRIES

25

Main Products



#### LM Guides

LM guides are our main products, which incorporated a part with linear rolling motion into practical usage for the first time in the world. They realize the development of high-precision, high-rigidity, energysaving, high-speed machines with long service lives.



Ball Screws

Ball screws are high-efficiency feed screws with the balls making a rolling motion between the screw and the nut. Compared with conventional sliding screws, these products have drive torque of one-third or less, making them most suitable for saving drive motor power.



#### Actuators

Actuators are hybrid products combining a guide component such as an LM guide with a ball screw, linear motor or other drive component. Reductions in the number of parts and design manhours can be realized by adopting the LM Guide Actuator.



#### **Ball Splines**

NO.1

Ball splines are rolling guide spline bearings. This is an innovative product with a ball rolling on a groove in the shaft, realizing allowable loads greater that with linear bushings and enabling torque transmission while making linear movements.



#### **Cross Roller Bearings**

Cross roller rings have orthogonally arranged cylindrical rollers. They are roller bearings with high rotation accuracy capable of bearing loads in every direction. The rings are highly rigid despite their compact design, and are used in the rotating parts of many different types of industrial machinery.

1

## **THK'S CHALLENGE**

## EXPANSION THROUGH...

### **Full-Scale Globalization**

THK is building an integrated production and sales structure with facilities and operations closer to centers of demand to produce and sell locally in four areas: Japan, the Americas, Europe and Asia. The Company is continuing its trend, particularly over recent years, of upgrading and expanding its sales network while bolstering its production capabilities across newly emerging markets including China, which is projected to enjoy demand growth over the medium-to-long-term. In developed countries, THK is also working to expand its sales network in a bid to steadily capture demand amid expansion in its user base. Through these means, the Company is working diligently to promote substantial additional growth.

THK is contributing to the growth and development of customers worldwide and helping to build a prosperous society by promoting the use of its products including LM guides. As a part of these endeavors, the Company has embraced the dual growth strategies of focusing on Full-Scale Globalization and the Development of New Business Areas to increase its geographical presence and expand the range of applications for which THK products are used. Against this backdrop, the Company announced details of its three-year medium-term management plan in May 2014. Under the plan, we will look to achieve the numerical targets of ¥250 billion in consolidated net sales, operating income of ¥40 billion, and an ROE of over 10% by the final year of the plan. In addition to accelerating the pace at which it implements Full-Scale Globalization as well as the Development of New Business Areas in its bid to achieve its numerical targets, every effort will be made to build a robust business base. In this manner, we plan to achieve a higher level of performance and consolidated net sales of ¥300 billion as the next set of targets going forward.



Development of New Business Areas

As a part of efforts to develop new business areas, THK has set up three specialist divisions: the ACE Division, which handles seismic isolation and damping systems; the FAI Division, which is responsible for activities in transportation equipment-related fields; and the IMT Division, which handles such products as electric actuators for use in general living environment fields, which are exhibiting wideranging latent demand. At the same time, the Company is working diligently to cultivate fields in close proximity to the consumer goods sector. Moreover, use of THK's products is expanding across a variety of fields including medical equipment, aircraft, and renewable energy. Recognizing the vast potential that also exists in other areas within the consumer goods sector, the Company is honing its accumulated know-how and core linear motion system technologies nurtured over a long period and is accelerating the pace at which it develops new business fields.

#### Europe

Net Sales ¥18.4 billion Sales bases: 12 Production bases: 2

#### Note: Net sales by regional data is based on overseas sales for fiscal 2013

#### Japan

Net Sales ¥101.0 billion Sales bases: 45 Production bases: 12 Development bases: 1

#### Asia and Other

Net Sales ¥37.0 billion Sales bases: 55 Production bases: 11 Development bases: 1

#### The Americas

Net Sales ¥28.9 billion Sales bases: 9 Production bases: 3

# GLOBALIZATION

## **NEW BUSINESS**

Expansion from Capital Goods into Consumer Goods

#### **Capital Goods**

Machine Tools Chip Mounting Machines Injection Molding Machines Industrial Robots Semiconductor Production Equipment FPD Production Equipment

**Consumer Goods** 

#### Develops and supplies key automotive components that enhance automobile safety

FAI Division (Future Automotive Industry)

· Other transportation equipment-related businesses

#### ACE Division (Amenity Creation Engineering)

 Mainly develops and supplies seismic isolation and damping system that help ensure housing safety
 Support the home automation

#### IMT Division (Innovation Mechatronics Technology)

- Supplies unit products customized to each customer's needs
   Develops and supplies electric actuator series that
   address customers' general-purpose needs
- $\cdot$  Developing next generation robot related products that are projected to expand in the future

#### Fields with High Future Growth Potential

· Medical equipment, aircraft, and energy-related fields



## CONSOLIDATED PERFORMANCE OVERVIEW

Years ended March 31

	2004	2005	2006	2007	2008	
Net Sales*	¥119,254	¥147,158	¥158,413	¥174,711	¥208,709	
Japan	85,344	105,555	112,245	119,513	136,322	
The Americas	10,436	12,888	14,108	16,650	26,000	
Europe	12,739	15,340	16,199	19,345	25,237	
Asia and Other	10,735	13,375	15,861	19,203	21,150	
Gross Profit	41,322	53,607	57,922	65,142	68,053	
Operating Income (Loss)	16,232	25,974	27,080	31,816	26,938	
Income (Loss) before Income Taxes and Minority Interests	15,521	26,845	30,566	34,524	26,701	
Net Income (Loss)	8,584	17,348	18,584	21,038	18,323	
Total Assets	191,105	220,008	244,385	263,281	264,229	
Net Assets (Note 2)	109,539	128,606	169,792	189,040	192,953	
* Segments are based on where our customers are located.						
Per Share						
Net Income (Loss) per Share—Basic	¥ 72.27	¥ 145.31	¥ 148.42	¥ 158.36	¥ 139.53	
Net Income (Loss) per Share—Diluted	63.69	130.05	137.97	157.22	138.74	
Book Value per Share (Note 3)	923.35	1,067.42	1,266.39	1,407.84	1,484.78	
Cash Dividend per Share	15	18	25	33	36	
Overseas Sales Ratio (%)	28.4	28.3	29.1	31.6	34.7	
Operating Margin (%)	13.6	17.7	17.1	18.2	12.9	
Return on Equity (ROE) (%) (Note 3)	8.1	14.7	12.6	11.8	9.7	
Return on Assets (ROA) (%) (Note 4)	8.5	12.8	11.8	12.8	10.5	
Equity Ratio (%) (Note 3)	57.1	58.0	68.9	71.1	72.3	
Asset Turnover Ratio (Times)	0.62	0.72	0.68	0.69	0.79	

Notes: 1. U.S. dollar amounts represent translation of Japanese yen, for convenience only, at the rate of 102.92 = U.S. \$1, the approximate rate of exchange prevailing in Tokyo on March 28, 2014.

2. Prior period figures have been reclassified to conform to the current year. Minority Interests is included in Net Assets

3. Calculated on the basis of Net Assets less Minority Interests.

4. Operating Income (Loss) plus Interest and Dividend Income as a percentage of average Total Assets.

## In fiscal 2013, ended March 31, 2014, net sales increased 10.2% year on year, to ¥185.4 billion.

In Japan, while capital investment-related demand trended toward a recovery from the second half of the fiscal year under review, activity remained weak throughout the first half. Meanwhile, demand in the Americas, Europe and China was firm in overall terms.

Under these circumstances, THK took aggressive steps to expand sales on the back of efforts to reinforce its business structure. Looking at its overseas operations, the Company benefited from year-on-year movements in foreign currency exchange rates, with the weak yen driving up sales at each of its overseas bases. As a net result of these factors, THK reported an increase in revenue for the fiscal year under review.

## Operating income increased 48.6% year on year, to ¥17.3 billion.

In addition to the increase in net sales, THK undertook a variety of activities including the P25 Project, a cross-sectional initiative that transcends each division and is designed to reinforce the Group's earnings base. These activities helped to enhance the efficiency of fixed costs and reduce the ratio of variable costs. Buoyed also by favorable foreign-currency exchange rates and the weak yen, earnings grew.

#### Net Sales



#### Operating Income (Loss)/Operating Income Margin



					Millions of yen	Thousands of U.S. dollars
2009	2010	2011	2012	2013	2014	2014
¥179,269	¥115,330	¥190,662	¥196,867	¥168,366	¥185,466	\$1,802,041
109,566	70,296	117,305	117,900	101,444	101,052	981,854
23,266	14,552	20,812	22,279	22,527	28,901	280,807
24,916	12,636	16,107	19,979	15,194	18,427	179,045
21,521	17,846	36,438	36,709	29,201	37,086	360,335
48,341	23,189	54,443	53,976	44,299	52,904	514,027
8,523	(9,509)	21,844	19,746	11,693	17,370	168,774
6,284	(14,511)	21,613	18,520	14,737	24,005	233,239
1,204	(14,301)	13,960	12,642	9,809	15,591	151,485
240,351	236,375	279,769	288,333	293,146	336,417	3,268,720
177,713	162,259	167,937	175,517	189,058	222,149	2,158,460
					Yen	U.S. dollars
¥ 9.36	¥ (111.20)	¥ 108.55	¥ 98.31	¥ 76.96	¥ 123.16	\$ 1.20
_	_	—	_	_	—	—
1,372.69	1,252.71	1,296.52	1,352.00	1,479.41	1,736.51	16.87
20	15	16	20	18	26	0.25
						_
38.9	39.0	38.5	40.1	39.7	45.5	
4.8	(8.2)	11.5	10.0	6.9	9.4	

#### Net Income (Loss)/Net Income Margin

0.7

3.6

73.4

0.71

(8.5)

(3.9)

68.2

0.48



#### **Return on Assets (ROA)**



2010 2011 2012 2013 2014

#### Net Income (Loss) per Share

8.5

8.6

59.6

0.74



2010 2011 2012 2013 2014

#### **Return on Equity (ROE)**





5.4

4.2

63.9

0.58

7.4

7.1

60.3

0.69



**Total Assets/Turnover Ratio** 

(Millions of yen)

400,000

300.000

200,000 -

100,000

0

Total Assets (Left scale) 🔶 Turnover Ratio (Right scale)

2010 2011 2012 2013 2014

(Times)

- 0.8

0.6

0.4

0.2

- 0

#### Cash Dividend per Share

7.7

5.7

65.3

0.59



#### Equity/Equity Ratio

Equity (Left scale) 🔶 Equity Ratio (Right scale)



## **TO OUR STAKEHOLDERS**

Pursuit of the two pillars of our growth strategy, "Full-Scale Globalization" and the "Development of New Business Areas"

> THK CO., LTD. President and CEO

Akihiro Teramachi

#### Looking Back on Fiscal 2013

Looking at the operating environment in fiscal 2013, ended March 31, 2014, capital investment-related demand in Japan trended toward a recovery from the second half of the fiscal year. Turning to overseas markets, demand in the Americas. Europe, and China also exhibited an overall underlying strength. In addition, compared with the previous fiscal year, movements in foreign currency exchange rates were favorable largely on the back of the downturn in the value of the yen. Buoyed by these factors as well as by revenue growth across each region overseas, consolidated net sales for the fiscal year under review amounted to ¥185.4 billion, an increase of 10.2% compared with the previous fiscal year. From a profit perspective, operating income increased 48.6% year on year, to ¥17.3 billion, and net income increased 59.0%, to ¥15.5 billion. In addition to the upswing in net sales, this improvement in profits was largely attributable to fluctuations in foreign currency exchange rates.

Amid these circumstances, the Group continued to promote the two core growth strategies of Full-Scale Globalization and the Development of New Business Areas as a part of its efforts to expand the market for its products including LM guides. Recognizing the potential for new growth drivers to emerge in wake of the Lehman crisis, we took the opportunity to accelerate the pace of growth strategy implementation in a bid to capture new demand. Turning our eyes to avenues for business outside Japan, in developing countries, where rates of economic growth have outstripped those of

developed markets, there is an expectation of an upswing in machinery demand and growth in factory automation (FA) activity. Under these circumstances, the Group has worked diligently to strengthen its sales, production, and development structure in China while also aggressively undertaking investments designed to generate growth. Among a host of investments, we have continued to channel resources into upgrading and expanding our sales networks in India and the ASEAN region. In developed countries, the forecast of progress toward electric-powered living across a variety of fields as well as heightened awareness toward the need for disaster-related contingency measures has stimulated demand for the Company's products in the consumer goods sector. Under these circumstances, we have pursued a number of activities aimed at increasing the use of our products including linear motion systems and focused on cultivating new markets. In addition to these endeavors geared toward expanding business areas, we have actively pushed forward such improvement measures as the P25 Project, a crosssectional initiative designed to strengthen the Company's earnings base. Through these and other means, we have placed considerable emphasis on increasing profitability.

Drawing on the fruits of these endeavors, the Company was successful in securing an increase in both revenue and earnings in FY2013 compared with the previous fiscal year. Looking at results against initial plans, however, we were unable to achieve established targets for net sales and operating income. This was largely attributed to the level of demand, particularly in Japan and Asia, which was lower than originally forecast. Despite these less than satisfactory results, I am confident that we have put in place a structure that is capable of securing definitive improvements on profit margins



#### **Financial Condition**

on increased net sales. This confidence is based on the benefits that have emerged through the implementation of a wide range of improvement measures including the P25 project.

Again looking back on conditions in the business markets in which we have operated since the Lehman crisis, and despite dramatic changes in our external environment, the market has witnessed steady growth in areas related to the Company's products, most notably in developing countries. Amid the entry into developing countries by home appliance. automobiles, and other set manufacturers, we have again become aware of growth in the repair and maintenance market, which has exceeded expectations. Furthermore, the range of users is widening in developed countries and regions including Europe and the United States. Regrettably, the Group has fallen short with efforts to capture a large share of this demand. Accordingly, we are yet to achieve the ¥208.7 billion record level of net sales reported in fiscal 2007. Moving forward, we therefore recognize that extending our sales network to every corner of the world and capturing a major portion of demand is our number one priority for the future.

#### Medium-Term Management Plan—Achieve Record-High Net Sales and Operating Income

Accounting for each of the aforementioned factors, we put in

place a new medium-term management plan in May 2014 that covers the three-year period from fiscal 2014 to fiscal 2016. Under the plan, we have set the targets of achieving ¥250 billion in net sales, ¥40 billion in operating income, and an ROE of over 10% by the final year of the plan. In the past, we have announced details of our medium-term plans on a rolling three-year basis. Since the Lehman crisis, subsequent uncertainty surrounding the external environment put this practice on hold. However, cognizant of the necessity to avoid an approach that is excessively weighted toward the short term and recognizing the importance of measures aimed at securing medium-to-long-term growth, we decided to again put forward a medium-term vision and plan for our future. In this instance, we have again abandoned the rolling approach and adopted a fixed plan to better clarify the need to definitively implement measures designed to secure our continued growth and development.

The basic strategies put forward to achieve the plan remain unchanged. Looking ahead, we will continue to focus on Full-Scale Globalization and the Development of New Business Areas. More importantly, we will place additional weight on accelerating the pace at which these strategies are carried out. The Group understands that an increase in net sales is paramount to securing earnings growth. Under this thinking, expanding net sales, commonly referred to as the top line, is our number one priority in as we work to achieve the plan.





With regard to Full-Scale Globalization, we anticipate market growth on the back of advances in FA in developing countries. At the same time, the range of users is also expected to widen in developed countries. In order to steadfastly capture this demand, we will therefore work to upgrade and expand our global sales network. In the Development of New Business Areas, we will strive to boost sales not only of existing products, but also of newly developed offerings amid the growing use of our products in such new fields as medical equipment, aircraft, robots, and renewable energy. Buoyed by each of these activities, we will set a new record for net sales and operating income while strengthening our management foundation and setting ourselves in the position to reach the long-term management target of ¥300 billion in net sales over the three years of the plan.

#### **Full-Scale Globalization**

While accelerating the pace of business development in developing countries, the Group will channel all of its energies toward building a robust sales network as it pursues Full-Scale Globalization.

In China, direct sales network has continued to expand steadily and the number of offices totaled 35 as of the end of March 2014. Despite this extensive network, we recognize the need to work beyond a direct structure in order to cope with continued FA development and a widening user base. Amid efforts to establish a robust indirect sales network, we will endeavor to definitively capture demand.

As set makers of home electric appliances, automobiles, and related products continue to make inroads into the ASEAN region, demand for repair and maintenance parts is expanding. In order to capture this demand, we are bolstering our network of agents and authorized distributors. In addition, we set up an ASEAN Customer Support structure in Thailand, Indonesia, and Vietnam in 2014 with the aim of providing finely tuned solutions to companies entering each market. We have also appointed designated personnel for each country and are making it a point to provide on-site services. Looking ahead, we will expand these endeavors into other countries within the ASEAN region and take steadfast steps to garner demand.

In India, we opened a sales office in Bangalore in 2012. Since then, we have also assigned staff to Pune, Delhi, and Chennai. We plan to establish additional sales bases in these cities in the not too distant future. Our goal is to win over a robust share of the increase in demand.

In Europe and the United States, new businesses in such wide-ranging fields as robotics and 3D printers continue to emerge. With this widening of our potential user base, we are renewing efforts to expand the distribution network.

The Group will continue to upgrade and expand its global production structure as a part of efforts to strengthen its sales network and expand its top line.

In Mexico, operations commenced at THK RHYTHM MEXICANA, S.A. DE C.V. in fiscal 2013. While initially engaging in the production of automotive parts, the possibility exists for this facility to produce linear motion-related products including LM guides for use in automobile-related devices at some time in the future.

In China, the Group is taking steps to move DALIAN THK CO., LTD. to a site more than four times the size of its current location and to expand operations. The new plant is scheduled to come online in December 2014. While monitoring demand trends, we will work to enhance our production capabilities.

These activities are not limited to developing countries. We will place equal emphasis on enhancing productivity in such developed countries and regions as Japan, Europe, and the United States on an ongoing basis.

#### **Development of New Business Areas**

In our second growth strategy pillar that entails the Development of New Business Areas, we set up three specialist divisions: the Future Automotive Industry (FAI) Division, which is charged with the responsibility of expanding use of the Company's transportation equipment-related products; the Amenity Creation Engineering (ACE) Division, which handles seismic isolation and damping systems that protect people's lives and possessions from the threat of earthquakes; and the Innovation Mechatronics Technology (IMT) Division, which is engaged in efforts aimed at expanding the Company's unit products, equipment, and electric actuator businesses. The Group is working diligently to increase the use of its products in each business field.

In the FAI Division, product use is expanding steadily worldwide. In areas outside existing businesses such as stabilizer link balls, the division is striving to expand linear motion related product applications across a variety of automotive mechanical components including next-generation steering, brakes, suspension, and car interiors.

Amid increased awareness of the dangers that earthquakes present, we are increasing the number of applications for our products in the Amenity Creation Engineering (ACE) Division. Awareness toward the importance of business continuity plans (BCPs) in particular continues to rise. Against this backdrop, the ACE Division is experiencing an upswing in demand for seismic isolation platforms that protect specific pieces of equipment. This reflects the growing understanding of the corporate sector of the need to protect vital assets including servers and manufacturing equipment from the threat of earthquakes. In order to capture this demand, THK is engaging vigorously in sales and marketing activities while promoting the competitive advantage of the Company's products. At the same time, we are working to develop new products that address market needs. Under these circumstances, the Seismic Isola-





tion Module, Model TGS, which were introduced in fiscal 2011, and the Inertial Rotary Damping Tube (iRDT), which controls the degree of shaking caused by prolonged ground motion released in fiscal 2012, are attracting wide acclaim from customers. THK's seismic isolation and damping system business continues to maintain its high rate of annual growth. Through this business, we will steadfastly capture increasing demand and aim for steady growth in the future.

The IMT Division is upgrading and expanding its product lineup in existing fields. In addition to bolstering its business structure in Japan as a matter of course, the division is promoting Full-Scale Globalization in the Americas, Europe, and Asia. Particular emphasis is being placed on building a local production and sales platform in Asia, where the market is projected to experience growth.

The Company's products including its lineup of LM guides and ball screws are being widely adopted across fields other than the aforementioned three divisions. In the medical equipment field, for example, the Company's products can be found in CT scanners and surgical robots. For aircraft, the Company's products are being used in control sticks as well as aircraft interiors including reclining chairs. Our products are enjoying extensive application in air conditioning systems. Moving forward, we will work diligently to advance fresh proposals. In the field of renewable energy, use of the Company's products as mechanical components is beginning to emerge. Our actuators are already being applied in solar and thermal power generation equipment. Recently, we have seen our products picked up by the wind and hydroelectric power generation sectors with expectations that demand will grow in the future. Robotics is also a field of considerable potential. We are endeavoring to improve the performance and functionality of our products to optimally serve the requirements of this field. From a long-term perspective, the day is expected when our work will extend into components that allow robots to coexist with humans.

In this manner, latent demand for the Company's products exists wherever there is a need for the linear motion of mechanical components. In order to tap into this vast potential, we will continue to hone our accumulated knowhow and core linear motion system technologies nurtured over a long period. Making the most of our competitive advantage, we will accelerate the pace of Development of New Business Areas.

#### **Toward Future Growth**

In fiscal 2014, the global economy is expected to remain firm. Under these circumstances, we have identified the fiscal 2014 consolidated numerical targets of ¥210 bil-

lion in net sales, a year-on-year increase of 13.2%, ¥27.0 billion in operating income, a substantial improvement of 55.4%, and ¥19.0 billion in net income, up 21.9%, announced in May 2014. Fiscal 2014 is the first year of our new medium-term management plan, and as such plays an important role in placing us on the right track to achieve the plan. We will definitely achieve this plan, and are committed to building a robust business base for further growth. To this end, as we achieve the goals set under the plan, we will bring the next target of ¥300 billion in net sales well within our sight. As a further indication of the fruits of our labor, we will look to lift our dividend payout ratio, which stood at 21.1% in fiscal 2013, to 30% as a function of growth by the final year of the plan.

As we work toward achieving these goals, we kindly request the continued support and understanding of all stakeholders.



July 2014

Akihing Teramachi

THK CO., LTD. President and CEO **Akihiro Teramachi** 

## **BUSINESS REVIEW: GEOGRAPHIC BUSINESS REVIEW**







#### Year-on-year Net Sales



#### **Operating Conditions and Performance Overview**

Regional sales decreased 0.4% in year-on-year terms, to ¥101.0 billion.

In the fiscal year under review, the Japanese economy recovered. This recovery was attributable to a variety of factors including the rise in stock prices which helped to fuel consumer sentiment spurring an upswing in personal spending, and signs of an improvement in capital investment. In the markets in which the Company operates, demand around the summer months for electronics-related products declined during the first half of fiscal 2013. Other demand also remained weak. In the second half, however, demand for such items as electronics and machine tools improved. Under these circumstances, the THK Group undertook aggressive sales and marketing activities while endeavoring to cultivate new markets across a variety of products including seismic isolation and damping system. Despite this pickup, the downturn in electronics-related demand during summer took its toll with overall revenue declining year on year.

#### FY2013 Operating Activities (Results)

#### Sales

- THK increased its focus on aggressive sales and marketing activities while cultivating such new business areas as automotive parts and seismic isolation and damping systems as a part of its efforts to definitively link demand with sales.
- THK continued to promote the "TAP 1" skills development program for sales personnel in order to improve their skills. At the same time, the Company took steps to deepen relationships with existing customers and nurture new customers. In concrete terms, THK not only focused on showcasing the unique characteristics of its product, but also worked to actively develop sales proposals inviting customers to apply THK products as an answer to specific issues.
- Taking into consideration progress toward electric-powered living across a variety of fields, THK worked diligently to introduce new electric actuator products and to expand applications.

#### Production

- . In addition to building a production structure that is capable of both flexibly and immediately addressing changes in demand, THK continued to adhere strictly to its policy of providing the highest quality, cost and delivery (QCD).
- THK channeled its energies toward further enhancing operating skills and boosting productivity. At the same time, the Company placed an increasing amount of weight on the shift to in-house production in order to lift cost competitiveness.

#### **General Overview**

• During the fiscal year under review, THK strove to build a business base that is capable of withstanding global competition. To this end, the Company undertook a variety of improvement measures including the promotion of the P25 Project, which aims to strengthen the Company's earnings base

#### FY2014 Operating Activities (Plan)

#### Sales

- THK will review its existing sales network with a view to comprehensively incorporating a variety of factors including the attributes of regions in which customers operate, different industries as well as product fields, and sales configurations.
- THK will continue to promote the "TAP 1" skills development program while proactively pursuing proposal-based sales and marketing that is designed to resolve outstanding issues.

#### Production

• THK will continue to channel its energies toward further enhancing operating skills and boosting productivity. At the same time, the Company will heighten its focus on the shift to in-house production in order to boost its cost competitiveness

#### **General Overview**

· Beginning with the P25 Project, the Company will ramp up its various improvement activities while redoubling its efforts to strengthen its earnings base. Moving forward, the Company will look to steadfastly improving profit margins in line with the increase in net sales.

## The Americas

Net Sales
(Millions of yen)
30,000
25,000
20,000
15,000
10,000
5,000
0 2010 2011 2012 2013 2014
Years ended March 31

Not Colo

Bases	
(As of March 31, 2	014)
United States	Sales offices
	Plants
Canada	Sales offices

Plants

Sales offices

Mexico

Brazil

#### Group Companies (As of March 31, 2014)

7

2

1

1

• THK Holdings of America, L.L.C.

- THK America, Inc.
- THK Manufacturing of America, Inc.
   THK RHYTHM NORTH AMERICA CO., LTD.
- THK RHYTHM NORTH AMERICA CO., LT
   THK RHYTHM MEXICANA, S.A. DE C.V.
- THK RHYTHM MEXICANA, S.A. DE C.V.
- THK RHYTHM MEXICANA ENGINEERING, S.A. DE C.V.

#### Year-on-year Net Sales



#### **Operating Conditions and Performance Overview**

Regional sales increased 28.3% year on year, to ¥28.9 billion.

Automobile production increased on the back of robust personal consumption. Capital investment also picked up throughout the fiscal year under review. Under these circumstances, the THK Group continued to pursue integrated production and sales with the aim of expanding transactions with existing customers and to cultivate opportunities in the medical equipment, aircraft, energy, and other new business fields. As a result, revenue in this region increased with sales of electronic products and transportation equipment climbing. Regional sales were also buoyed by a downturn in the value of the yen compared with levels reported in the previous fiscal year.

#### FY2013 Operating Activities (Results)

#### Sales

 With capital goods manufacturers shifting their production activities overseas, particularly to Asia, the THK Group worked diligently to uncover opportunities in fresh fields—such as the medical equipment, aircraft and energy-related areas—and to cultivate new markets, including Mexico and Canada.

#### Production

- The THK Group made every effort to promote local procurement and in-house manufacturing. At the same time, the Group bolstered its cost competitiveness even further by enhancing operating skills and boosting productivity.
- THK RHYTHM MEXICANA in Mexico commenced deliveries to customers. This company was established with the aim of strengthening the Group's supply capabilities to North and South America.

#### FY2014 Operating Activities (Plan)

#### Sales

- In addition to uncovering opportunities with existing customers on an ongoing basis, the THK Group will work to cultivate business in other countries including Mexico and Canada.
- Demand in such new business fields as medical equipment, aircraft, and energy is projected to be robust. Demand is also expected to grow in the fields of 3D printers and humanoid robots. Under these conditions, the THK Group will actively undertake PR activities and participate in exhibitions while focus-ing on increasing net sales.

#### Production

- THK will take full advantage of its position as the only company in its industry to maintain a production platform in North America. At the same time, the Company will expand its product lineup to match market needs.
- THK will work to enhance its cost competitiveness by continuing to improve its on-site operating expertise and productivity.

## Europe



Net Sales

#### Bases

(As of March 31, 2014) Germany Sales offices 2 United Kingdom Sales offices 1 Ireland Plants 1 Italy Sales offices 1 Sweden Sales offices Austria Sales offices 1 Spain Sales offices Sales offices France Plants Turkey Sales offices 1 Czech Republic Sales offices 1 Netherlands Sales offices 1 Russia Sales offices 1

#### **Group Companies**

(As of March 31, 2014)

- THK Europe B.V.
- THK GmbH
- THK France S.A.S.
- THK Manufacturing of Europe S.A.S.
- THK Manufacturing of Ireland Ltd.

#### Year-on-year Net Sales



Regional sales increased 21.3% year on year, to ¥18.4 billion.

In Europe, where signs of a recovery were starting to appear during the fiscal year under review after a prolonged downturn, the THK Group undertook aggressive sales and marketing activities in an effort to expand transactions through integrated production and sales and to cultivate opportunities in the medical equipment, aircraft, energy, and other new business fields. In addition, the value of the yen remained lower than the previous fiscal year contributing to an increase in regional sales.

#### FY2013 Operating Activities (Results)

#### Sales

- In addition to further cultivating existing customers in the machine tools, general machinery, FA, robotics, and related fields, the THK Group placed particular weight on uncovering business opportunities in such areas as the medical equipment, aircraft and railway-related fields, which are projected to experience robust demand going forward.
- The Group also undertook flexible inventory management while working diligently to capture demand as a part of efforts to meet the demand for quick deliveries.

#### Production

- In its back office support areas, the THK Group continued to promote its operating policy of "small numbers with exceptional talent." Through a variety of measures including the procurement of components and parts in areas where foreign currency exchange rates are favorable, the Group took steps to improve its cost competitiveness.
- Energies were also channeled toward optimizing product items in order to specialize in products that offer high profit margins.

#### FY2014 Operating Activities (Plan)

#### Sales

- In order to ensure that the Group captures demand, the THK Group will work beyond Western Europe and upgrade and expand its distribution and sales network in Eastern Europe and Russia, which is expected to witness demand growth.
- The THK Group will also work aggressively to expand sales in the medical equipment, aircraft, and other fields, which are in relative terms not as susceptible to fluctuations in economic conditions and exhibit substantial latent demand. At the same time, the Group will showcase the appeal and competitive advantage of its products by holding exhibitions and participating in events.

#### Production

 Amid the entry into Europe by competitor manufacturers from Asia, the THK Group will promoted multi-faceted initiatives aimed at reducing costs and engage in innovative manufacturing.

## Asia and Other

(Millions	of yei	ר)						
40,000								
30,000		-	L					
20,000	-	_	ŀ					
10,000	-	-	ŀ					
0		0 20	11 3	2012	201	3 5	2014	

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Bases (As of March 31	, 2014)		Group Companies (As of March 31, 2014)
China	Sales offices Plants R&D Center	35 5 1	<ul> <li>THK (CHINA) CO., LTD.</li> <li>THK (SHANGHAI) CO., LTD.</li> <li>DALIAN THK CO., LTD.</li> <li>THK MANUFACTURING OF CHINA (WUXI) CO., LTD.</li> </ul>
Singapore India	Sales offices Sales offices Sales offices Sales offices	1	<ul> <li>THK MANUFACTURING OF CHINA (LIAONING) CO., LTD.</li> <li>THK MANUFACTURING OF CHINA (CHANGZHOU) CO., LTD</li> <li>THK RHYTHM GUANGZHOU CO., LTD.</li> <li>THK RHYTHM CHANGZHOU CO., LTD.</li> <li>THK TAIWAN CO., LTD.</li> </ul>
South Korea Vietnam Malaysia		3	<ul> <li>Beldex KOREA Corporation</li> <li>THK LM SYSTEM Pte. Ltd.</li> <li>THK RHYTHM (THAILAND) CO., LTD.</li> <li>THK MANUFACTURING OF VIETNAM CO., LTD.</li> <li>THK RHYTHM MALAYSIA Sdn. Bhd.</li> <li>THK India Private Limited</li> <li>SAMICK THK CO., LTD.</li> </ul>

#### Year-on-year Net Sales

27.0% UP

#### **Operating Conditions and Performance Overview**

Sales in Asia and other regions grew 27.0% year on year, to ¥37.0 billion.

Developing countries including China are experiencing a slowdown in their rates of economic growth. Despite these less than favorable conditions, the THK Group witnessed improvements in demand for certain products, such as small machine tools, driven by rising investments in smartphone, tablet PC, and related areas. Under these circumstances, the Group engaged in aggressive sales and marketing activities taking full advantage of earlier efforts to bolster its sales network. As a result, revenue increased with an upswing in net sales across a wide range of fields including general machinery and transportation equipment. Regional sales were also buoyed by such factors as the impact of movements in foreign currency exchange rates, most notably a weaker yen compared with the previous fiscal year. Turning to the Group's activities in South Korea, export volumes to SAMICK THK CO., LTD., an equity-method affiliate, are recorded in consolidated net sales. Going forward, this amount is projected to trend downward in line with ongoing efforts to promote localization.

#### FY2013 Operating Activities (Results)

#### Sales

- In addition to strengthening its sales network in China, the THK Group began cultivating new customers and new areas outside its mainstay machine tools field.
- In Taiwan, the THK Group took steps to capture demand associated with investments in smartphones and tablet PCs. At the same time, the Group continued to pursue ongoing steps to approach seismic isolation system, energy, and other new fields.
- The ASEAN region witnessed the entry of set manufacturers in each of the home electric appliance and automobile fields, which spurred growing demand for repair and maintenance parts. Against this backdrop, the THK Group looked to upgrade and expand its sales network as a part of efforts to capture this demand. In addition, steps were taken to cultivate customers in India and to strengthen sales structures and systems.

#### Production

- In China, the THK Group made every effort to strengthen its production capacity as the means to capture the medium-to-long-term increase in demand not only in China, but also worldwide.
- In addition to enhancing operational skills and productivity, the THK Group worked diligently to bolster its cost competitiveness by promoting the local procurement of component parts.

#### Other

• At the China engineering division, which is the Group's first overseas R&D base, efforts were channeled toward developing products that match the local market needs of developing countries.

#### FY2014 Operating Activities (Plan)

#### Sales

- In China, the Group is building on the efforts that is has continued to exert to strengthen the direct selling network to bolster its indirect sales network in a bid to put in place a structure that is capable of definitively capturing demand.
- In Taiwan, the Group will focus on reinforcing its sales network while at the same time cultivating new customers. In addition, steps will be taken to cultivate new fields through a variety of activities including the promotion of the Group's seismic isolation systems to semiconductor manufacturers.
- In the ASEAN region, the THK Group introduced the ASEAN Customer Support initiatives in April 2014 with the aim of providing a wide variety of support to companies entering the markets of Thailand, Indonesia, and Vietnam. Looking ahead, this initiative will be extended to other countries in the ASEAN region in order to steadfastly capture demand in this area.

#### Production

- THK will continue to strengthen its cost competitiveness through a variety of measures including efforts to enhance its operational skills and increase productivity. At the same time, the Group will focus on promoting local procurement of component parts.
- In China, the Group is promoting the relocation of DALIAN THK CO., LTD, to a site that is more than four times the size of its current location. The new plant is scheduled to come online in December 2014.

#### Other

• The THK Group will continue to promote collaboration between its R&D operations in China and Japan. At the same time, the Group will emphasize product development that reflects the local needs of developing countries.

## **BUSINESS REVIEW: NEW BUSINESS REVIEW**

#### ACE Division

#### Broad Possibilities for THK's Seismic Isolation and Damping Technologies

ACE stands for Amenity Creation Engineering. Guided by the concept of "developing technology to realize creative living spaces for greater comfort," the ACE Division has sought to apply THK's original linear motion technology since its establishment in 2001. The division develops and markets seismic isolation and damping systems that protect human life and property from the threat of earthquakes. In addition, steps are being taken to promote increased use of the division's products and technologies in home automation-related devices.

THK's seismic isolation and damping systems leverage basic technologies, such as LM guides and ball screws, as well as a broad lineup of products, to protect a wide range of structures, from high-rise buildings and lowrise residences to historical structures such as temples and shrines. In this manner, the Company maintains a broad product lineup that is capable of providing considerable benefits to a variety of structures. Following the Great East Japan Earthquake that struck the nation on March 11, 2011, awareness toward the importance of business continuity plans (BCPs) has increased dramatically. This has in turn contributed to a sharp jump in demand for seismic isolation platforms to protect specific pieces of equipment and assets essential to business operations including servers and a variety of manufacturing equipment. The Company is working to further expand the use of its seismic isolation platforms. In addition, THK is engaging in vigorous sales and marketing activities in an effort to expand its seismic isolation and damping systems business. At the same time, the Company is working to develop new products that address the needs of the market. In fiscal 2013, we were able to greatly increase the number of seismic isolation system applications compared with previous years, mainly those for buildings. The seismic isolation and damping systems business continues to maintain a high growth rate. Looking ahead, every effort will be made to steadfastly capture expanding demand and secure growth going forward.

#### Expanding Product Lineup and Bolstering Sales and Marketing Activities

Amid increasing general awareness of the need to implement disaster-related contingency measures, THK expects demand for seismic isolation and damping systems to continue growing over the medium-to-long-term. The ACE Division will continue to promote the considerable benefits of THK's seismic isolation and damping technologies to architectural firms and homebuilders and actively promote the use of its products in the construction of public offices and other buildings that are charged with the responsibility of providing a disaster headquarters function during periods of emergency in order to further diversify its customer base. Meanwhile, THK will upgrade and expand its lineup of seismic isolation platform systems. In addition to addressing increasingly diverse earthquake countermeasure needs, the Company will expand sales while promoting the appeal of its broad product applications. This includes the outstanding efficacy of its seismic isolation platform systems with regard to precision measuring equipment including detection equipment. Moreover, the division will work to promote more widespread product uptake by continuing to organize seminars for the benefit of the general consumer. These seminars will help explain the importance of installing seismic isolation and damping systems as well as the advantages offered by THK's technologies and products. At the same time, we will implement sales and promotional activities through effective use of the Seismic Isolation Experience Car initiative to generate further growth in THK's seismic isolation and damping systems business.





An example of the Seismic Isolation Module, Model TGS (semiconductor production equipment)



An example of residential seismic isolation application

#### **FAI Division**

#### Targeting Higher Earnings from Transportation Equipment Fields

FAI stands for Future Automotive Industry. THK set up the FAI Division in 1999 to expand usage of the Company's products as automotive parts. THK's link balls, which are the division's mainstay product, employ an integral molding process for the production of aluminum die-casts, making each link ball much lighter than their conventional steel equivalent. At the same time, the Company's link balls are highly resistant to corrosion and abrasion. Recently, this product is attracting keen interest from major automobile manufacturers in Japan and overseas as the demand for fuel-efficient automobiles continues to rise. In 2007, RHYTHM CORPORATION, an automotive parts manufacturer that boasts superior forging technologies, was included in THK's scope of consolidation as a subsidiary company. In the ensuing period, and with the addition of RHYTHM, the division has worked diligently to promote business development under an integrated format. In order to further strengthen this collaboration, steps were taken to change the name of RHYTHM to THK RHYTHM CO., LTD. in June 2010. The THK Group is targeting a global presence as an automotive parts supplier through the pursuit of synergies with THK RHYTHM to enhance the Group's ability to respond rapidly and precisely to changes in the global automotive market.

#### **Toward Realizing Further Synergies with THK RHYTHM**

Projected major developments in the FAI Division over the medium-to-longterm include significant growth in automobile demand within emerging markets and expansion in the number of major automobile production regions. Another key change is an ongoing trend to make automobiles lighter and more energy efficient, reflecting greater global interest in environmental protection. As a result, hybrid and electric vehicles are expected to gain in popularity in the future. Against this backdrop, THK continues to further develop those synergy effects to accrue from its relationship with THK RHYTHM. In this manner, the Company is working to expand the use of its products across a wider spectrum of automotive models.

Among a host of specific benefits to accrue to date, and from a management perspective, THK has witnessed increased efficiency in the handling of orders with a fewer number of people attending to a larger volume of orders. This has been achieved by consolidating the corporate function at THK RHYTHM's head office, and has further helped in building a structure that increases the speed of product use. From the standpoint of sales, proposals with respect to THK RHYTHM's products were implemented using THK's sales channels as well as its established trading relationships with domestic and overseas manufacturers of finished automobiles. Moreover, steps have been taken to consolidate overseas branches and to bolster collaboration among staff. Turning to production, the manufacture of THK's link balls in Japan and China was taken over by THK RHYTHM. This initiative is designed to promote global business development, ensure agile and efficient business operations and enhance profitability in transportation equipment-related businesses. By leveraging THK's outstanding production technologies accumulated as a leading manufacturer of LM guides together with the production and quality management techniques of THK RHYTHM, a manufacturer of automotive parts, successful efforts have been made to secure highly cost-competitive production. On the technology front, subcommittees were established to better promote the interaction and exchange of the technological expertise of both companies. As one example, THK RHYTHM's forging technologies are being applied to the manufacture of LM guides, a core THK product. On this basis, the Group is implementing activities aimed at expanding use in consumer goods areas and enhancing the cost competitiveness of LM guides. In this manner, the Group is working diligently to draw out synergies between THK RHYTHM and THK at each of the management, sales, production and technology levels.

In addition to these efforts, THK RHYTHM MEXICANA, S.A. DE C.V., which had been established in Mexico to strengthen the product supply system to North and South America as well as in its local market, started deliveries to customers in fiscal 2013. Although starting with the production of automotive parts, in the future the company will also be entering the linear-related product manufacturing field, including LM guides, as automotive-related devices.

Looking further ahead, the FAI Division will accelerate efforts to realize synergies with the aim of promoting increased application of its products. At the same time, the division will also work to expand applications of its linear-related products in a variety of automobile mechanisms other than stabilizing systems, including interiors in addition to next-generation steering and brakes as well as suspensions, as it strives toward improving profitability in transportation equipment fields.



An example of link ball application



#### **IMT Division**

#### Expanding Use of the Group's Electric Actuator and Unit Products Businesses

The Innovation Mechatronics Technology (IMT) Division was established in June 2009 with the aim of expanding the Group's electric actuator and unit products businesses, areas which are projected to experience future market growth.

In recent years, and amid the growing need for enhanced productivity prompting advances in performance and diverse functionality with respect to such industrial machinery as semiconductors as well as flat-panel production equipment, calls for improved economy in machinery architecture and design have become increasingly prominent. Under these circumstances, demand for mechanical, hydraulic or air-based equipment including actuators, which assist in the movement and control of goods, is expected to rise. Moreover, as interest in global environmental protection gathers momentum, the need for electric actuators, which deliver superior energy efficiency compared with existing hydraulic or air-based actuators, is projected to advance. In addition, extending beyond industrial machinery, momentum is projected to gather toward electric-powered production lines.

Against the backdrop of this operating environment, the IMT Division is leveraging THK's original concepts and innovative technologies to further cultivate markets. As an initial step, the division will work to expand the application of electric actuators and unit products in industrial machinery. Recognizing the existence of wide-ranging latent demand in such community and general living environment areas as fitness and nursing care, the division will be sure to unlock this demand to spur earnings growth. In this regard, every effort will be channeled toward actively developing electric actuators that combine varied and diverse applications while at the same time nurturing the market.

#### Strengthening Development, Production and Sales that Reinforce THK's Competitive Advantage

Electric actuators are made up of three elements: control equipment, a motor and a mechanical slider unit. The base technologies in the mechanical slider unit are LM guides and ball screws, which are THK's core products. A pioneer in LM guides and the manufacturer that leads the world in terms of the know-how accumulated in these products, THK has continued to supply products of the highest quality on the global market for many years. As the mechanical slider unit is made up of those same high-quality LM guides and ball screws, THK's electric actuators possess significant advantages in the market.

In fiscal 2013, we endeavored to continually expand our product lineup, assembled a range of peripheral control devices, and upgraded systems to enable linked sales, from controllers to actuators. Amid sharply increasing needs with regard to digitizing devices that in the past relied on hydraulic or air pressure, the Company will address the growing demand for the Press Series, the optimum product, in particular for such applications as compact press fitting machines and crimping machines.

In addition to focusing on the development of electric actuators capable of fulfilling ongoing market needs, the Company will also be enterprisingly encouraging developments destined for the robot field, where growth is expected in the coming years. Moreover, naturally reinforcing our business systems in Japan, we will work on full-scale globalization in the Americas, Europe and Asia. Particularly in Asia, where market expansion is anticipated, we will vigorously work to build the foundations of a local production and sales system.



## THK PRODUCTS

## **INNOVATIVE PRODUCTS**

As a global pioneer, THK developed the linear motion (LM) guide, which is based on an original concept and innovative technology. Within the mechatronics sector, LM guides are used as a vital machinery component and have varied industrial applications. THK also develops, produces and supplies to the world a range of other vital machinery components, including ball splines and ball screws.

#### LM Guides

LM guides are critical elements in many types of machinery. By converting slippage into a rolling motion, they enable parts of machinery to move smoothly, easily and precisely in a straight line. As a result, LM guides help to enhance the precision, rigidity and speed of a wide range of industrial machinery. In 1996, THK became the first company in the world to successfully develop the next generation of LM guides featuring caged ball technology. Later, in 2001, the Company introduced to the market LM guides with caged rollers. Since then we have striven to expand the usage of these improved LM guides. The ball cages are resin parts that keep the balls in place and guide them. This stops direct contact between the balls or rollers, eliminating noise and friction. Compared with first-generation LM guides, the use of caged ball technology achieves long service life, low noise and long-term maintenance-free operation. LM guides based on caged ball technology are now vital components of many types of equipment. They have provided major contributions to the machine tool, semiconductor production equipment and related sectors.





LM guide used in a machining center (a type of machine tool)

#### **Ball Screws**



Ball screws are machinery parts that function by causing a large number of balls to circulate between the screw shaft and the nuts. This mechanism of action efficiently converts rotary motion into linear motion. THK has developed ball screws featuring caged ball technology, thus helping to realize longer life with lower noise and provide an extended maintenance-free period. As a result, these offerings are now essential elements in the machine tools, industrial robots, semiconductor production equipment and related sectors. Other ball screws supplied by THK are designed to support high loads, making them ideally suited for replacing the hydraulic cylinders used in capital equipment such as injection molding machines, presses and die-cast machines.

#### Actuators



Actuators are hybrid products combining a guide component such as an LM guide with a ball screw, linear motor or other drive component. In industries such as electronics, there is an increasing need to shorten development and manufacturing lead-times. Modularization allows actuators to realize benefits such as simplified design and fewer assembly components, thus helping to meet such requirements. THK supplies a varied lineup of actuators ranging from basic, low-priced units to high-end components designed to operate at high speed or perform to clean-room specifications. Such advanced actuators have become indispensable parts in equipment used in the manufacture or inspection of semiconductors and flat-panel displays.

#### **Ball Splines**



Developed in 1971, the same year that the Company was established, ball splines were the precursor to the LM guide. Balls roll along an Rshaped groove machined into the spline axle. This critical advance boosts the load that the device can tolerate and permits the transmission of torque, resulting in a revolutionary linear motion system. Compared with the existing configuration, which does not contain such grooves, ball splines boost the tolerable load by a factor of 13 and service life by a factor of 2,200. Today, ball splines play a number of highly functionalized roles in a variety of machines. Usage examples include industrial robots, medical equipment and chip mounters.



Ball screw used in a dicing saw (for semiconductor production)



Actuators are used in medical equipment such as CT scanners



Used in bathing assistance equipment

#### **Cross Roller Rings**



#### Link Balls, THK RHYTHM Products



Cross roller rings are roller bearings that feature internal cylindrical rollers arranged orthogonally so as to facilitate load bearing in every direction. The incorporation of the spacer cages between these orthogonally arranged rollers prevents roller skew and reciprocal abrasion between the rollers. These rings are highly rigid despite their compact structure. Cross roller rings are used in the rotating parts of many different types of industrial machinery, including the joint areas and swiveling parts of industrial robots, machining center swivel tables, the rotating parts of industrial manipulators and precision rotary tables. Other applications include medical equipment, measuring instruments and semiconductor production equipment.

A product that THK has manufactured along with LM guides since the time of the Company's foundation is the link ball, an automobile undercarriage component made from aluminum. Manufactured by a proprietary process, link balls are spherical joints in which a high-precision steel ball bearing forms the spherical surface. After molding a die-cast holder, the shank portions are specially welded. Using an integral molding process for the aluminum die-cast makes the link balls highly resistant to corrosion and wear due to abrasion. They are also considerably lighter than the steel parts traditionally used. Playing an important role in automobile safety and comfort, link balls have been adopted by leading automakers in the World for a number of undercarriage mechanisms, such as the joint sections connecting stabilizers to the suspension and ground clearance sensors. As adoption of link balls shifted into high gear, RHYTHM COR-PORATION (now THK RHYTHM CO., LTD.), was included in THK's scope of consolidation as a

subsidiary in 2007 and, as a company that was primarily involved in the manufacture of steel ball joints, developed business as an automotive parts manufacturer covering the full gamut of ball-joint products. THK RHYTHM manufactures and sells related products, such as steering, suspension, brake, engine and transmission components. In addition to its mainstay coldforged ball joints, THK RHYTHM is currently expanding operations in the component field, with aluminum links that are integrated ball joints with aluminum suspension links. As critical automotive safety components, these products must meet the highest standards of quality and performance. Responding to market demands by offering guarantees of zero defects and zero delivery problems, THK RHYTHM is contributing to the production of safer, more comfortable automobiles.



Usage in industrial robots



Usage of link balls in automotive parts



Usage of THK RHYTHM products in automotive parts

## **RESEARCH AND DEVELOPMENT**

Guided by the business philosophy of "providing innovative products to the world and generating new trends to contribute to the creation of an affluent society," THK continually strives to create original products as a creative developmentdriven enterprise.

## THK Product Development as a Contributor to Industrial Development

THK's concept toward business is based on the philosophy of "providing innovative products to the world and generating new trends to contribute to the creation of an affluent society." This thinking has guided our drive to be a creative development-driven enterprise, enabling us to develop a varied stream of products since our establishment in 1971. Besides contributing to industrial development, these efforts have also resulted in THK steadily accumulating technical expertise that has been a primary source of growth.

THK developed the world's first linear motion (LM) guide.

For the first 10 years after we started production and sale of these products in 1972, LM guides were primarily used in machine tools. During this period, we developed a series of new products to fulfill our customers' needs for increased precision and lower cost. In the 1990s, other industries—such as manufacturers of semiconductor production equipment and industrial robots—began to adopt THK products. We responded by developing various new products that were optimized for customer-specific applications and operating environments in these sectors.

In 1996, we pioneered the development on the world's first-ever LM guide using caged ball technology, an advance that enabled LM guides to operate without maintenance for much longer periods. Although such technology was already common in rotary bearings at that time, the problem was the need to cope with both linear and circular movements. This made it extremely difficult to develop ball cages with sufficient durability to move along straight lines or curves. THK successfully took steps to overcome this

issue. LM guides based on caged ball technology not only provide the benefit of long-term maintenance-free use, but have also made a significant contribution to the development of high-speed, low-noise industrial machinery with longer productive lives, in such sectors as machine tools and semiconductor production equipment. The advance also paved the way for the development of LM guides for additional applications. Today, we continue to develop products that use caged ball technology. Besides LM guides, this range has expanded to include ball screws, ball splines and hybrid units, which combine LM guides and ball screws.

#### A Global R&D System for the Next Generation

Drawing on elite minds from the ACE, FAI and IMT divisions, with a particular focus on the Engineering Division, a task force engages in R&D activities, primarily out of the Technology Center located in Tokyo. In addition to such mainstay products as linear motion systems and mechatronics equipment, every effort is being made to develop innovative products with an eye toward developing new business areas. Drawing on its core linear motion system technologies and know-how, THK is therefore ramping up its product development activities in such wide-ranging fields as seismic isolation and damping systems, transportation equipment, medical equipment, aircraft, and renewable energy.

Turning to activities outside Japan, operations commenced at an R&D facility established within the head office of THK (CHINA) CO., LTD. in Dalian, Liaoning Province in April 2010. This is the Group's first such overseas base. More recently, operations commenced at a new designated R&D Center in April 2012. This is helping to accelerate product development. Amid a

#### MAJOR NEW PRODUCTS DEVELOPED IN FISCAL 2013



#### Caged Roller LM Guide Model SRG ultra-long block type

In connection with its SRG caged roller LM guide, the Company introduced an ultra-long block version model. This initiative is aimed at addressing the need for higher load capacity.



High-Speed Rolled Ball Screw Model BTK-V

While twice as fast as its predecessor, the BTK-V offers lower noise levels and improved sound quality. The use of a plastic pipe full enclosure reduces assembly hours and increases bursting strength.



#### DIN Standard Compliant Precision Caged Ball Screw Model SDA

Aiming to expand its global market share in ball screws, THK offers the SDA caged ball screw compatible with DIN specifications, an industry standard in Germany. It enables high-speed motion with low noise levels and can be operated without maintenance for long periods. Chinese market that continues to enjoy growth, the THK Group will develop products that address local needs in a timely manner by locating this R&D base at the point of demand.

#### Product Development in Fiscal 2013: Realizing the "cubic E" Concept

Leveraging creative ideas and the Group's unique technologies, the main theme of THK's current R&D activities is the "cubic E" concept, which embraces the three keywords "Ecological," "Economical" and "Endless." Based on this theme, we continued throughout fiscal 2013 to speed up development with the aim of extending the range of applications for our technologies while at the same time seeking to develop highly original and attractive products for launch 5–10 years in the future. Major achievement in fiscal 2013 included the development of products for a number of original applications. In the industrial machinery field, and again with an emphasis on mainstay LM guides and ball screws, we developed electric actuator-related new model products for use in areas where demand is projected to increase in line with the ongoing progress toward electric-powered living.

With regard to our endeavors in new business areas, the Group focused on further raising competitiveness particularly from the perspective of costs in the transportation equipment field. In this context, steps were taken to develop new crafting techniques, more compact and lightweight products as well as products for use in electric vehicles. Particular attention was also directed toward development activities in other fields including aircraft, renewable energy, and robotics. In the aircraft field, THK worked to put forward proposals and engage in the development of interior-related products for such items as seats as a part of efforts to cultivate new markets. In the renewable energy field, the Company manufactured actual equipment for wind, hydroelectric and solar power generators. In addition, through business and university collaboration, we are working to develop optimal parts and components. During the fiscal year under review, we started sales of shaft units that reduce the resistance of the rotating wings of vertical shaft-type wind power generators. In the robotics field, we strived to develop markets in the consumer-use robot, FA and education fields, while improving "SEED Solutions," the element/components of a robotics technology system for next-generation robots, including version updates. We are also promoting developments in the robotics industry such as peripheral technologies for upper-body humanoid robots and robotic hand technologies.

The Company won the 2013 JSME Medal for New Technology, awarded by the Japan Society of Mechanical Engineers (JSME), for its Double-Row Angular Contact Roller Rings "model RW," which was launched in the market in 2010 and has been widely adopted for rotating tables for machine tools and robotic joints. This award is given to publicly recognize superior products created via ingenuous adjustments to and improvement of existing technologies and/or grassroots technological development.

#### **Fiscal 2014 Policies and Initiatives**

We plan to continuously focus our efforts in fiscal 2014 on the efficient development of new products with the aim of expanding applications for THK technology further. Specifically, we will pursue themes such as customer convenience while promoting designs that incorporate the potential for enhanced productivity and quality. Moreover, by conducting in tandem basic and applied development activities, we will focus on developing products that can quickly generate commercial returns. Complementing these endeavors, and while strengthening our global development capabilities, the R&D base within THK CHINA will serve at the center of efforts to actively promote product development that addresses local market needs. The THK Group boasts a wide variety of proprietary technologies. Looking ahead, we will actively promote technological interaction between Group companies in an effort to stimulate maximum synergies through the mutual rerouting of technologies thereby leading to new product development.



#### DIN Standard Compliant Precision Ball Screw Model EBA/EPA and Others

Aiming to expand its global market share in ball screws, THK offers the EBA/EPA and others ball screw compatible with DIN specifications. It is a compact product with an internal circulation system that uses deflectors.



Electric Actuator Compact Series KRF

The KRF is a single-axis fully enclosed actuator with high moment rigidity. It enables compact designs and prevents intrusion of foreign matter.



## Electric Actuator Compact Series KSF

The KSF actuator features a larger shaft diameter ball screw in order to fully utilize motor capacity. This enables long strokes, high speeds and quick acceleration/deceleration.



Network Unit TNU

As control equipment for electric actuators, the TNU is compatible with EtherCAT specifications for general-purpose networks. It is an easy-to-use product that features simplified operations.

## **ENVIRONMENTAL PRESERVATION**

1

As a pioneering global manufacturer of vital machinery components, the THK Group has contributed to society and economic activity via the development of linear motion systems. At the same time, we recognize our corporate social responsibility in terms of contributing to global environmental preservation efforts so that future generations inherit a healthy planet. To this end, we are engaged in various activities aimed at continuously reducing the impact on the environment as well as trying to protect and improve the natural environment.

#### The THK Group's Basic Policy Regarding the Environment

Conservation of the environment is considered a major management concern, and we are striving to accurately grasp the impact on the environment produced by the Group's business activities, products and services. Every division participates by setting relevant environmental goals.

- 2 In addition to following environmental laws, we set self-imposed standards for Group companies and regularly review them to improve the efficiency and effectiveness of our environmental management.
- 3 We will continually promote the development of products that help reduce environmental burdens.
- 4 We will decrease energy use associated with our business activities, while continually promoting reductions in per units of energy consumption and greenhouse gas emissions.
- 5 In addition to continually promoting conservation and the recycling of resources, with particular attention to reducing and recycling waste from our manufacturing divisions, we will strive to prevent pollution.
- 6 To promote greater unity in our environmental activities, we will provide guidance and support to our affiliates and business partners, and strive to work in cooperation and harmony with local communities.

7 This basic policy regarding the environment shall be disseminated to all divisions in the Group through education, training and activities designed to improve awareness. We will disclose information concerning the environment to parties within and outside the Group in a timely manner.

Revised on June 3, 2013

#### **Environmental Activities and Targets**

Area	Objectives and Goals	Main Activities
Energy conservation, prevention of global warming	Cut greenhouse gas emissions	<ol> <li>Energy diagnostics</li> <li>Energy conservation</li> <li>Use of clean energy</li> </ol>
Materials conservation, zero emissions	Reduce environmental impact; achieve zero emissions	<ol> <li>Input controls on materials, parts and by-products</li> <li>Controls on emissions and final waste disposal</li> <li>Material reuse/recycling</li> </ol>
Harmful substance controls	Eliminate and control harmful substances in THK Group production and distribution activities	<ol> <li>Substitution of PRTR-designated substances</li> <li>Green procurement and purchasing</li> </ol>
Environment-friendly products and services	Develop products and supply services using LCA (Life Cycle Assessment) methods	<ol> <li>Cage-embedded product series development</li> <li>Extension of service life and maintenance-free periods</li> </ol>

#### **Environmental Management System**

THK is working to acquire ISO 14001 certification for environmental management system at its production sites in Japan and overseas. At each production site, we conduct management reviews and internal audits to confirm that business is executed in accordance with rules and environmental laws and regulations are followed. Moreover, we use the Plan-Do-Check-Act (PDCA) management cycle in our efforts to identify and solve problems and improve the environmental management framework.

To promote Group-wide environmental activities, THK has its Risk Management Division's Environmental Management Department coordinate efforts to reduce environmental impact by collaborating with production, administrative and distribution divisions. We aim to share more information about these activities and enhance our training programs as well.

With regard to the three environmental targets, the Group recorded a year-on-year increase of 0.55% in its zero emissions rate against a reduction target of less than 0.50% in the material conservation and zero emissions field. The Group, however, was able to achieve a reduction in  $CO_2$  basic unit emissions for a year-on-year reduction target of 1% in the energy conservation and global warming prevention field, and curtailed the use of PRTR-designated substances compared with the previous fiscal year in the harmful substance controls field as a result of its activities in fiscal 2013.

#### New Energy/Energy Conservation Top Runner Award Winner

Hamamatsu City in Shizuoka Prefecture administers the Hamamatsu City New Energy/Energy Conservation Top Runner System, which recognizes companies working to reduce energy usage. In fiscal 2013, 38 companies were recognized and categorized by rank. Of these, THK RHYTHM won an S Class award, the highest ranking. THK RHYTHM was also chosen for the Top Runner Award, which is best owed on the company that displayed the best efforts among the companies honored with the awards.

This award recognizes the aggressive measures undertaken by THK RHYTHM to install energy-saving equipment, such as solar panels and LED lighting, and its impressive SYT activities to conserve energy based on the catchphrase "turn it down, stop it, or turn it off." The THK Group will continue to vigorously promote energy-saving activities in the years to come.

#### ISO 14001 Certified Business Locations

Business Location	Date of Certification	Certifying Body
YAMAGATA Plant		
KOFU Plant		
YAMAGUCHI Plant	<ul> <li>December 17, 2010</li> <li>(Registration renewal date)</li> </ul>	JQA
MIE Plant		
GIFU Plant		
THK RHYTHM NORTH AMERICA CO., LTD. (USA)	June 13, 2001	SQA
THK RHYTHM CO., LTD. Headquarters / HAMAMATSU Plants	December 20, 2001	JIA
THK RHYTHM KYUSHU CO., LTD.	December 20, 2002	JIA
THK Manufacturing of America, Inc. (USA)	July 14, 2003	QMI
THK Manufacturing of Europe S.A.S. (Europe)	February 3, 2004	AFAQ
THK NIIGATA CO., LTD.	October 21, 2005	JQA
THK RHYTHM CO., LTD. INASA Plant	December 20, 2006	JIA
THK MANUFACTURING OF CHINA (WUXI) CO., LTD. (China)	January 7, 2008	CQC
DALIAN THK CO., LTD. (China)	December 18, 2008	TUV
THK MANUFACTURING OF CHINA (LIAONING) CO., LTD. (China)	January 12, 2010	TUV
THK INTECHS CO., LTD. MISHIMA / SENDAI Plants	March 21, 2013	ClassNK



Center: Mr. Yasutomo Suzuki, Mayor of Hamamatsu City Second from the right: Mr. Sawada, Director and Executive Vice Chairman of THK RHYTHM

#### **Overseas Clean Production Activities**

THK MANUFACTURING OF CHINA (LIAONING) CO., LTD.'s clean production activities were highly acclaimed in May 2013 by Dalian City's Environmental Protection Bureau in China. Clean production activities are activities that help reduce energy usage through the adoption of advanced technologies and facilities to improve resource usage efficiency and reduce the generation and emission of polluting substances. As a part of these efforts in fiscal 2013, we implemented improvements for 50 projects submitted by employees, including the recycling of whetstones and reduction of resins through more efficient injection molding.



Clean production education and training at an overseas base

## **CORPORATE GOVERNANCE AND INTERNAL CONTROLS**

THK's aim as an enterprise is to maximize the generation of stable returns for shareholders over the long term. To this end, THK is working to strengthen corporate governance while upgrading compliance, risk management and other internal control systems.

#### **Basic Stance on Corporate Governance**

THK's basic stance on corporate governance is that, from the perspective of maximizing shareholder returns, the Company aims to boost the transparency of management to shareholders while at the same time striving to achieve proper and efficient management.

A company with a Board of Auditors, THK's management organizations are based on a Board of Directors and a Board of Auditors that include outside directors and auditors, respectively. With effect from June 21, 2014, the Company is introducing an executive officer system in conjunction with a reduction in the number of its directors. Through this move, THK is planning to enhance the management oversight function carried out by the Board of Directors, clarify roles and responsibilities with regard to operational execution, and accelerate decision making and operational execution.

Comprising a total of eight directors—a president, two directors with special titles, three directors who also serve as executive officers, and two outside directors—the new Board of Directors make decisions on important management matters and carry out oversight of directors and executive officers in the execution of their duties. Having introduced an outside director who has independence from the members who make up the Board of Directors, the Company is working to further improve management oversight functions. Also with effect from June 21, 2014, the number of independent outside directors was increased from one to two, as part of the Company's efforts to ensure the neutrality, legality, and validity of management.

In order to make rapid and appropriate decisions, the Board of Directors hears and acts upon necessary information from officers and relevant internal departments. Discussions and debate are undertaken during Board of Directors' meetings with the opinions of lawyers, accountants and other third-party professionals sought as required. The Board of Directors then holds discussions on the basis of the gathered information and makes decisions on important management matters. As seen from the above, the Company is working to improve management oversight functions by having the opinions of experts, who have a third-party perspective, reflected in the Board of Directors' decision-making process, and the opinions of the two outside directors, who possess sufficient insight and a wealth of experience reflected in its corporate management, reflected in corporate management.

Comprising a total of four auditors-two full-time and two parttime-the Board of Auditors works to improve auditing function by



strengthening the functions of the Board of Auditors itself. In addition to attending Board of Directors' meetings and other important meetings, and having examined the Company's business affairs and finances, each auditor works on effective audits of the execution of directors' and executive officers' duties and of business execution through the exchange of views and information at Board of Auditors' meetings. The outside auditors conduct legitimate and pertinent audits in each of the respective fields with which they are conversant, namely financial accounting and corporate legal affairs.

THK is also introducing an executive officer system. Appointed by decision of the Board of Directors, executive officers will be granted authority as officials responsible for the comprehensive execution of business affairs in specific matters. The Company is working to accelerate business execution by clarifying roles and responsibilities related to the execution of executive officers' duties.

#### **Active Disclosure of Corporate Information**

THK has consistently regarded active communication with all stakeholders as an extremely important part of management, and as such the Company is actively committed to maintaining fair and proper disclosure of corporate information.

THK holds the General Meeting of Shareholders on a Saturday in mid-June. This policy deliberately avoids the period in late June when many shareholder meetings are clustered, thus making it easier for shareholders to attend.



## Construction and Reinforcement of a System of Internal Controls

Concentrating on comprehensive compliance, THK is implementing initiatives to reinforce internal controls as a part of efforts to strengthen its management platform. In 2008, THK introduced an internal control regulation regarding financial reporting. The entire THK Group including its subsidiaries and affiliates is thus endeavoring to engage in ongoing efforts to facilitate a corporate structure that ensures the reliability of its financial reporting based on Japan's Financial Instruments and Exchange Law.

At the same time, the Internal Control Audit Department was established within the Internal Audit Division to evaluate the operational status and performance of internal control systems. Based on evaluations that are conducted annually, initiatives are implemented within the Internal Control Department, set up as a secretariat within the Risk Management Division, to further improve operations and performance.

In-house evaluations undertaken during fiscal 2013 on the Group's internal control systems did not detect any flaws or serious outstanding issues that required disclosure. The conclusions from these evaluations were submitted in a statutory filing on internal control to the Prime Minister of Japan (the Kanto Local Finance Bureau) in June 2014 and then disclosed.

#### Framework for the Promotion of Compliance

THK established the Compliance Committee in 2005 as a permanent body chaired by the President and CEO. As well as determining all policies relating to the establishment of an in-house compliance framework, the Committee considers and manages the response to any instances where employees are in breach of statutory or internal regulatory requirements as well as cases of reported compliance violations. In order to ensure the legality and efficacy of each response, steps are taken to coordinate with designated legal counsel in its capacity as observer to the Committee.

The Company has established the THK Help Line to prevent executive officers and employees from committing violations and to help ensure that swift corrective measures can be taken in the event of any serious compliance-related problems. Reports can be made by telephone or e-mail. Contact can also be made with external legal counsel. In fiscal 2013, four inquiries were fielded through the THK Help Line. Each was attended to in an appropriate manner in collaboration with the relevant department.

In addition, THK's operating divisions have all established compliance working groups reporting to the Compliance Committee. Working group members are selected from each site and region and are charged with the responsibilities of promoting compliance while fulfilling an advisory function. Furthermore, members play an important role in ensuring compliance with statutory, regulatory and other requirements through a variety of measures including the holding of voluntary study workshops.

#### **Thorough Risk Management**

THK has set up the Risk Management Division to oversee and address risks on a Groupwide basis. Within this division, separate sections are responsible for formulating guidelines and organizing educational and training programs relating to such risks as compliance, the environment, disasters, information security, export controls and new forms of influenza.

## **BOARD OF DIRECTORS AND AUDITORS**

As of June 21, 2014

#### Directors



Akihiro Teramachi President and CEO



Toshihiro Teramachi Executive Vice President



Hiroshi Imano Executive Vice President



Takashi Okubo

Director and Managing Executive Officer Executive Vice Chairman of THK (CHINA) CO., LTD.



Junichi Sakai Director and Executive Officer General Manager of Quality Assurance Division

General Manager of ICB Center



Takashi Teramachi Director and Executive Officer Deputy General Manager of IMT Division Representative Director and President of THK INTECHS CO., LTD.



Masaaki Kainosho Outside Director



Masakatsu Hioki Outside Director

#### Auditors



Hideyuki Kiuchi Standing Auditor



Kazunori Igarashi Standing Auditor



Shizuo Watanabe Outside Auditor



Masatake Yone
Outside Auditor

#### **Executive Officers**

Managing Executive Officer	Tetsuya Hayashida
	Representative Director and President of THK Europe B.V. Representative Director and President of THK GmbH Representative Director and President of THK France S.A.S. Representative Director and President of THK Manufacturing of Europe S.A.S. Representative Director and President of THK Manufacturing of Ireland Ltd.
Managing Executive Officer	Junji Shimomaki
	Senior General Manager of Sales Division
Managing Executive Officer	Nobuyuki Maki
	Senior General Manager of Production Division
Managing Executive Officer	Masato Sawada
	General Manager of FAI Division Director and Executive Vice Chairman of THK RHYTHM CO., LTD.
Managing Executive Officer	Takanobu Hoshino
	General Manager of IMT Division Director and Executive Vice Chairman of THK INTECHS CO., LTD.
Managing Executive Officer	Akihiko Kambe
	Representative Director and President of THK Holdings of America, L.L.C. Representative Director and President of THK Manufacturing of America, Inc.
Executive Officer	Kaoru Hoshide
	Senior General Manager of Engineering Division
Executive Officer	Hirokazu Ishikawa
	Senior General Manager of Sales Support Division
Executive Officer	Naoki Kinoshita
	President of THK (CHINA) CO., LTD.
Executive Officer	Junichi Kuwabara
	General Manager of ACE Division
Executive Officer	Masaki Sugita
For surface Officers	Representative Director and President of THK America, Inc.
Executive Officer	Yukio Yamada
	General Manager of Sales Division General Manager of International Sales Department Representative Director and President of THK LM SYSTEM Pte. Ltd.
Executive Officer	Nobuaki Sugahara
	General Manager of Corporate Strategy Division
Executive Officer	Sakae Ito
	General Manager of Risk Management Division
Executive Officer	Hitoshi Muramoto Representative Director and President of THK RHYTHM CO., LTD.

\* Exclude concurrently serving as director

## FINANCIAL SECTION

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### **MANAGEMENT'S DISCUSSION & ANALYSIS**

#### **Analysis of Operating Results**

#### Net Sales

In fiscal 2013, ended March 31, 2014, as economic growth in emerging countries slowed, recovery trends were seen in developed countries. In overall terms, the global economy experienced a moderate upswing. In Japan, consumer spending increased on the back of high stock prices that improved consumer sentiment, and the Japanese economy recuperated with signs of a positive turnaround in capital investments. Turning to specific overseas economies, conditions in the United States were buoyed by strong consumer spending, and the European economy showed signs of a recovery from its recession phase. In emerging countries such as China, however, the pace of growth slowed owing to slumping domestic demand.

The THK Group has identified "Full-Scale Globalization" and the "Development of New Business Areas" as cornerstones of its growth strategy aimed at capturing the latent demand for its products such as LM guides. In addition, as new drivers of our growth come to light in the global economy's recovery from the Lehman Brothers shock, the THK Group is accelerating its growth strategy in order to secure demand. Against the backdrop of higher rates of economic growth in emerging countries, compared with developed countries, in particular, demand for machinery and the development of factory automation (FA) is anticipated to increase. Under these circumstances, the THK Group is undertaking proactive investments for future growth. In addition to strengthening its sales, production and development structure in China, the Group is also expanding sales channels in India and the ASEAN region. In developed countries, demand for the Group's products in the consumer goods domain is anticipated to expand due to the progress of motorization and growing awareness toward disaster countermeasures. At the same time, THK is focusing on new markets to promote the widespread adoption of its products including linear motion systems. In the fiscal year under review, demand in the electronics industry showed a moderate recovery. Under these circumstances, the THK Group leveraged previous efforts to reinforce its operating structure to proactively expand sales. Moreover, buoyed by movements in the value of the yen, which weakened compared with the previous fiscal year, the Group reported an increase in consolidated net sales of ¥17,100 million, or 10.2%, year on year, to ¥185,466 million.

#### Cost of Sales

From a cost perspective, the Group implemented various measures aimed at improving productivity. Those measures included the P25 Project, a cross-sectional initiative designed to reinforce the Group's earnings base, which helped to successfully streamline fixed costs and lower the variable cost ratio. As a result, the cost of sales to sales ratio improved by 2.2 percentage points compared with the previous fiscal year, to 71.5%.

#### Selling, General and Administrative (SG&A) Expenses

SG&A expenses were up ¥2,928 million, or 9.0%, compared with the previous fiscal year, to ¥35,534 million. This was mainly due to higher net sales and an increase in research and development costs for forward-looking enhanced research activities. The ratio of SG&A expenses to net sales, however, improved by 0.2 percentage point year on year to 19.2 %. This was largely attributable to successful efforts to contain costs and improve operating efficiency.





#### **Operating Income (Loss)/Operating Income Margin**



#### Operating Income

Accounting for each of the aforementioned factors, operating income increased ¥5,677 million, or 48.6%, compared with the previous fiscal year, to ¥17,370 million for an operating margin of 9.4%

#### Non-Operating Income and Expenses

Turning to non-operating income and expenses, total non-operating income was ¥6,635 million. In addition to a foreign exchange gain, net of ¥5,193 million, this total reflected equity in earnings of an affiliate of ¥522 million. Total non-operating expenses were ¥1,585 million and mainly included interest expenses of ¥802 million.

#### Net Income

Net income for the fiscal year under review amounted to ¥15,591 million, up ¥5,782 million, or 58.9%, compared with the previous fiscal year.

#### **Segment Information**

#### Japan

In Japan, consumer spending increased on the back of consumer sentiment buoyed by high stock prices. At the same time, the Japanese economy experienced a positive upswing showing signs of a recovery in capital investment. In the first half of the fiscal year under review, demand in the electronics industry entered an adjustment phase during summer. Demand in other industries remained at levels lower than the previous fiscal year. In the second half, however, conditions exhibited a positive trend with a recovery in overall demand including the machine tool and electronics industries. Under these circumstances, THK worked proactively to implement aggressive business measures and cultivate new business fields, including seismic isolation and damping systems. As a result, net sales amounted to ¥107,436 million, up ¥430 million, or 0.4%, compared with the previous fiscal year. Operating income (segment income) amounted to ¥16,434 million, up ¥4,858 million, or 42.0%, year on year due to successful efforts to implement various operating measures including the P25 Project, the Group's cross-divisional project. These measures helped to streamline fixed costs and lower the variable cost ratio. In addition, the weaker yen during the period had a favorable impact on operating results.

#### The Americas

In the Americas, an upswing in automobile production, and capital investments also continued to increase on the back of strong consumer spending. Under these circumstances, production and sales worked in unison to expand transactions with existing customers and to cultivate new business opportunities in the medical equipment, aircraft,

#### Net Income (Loss)/Net Income Margin



#### Return on Assets (ROA)/Return on Equity (ROE)



energy-related and other fields. Coupled with the favorable effect of the weaker yen, these endeavors served to boost sales particularly in the electronics and transportation equipment industries. As a result, sales in the Americas amounted to 428,618 million, up 46,310 million, or 28.3%, compared with the previous fiscal year. Operating income (segment income) came to 41,166 million, up 4156 million, or 15.4%, year on year.

#### Europe

After a period of prolonged recession, Europe showed signs of a recovery. Against this backdrop, production and sales worked in unison to expand transactions with existing customers and to cultivate new business opportunities in the medical equipment, aircraft, energy-related and other fields. Buoyed also by the positive effects of the weak yen, sales in Europe amounted to ¥18,292 million, up ¥3,229 million, or 21.4%, compared with the previous fiscal year. Operating income (segment income) was ¥180 million, up ¥558 million year on year. This was a return to profitability.

#### China

In China, automobile production remained robust, however, the country's rapid rate of economic growth slowed. Driven by investments in the smart phone and tablet computer markets, there were signs of a partial recovery of demand for small machine tools. Under these circumstances, THK implemented aggressive business measures on the back of its strengthened sales channels and successfully increased sales to the various industries, such as general machinery and transportation equipment industries. As a result, sales in China amounted to \$19,858 million, up \$6,431 million, or 47.9%, compared with the pre-

vious fiscal year. In contrast, the Group incurred an operating loss (segment loss) of ¥614 million, a negative turnaround of ¥279 million. This largely reflected proactive investment geared toward future growth.

#### Other

In other countries and regions including Taiwan, India and the ASEAN region, there were signs of a recovery in demand especially for small machine tools. This largely reflected investments in the smartphone and tablet computer markets. Against this backdrop, the THK Group continued to expand transactions with existing customers and to cultivate new customers. Results were also impacted by the yen, which remained weak throughout the fiscal year. As a result, sales amounted to ¥11,262 million, up ¥700 million, or 6.6%, compared with the previous fiscal year. Operating income (segment income) came to ¥677 million, up ¥386 million, or 132.6%, year on year.

#### Net Income (Loss) per Share



#### Net Assets per Share



#### **Financial Position**

#### Assets, Liabilities and Net Assets

#### Assets

Total current assets stood at 4227,890 million as of March 31, 2014, an increase of 433,949 million compared with the end of the previous fiscal year. Cash and cash equivalents climbed 422,375 million year on year, owing mainly to free cash flow and the effect of exchange difference. At the same time, trade accounts and notes receivable grew 46,441 million, reflecting higher net sales, and inventories increased 44,667 million.

Total non-current assets stood at ¥108,527 million as of March 31, 2014, an increase of ¥9,322 million year on year. During the fiscal year under review, THK undertook capital investments of ¥8,888 million while depreciation expenses amounted to ¥10,844 million. Other factors contributing to the movement in non-current assets included an upswing in total property, plant and equipment of ¥7,142 million owing largely to exchange difference to assets denominated on foreign currencies, and increased in intangibles of ¥1,446 million.

#### Liabilities

Total liabilities came to ¥114,268 million, an increase of ¥10,180 million compared with the end of the previous fiscal year. Major movements in liabilities included an increase in trade accounts and notes payable of ¥4,565 million, reflecting the upswing in net sales, and an increase in income taxes payable of ¥3,631 million. During the period under review, THK repaid debt totaling ¥20,000 million and reclassified bonds totaling ¥10,000 million, which fall due for repayment within one year, as current liabilities from long-term liabilities.

#### Net Assets

Total net assets stood at ¥222,149 million, up ¥33,091 million compared with the previous fiscal year-end. In addition to net income of ¥15,591 million, this increase was largely attributable to foreign currency translation adjustments, which grew ¥20,061 million year on year.

#### Cash Flows

Net cash provided by operating activities came to ¥23,665 million, compared with ¥20,395 million in the previous fiscal year. Major cash inflows were income before income taxes and minority interests of ¥24,005 million, depreciation and amortization of ¥11,101 million, and increase in accounts and notes payable of ¥1,976 million. The principal cash outflows included increase in accounts and notes receivable of ¥3,810 million and increase in inventories of ¥1,479 million.

Net cash used in investing activities totaled ¥9,554 million, compared with ¥15,284 million in the previous fiscal year. The primary component was purchase of property, plant and equipment and intangibles.

Net cash used in financing activities was ¥2,790 million compared with ¥5,388 million in the previous fiscal year. The major cash outflow was cash dividends. During the fiscal year under review, THK issued bonds totaling ¥20,000 million and repaid long-term debt of ¥20,000 million.

Accounting for each of the aforementioned activities, cash and cash equivalents as of March 31, 2014 stood at ¥138,343 million, an increase of ¥22,375 million compared with the end of the previous fiscal year.



#### Equity/Equity Ratio


## **RISK FACTORS**

Risk factors and uncertainties that could affect the THK Group's business results and financial position include, but are not limited to, the items outlined in the following discussion. Please note that information provided on this page was accurate as of June 23, 2014. Any items relating to the future are based on the best judgment of THK Group management as of this date.

## Dependence on Linear Motion Systems

The principal business of the THK Group is the manufacture and sale of linear motion systems, notably LM guides. Linear motion systems account for the majority of sales and are expected to continue to do so for the foreseeable future. Any unexpected technical revolution that jeopardizes the position of linear motion systems as a critical machinery component could have a negative impact on the business results and financial position of the THK Group.

#### Effect of Changes in Production Trends within Specific Industries

The THK Group manufactures and sells LM guides, ball screws and other machinery components as well as link balls, suspension ball joints and other transportation equipment components. The principal users of these products are companies that make industrial machinery and equipment including machine tool, general machinery and semiconductor production equipment as well as manufacturers of transportation equipment. While the THK Group is striving through Full-Scale Globalization and Development of New Business Areas to realize expansions in its business domains, the performance of the THK Group is influenced by production trends within industrial sectors such as machine tools, general machinery and semiconductor production equipment as well as other transportation equipment that form the THK Group's major customers.

As a result, the business results and financial position of the THK Group could be affected negatively in the future by a downturn in production levels in these specific industries.

#### **Overseas Business Expansion**

The THK Group has manufacturing and sales operations in the Americas, Europe, Asia and other regions. Economic downturns in countries where the THK Group manufactures or sells products that result in reduced demand for the Company's products could have a negative impact on the THK Group's business results and financial position. Any unexpected legal and regulatory changes in countries other than Japan could also have a similar effect.

### **Exchange Rate Fluctuations**

The THK Group conducts a portion of its business in foreign currencies. Accordingly, the Group attempts to hedge currency risk using forward foreign currency exchange and other instruments. Nonetheless, any significant unexpected fluctuations in foreign exchange rates have the potential to exert a negative impact on the business results and financial position of the THK Group.

#### **Reliance on Specific Sources of Supply**

The THK Group procures some raw materials and parts from external supply sources. As a result, the THK Group's business results and financial position could be negatively affected in the event of a shortfall in raw materials and parts owing to such factors as a drop in the production capacity of suppliers, natural disaster or other unforeseen incident.

## **Incidence of Defective Products**

THK Group products are widely used in industrial machinery including machine tools, industrial robots and semiconductor production equipment. Applications for THK products have also expanded to include various areas related to consumer goods, including automobiles, seismic isolation and damping systems, medical equipment, amusement equipment and the aircraft industry.

Under these circumstances, the THK Group is working to build quality assurance systems to ensure that high product quality is maintained across all product sectors. However, any incidence of defective products that arises in any of these markets could potentially result in substantial unexpected costs or a loss of trust among the general public, thereby exerting a negative impact on the business results and financial position of the THK Group.

#### Information Security

The THK Group collects, maintains and manages personal information as well as trade secrets relating to its customers, business partners and other stakeholders in the ongoing conduct of its business activities. While every effort is made to ensure that this information is stored and stringently managed in a secure and appropriate manner, the loss or leakage of a part or all of this information due to a computer virus, information system defect or other factors have the potential to exert a negative impact on the Group's reputation, credibility and standing. This in turn could result in a deterioration in the Group's business results and financial position.

## Disasters, Acts of Terrorism, Infectious Diseases and Other Maladies

The THK Group maintains and operates manufacturing facilities as well as sales and marketing offices in Japan, the Americas, Europe, Asia as well as other countries and regions. In the event that any of the Group's points of representation are affected by natural disasters, including earthquakes and fire, political unrest due to acts of terrorism or war, or the outbreak of an infectious disease, the potential exists for the THK Group's business results and financial position to be negatively impacted.

### Sharp Hikes in the Prices of Raw Materials

Against the backdrop of unanticipated sharp hikes in the prices of raw materials due to such factors as high crude oil prices, social conditions in raw material supplying countries and rising demand in newly emerging nations, the costs associated with the manufacture of the Group's products can be expected to increase. As a result, the potential exists for the THK Group's business results and financial position to be negatively impacted.

## **CONSOLIDATED FINANCIAL STATEMENTS**

THK CO., LTD. and consolidated subsidiaries

## **Consolidated Balance Sheets**

h 31, 2014 and 2013	Millions of	yen	Thousands of U.S. dollars (Note 2)	
	2014	2013	2014	
SETS				
Current Assets:				
Cash and cash equivalents (Note 19)	¥ 138,343	¥ 115,968	\$ 1,344,18	
Receivables (Note 19):				
Trade accounts and notes receivable (Note 11)	51,149	44,438	496,97	
—Unconsolidated subsidiaries and affiliates	1,408	1,678	13,68	
Other receivables	1,098	1,247	10,67	
	684	772	6,63	
	54,339	48,135	527,96	
Less allowance for doubtful receivables	(132)	(120)	(1,28	
	54,207	48,015	526,68	
Inventories (Note 4)	28,766	24,099	279,50	
Short-term loans receivable-		,		
Unconsolidated subsidiaries and affiliates	1,000	1,000	9,71	
Other	2	2	2	
Deferred tax assets (Note 16)	3,554	3,246	34,53	
Other current assets	2,018	1,611	19,60	
Total current assets	227,890	193,941	2,214,24	
	,	, -	, ,	
Investments and Other:				
Investments in securities (Notes 6 and 19)	2,335	2,240	22,68	
Investments in unconsolidated subsidiaries and affiliates	4,103	3,018	39,86	
Net defined benefit asset (Note 8)	33	_	32	
Long-term loans receivable—				
Unconsolidated subsidiaries and affiliates	—	1,000		
Other	62	50	60	
Deferred tax assets (Note 16)	1,368	848	13,29	
Other investments	1,573	1,584	15,28	
Total investments and other	9,474	8,740	92,05	
Dreparty Diant and Equipment (Nates 5)				
Property, Plant and Equipment (Notes 5): Buildings and structures	62,037	56,419	602,77	
Machinery, equipment and others	170,091	155,855	1,652,65	
	232,128	212,274	2,255,42	
Less accumulated depreciation	(157,160)	(144,420)	(1,527,01	
	74,968	67,854	728,41	
Land	13,195	13,094	128,20	
Construction in progress	6,676	6,749	64,86	
Total property, plant and equipment	94,839	87,697	921,48	
rotar property, plant and equipment	54,055	07,097	521,40	
Intangibles:				
Goodwill	894	1,171	8,67	
Other	3,320	1,597	32,25	
Total intangibles	4,214	2,768	40,93	
Total assets	¥ 336,417	¥ 293,146	\$ 3,268,72	

	Millions of	ren	Thousands of U.S. dolla (Note 2)	
	2014	2013	2014	
BILITIES AND NET ASSETS				
Current Liabilities:				
Current portion of long-term debt (Notes 7 and 19)	¥ 10,000	¥ 20,000	\$ 97,16	
Payables (Note 19):				
Trade accounts and notes payable (Note 11)	25,084	20,608	243,72	
—Unconsolidated subsidiaries and affiliates	327	238	3,17	
Other payables	1,258	1,723	12,22	
<ul> <li>—Unconsolidated subsidiaries and affiliates</li> </ul>	138	128	1,34	
	26,807	22,697	260,46	
Income taxes payable	5,808	2,177	56,43	
Accrued bonuses to employees	2,958	2,572	28,73	
Other accrued expenses	7,172	6,538	69,68	
Lease obligations	280	237	2,72	
Other current liabilities	1,465	1,436	14,23	
Total current liabilities	54,490	55,657	529,44	
.ong-term Liabilities:				
Long-term debt (Notes 7 and 19)	50,000	40,000	485,8 <sup>-</sup>	
Reserve for employees' retirement benefits (Note 8)	50,000	3,009	403,0	
Reserve for directors' and corporate auditors' retirement benefits	127	114	1,23	
Reserve for product warranty	149	132	1,4	
Long-term lease obligations	524	534	5,00	
Net defined benefit liability (Note 8)	4,084		39,68	
Deferred tax liabilities (Note 16)	3,862	3,660	35,50	
Other liabilities	1,032	982	10,02	
Total long-term liabilities	59,778	48,431	580,8	
Commitment and Contingent Liabilities (Notes 9 and 10)				
Net Assets (Note 12):				
Shareholders' equity				
Shareholders' equity Common stock				
Shareholders' equity Common stock Authorized: 465,877,700 shares; Issued: 133,856,903 shares as of March 31, 2014 and 2013	34,606	34,606	-	
Shareholders' equity Common stock Authorized: 465,877,700 shares; Issued: 133,856,903 shares as of March 31, 2014 and 2013 Additional paid-in capital	34,606 44,585	34,606 44,585	-	
Shareholders' equity Common stock Authorized: 465,877,700 shares; Issued: 133,856,903 shares as of March 31, 2014 and 2013 Additional paid-in capital Retained earnings			433,19	
Shareholders' equity Common stock Authorized: 465,877,700 shares; Issued: 133,856,903 shares as of March 31, 2014 and 2013 Additional paid-in capital	44,585	44,585	433,19 1,374,6	
Shareholders' equity Common stock Authorized: 465,877,700 shares; Issued: 133,856,903 shares as of March 31, 2014 and 2013 Additional paid-in capital Retained earnings Treasury stock, at cost: 7,263,269 shares and 7,260,392 shares as of	44,585 141,475	44,585 128,416	433,19 1,374,61 (135,39	
Shareholders' equity Common stock Authorized: 465,877,700 shares; Issued: 133,856,903 shares as of March 31, 2014 and 2013 Additional paid-in capital Retained earnings Treasury stock, at cost: 7,263,269 shares and 7,260,392 shares as of March 31, 2014 and 2013, respectively	44,585 141,475 (13,935)	44,585 128,416 (13,928)	433,19 1,374,61 (135,39	
Shareholders' equity Common stock Authorized: 465,877,700 shares; Issued: 133,856,903 shares as of March 31, 2014 and 2013 Additional paid-in capital Retained earnings Treasury stock, at cost: 7,263,269 shares and 7,260,392 shares as of March 31, 2014 and 2013, respectively Total shareholders' equity	44,585 141,475 (13,935)	44,585 128,416 (13,928)	433,19 1,374,61 (135,39 2,008,66	
Shareholders' equity Common stock Authorized: 465,877,700 shares; Issued: 133,856,903 shares as of March 31, 2014 and 2013 Additional paid-in capital Retained earnings Treasury stock, at cost: 7,263,269 shares and 7,260,392 shares as of March 31, 2014 and 2013, respectively Total shareholders' equity Accumulated other comprehensive income (loss):	44,585 141,475 (13,935) 206,731	44,585 128,416 (13,928) 193,679	433,19 1,374,61 (135,39 2,008,66	
Shareholders' equity Common stock Authorized: 465,877,700 shares; Issued: 133,856,903 shares as of March 31, 2014 and 2013 Additional paid-in capital Retained earnings Treasury stock, at cost: 7,263,269 shares and 7,260,392 shares as of March 31, 2014 and 2013, respectively Total shareholders' equity Accumulated other comprehensive income (loss): Net unrealized gain on available-for-sale securities	44,585 141,475 (13,935) 206,731 802	44,585 128,416 (13,928) 193,679 741	433,19 1,374,61 (135,39 2,008,60 7,79 125,63	
Shareholders' equity Common stock Authorized: 465,877,700 shares; Issued: 133,856,903 shares as of March 31, 2014 and 2013 Additional paid-in capital Retained earnings Treasury stock, at cost: 7,263,269 shares and 7,260,392 shares as of March 31, 2014 and 2013, respectively Total shareholders' equity Accumulated other comprehensive income (loss): Net unrealized gain on available-for-sale securities Foreign currency translation adjustments	44,585 141,475 (13,935) 206,731 802 12,930	44,585 128,416 (13,928) 193,679 741	433,19 1,374,61 (135,39 2,008,66 7,79 125,63 (6,14	
Shareholders' equity Common stock Authorized: 465,877,700 shares; Issued: 133,856,903 shares as of March 31, 2014 and 2013 Additional paid-in capital Retained earnings Treasury stock, at cost: 7,263,269 shares and 7,260,392 shares as of March 31, 2014 and 2013, respectively Total shareholders' equity Accumulated other comprehensive income (loss): Net unrealized gain on available-for-sale securities Foreign currency translation adjustments Remeasurements of defined benefit plans (Note 8)	44,585 141,475 (13,935) 206,731 802 12,930 (632)	44,585 128,416 (13,928) 193,679 741 (7,131)	433,19 1,374,61 (135,39 2,008,66 7,79 125,63 (6,14 127,27	
Shareholders' equity         Common stock         Authorized: 465,877,700 shares; Issued: 133,856,903 shares as of         March 31, 2014 and 2013         Additional paid-in capital         Retained earnings         Treasury stock, at cost: 7,263,269 shares and 7,260,392 shares as of         March 31, 2014 and 2013, respectively         Total shareholders' equity         Accumulated other comprehensive income (loss):         Net unrealized gain on available-for-sale securities         Foreign currency translation adjustments         Remeasurements of defined benefit plans (Note 8)         Total accumulated other comprehensive income (loss)	44,585 141,475 (13,935) 206,731 802 12,930 (632) 13,100	44,585 128,416 (13,928) 193,679 741 (7,131)  (6,390)	336,24 433,19 1,374,61 (135,39 2,008,66 7,79 125,63 (6,14 127,27 22,52 2,158,46	

## **Consolidated Statements of Income**

fears ended March 31, 2014 and 2013	Millions of yen		Thousands of U.S. dollars (Note 2)	
	2014	2013	2014	
Net Sales	¥185,466	¥168,366	\$1,802,041	
Cost of Sales (Note 14)	132,562	124,067	1,288,014	
Gross profit	52,904	44,299	514,027	
Selling, General and Administrative Expenses (Notes 13 and 14)	35,534	32,606	345,253	
Operating income	17,370	11,693	168,774	
Non-Operating Income (Expenses):				
Interest and dividend income	476	416	4,624	
Interest expenses	(802)	(712)	(7,790)	
Foreign exchange gain, net	5,193	2,651	50,460	
Equity in earnings of an affiliate	522	200	5,075	
Rental income	332	313	3,223	
Loss on sales and disposal of property, plant and equipment, net	(205)	(48)	(1,995)	
Subsidy income	592	20	5,747	
Other, net	527	204	5,121	
	6,635	3,044	64,465	
Income before income taxes and minority interests	24,005	14,737	233,239	
Income Taxes (Note 16)				
Current	8,494	4,689	82,529	
Deferred	(247)	185	(2,399)	
Total income taxes	8,247	4,874	80,130	
Net income before minority interests	15,758	9,863	153,109	
Minority Interests in Net Income	167	54	1,624	
Net income	¥ 15,591	¥ 9,809	\$ 151,485	

## **Consolidated Statements of Comprehensive Income**

Years ended March 31, 2014 and 2013	Millions of ye	en	Thousands of U.S. dollars (Note 2)
	2014	2013	2014
Net Income before Minority Interests	¥15,758	¥9,863	\$153,109
Other Comprehensive Income (Note 17):			
Net unrealized gain (loss) on available-for-sale securities	54	(39)	524
Foreign currency translation adjustments	19,662	8,428	191,043
Share of other comprehensive income of an affiliate accounted for under the equity method	804	547	7,808
Total other comprehensive income	20,520	8,936	199,375
Comprehensive Income	36,278	18,799	352,484
Attributable to:			
Shareholders of THK CO., LTD.	35,729	18,548	347,155
Minority interests	549	251	5,329

## **Consolidated Statements of Changes in Net Assets**

Years ended March 31, 2014 and 2013	Millions of yen				
			Shareholders' equity		
	Common stock	Additional paid-in capital	Retained earnings	Treasury stock, at cost	Total shareholders' equity
Balance at April 1, 2012	¥34,606	¥44,585	¥121,162	¥(11,362)	¥188,991
Cash dividends		—	(2,555)	—	(2,555)
Net income			9,809	—	9,809
Purchase of treasury stock		—		(2,566)	(2,566)
Disposition of treasury stock		—			
Net changes of items other than shareholders' equity		—	—		
Balance at March 31, 2013	¥34,606	¥44,585	¥128,416	¥(13,928)	¥193,679
Cash dividends	—	—	(2,532)	—	(2,532)
Net income	_	—	15,591	_	15,591
Purchase of treasury stock	_	_		(7)	(7)
Disposition of treasury stock	—	0	—	0	0
Net changes of items other than shareholders' equity	_	—	—	—	
Balance at March 31, 2014	¥34,606	¥44,585	¥141,475	¥(13,935)	¥206,731

	Millions of yen					
		Accumulated other co	mprehensive income			
	Net unrealized gain on available-for-sale securities	Foreign currency translation adjustments	Remeasurements of defined benefit plans	Total accumulated other comprehensive income	Minority interests	Total net assets
Balance at April 1, 2012	¥777	¥(15,903)	¥ —	¥(15,126)	¥1,652	¥175,517
Cash dividends	—	—	_	—	—	(2,555)
Net income	—		—			9,809
Purchase of treasury stock	—	_	_			(2,566)
Disposition of treasury stock	_	_	_			_
Net changes of items other than shareholders' equity	(36)	8,772	_	8,736	117	8,853
Balance at March 31, 2013	¥741	¥ (7,131)	¥ —	¥ (6,390)	¥1,769	¥189,058
Cash dividends	_	_	_		_	(2,532)
Net income	_	—	—	—		15,591
Purchase of treasury stock	_	_	_	_	_	(7)
Disposition of treasury stock	_	_	_	_	_	0
Net changes of items other than shareholders' equity	61	20,061	(632)	19,490	549	20,039
Balance at March 31, 2014	¥802	¥ 12,930	¥(632)	¥ 13,100	¥2,318	¥222,149

	Thousands of U.S. dollars (Note 2)				
	Shareholders' equity				
	Common stock	Additional paid-in capital	Retained earnings	Treasury stock, at cost	Total shareholders' equity
Balance at April 1, 2013	\$336,244	\$433,199	\$1,247,728	\$(135,331)	\$1,881,840
Cash dividends		_	(24,602)		(24,602)
Net income	_	_	151,485		151,485
Purchase of treasury stock	_	_	_	(64)	(64)
Disposition of treasury stock	_	0	—	1	1
Net changes of items other than shareholders' equity	_	_	_		_
Balance at March 31, 2014	\$336,244	\$433,199	\$1,374,611	\$(135,394)	\$2,008,660

	Thousands of U.S. dollars (Note 2)					
	Accumulated other comprehensive income					
	Net unrealized gain on available-for-sale securities	Foreign currency translation adjustments	Remeasurements of defined benefit plans	Total accumulated other comprehensive income	Minority interests	Total net assets
Balance at April 1, 2013	\$7,198	\$ (69,287)	\$ —	\$ (62,089)	\$17,192	\$1,836,943
Cash dividends	_	_			_	(24,602)
Net income	_	—	_	—	_	151,485
Purchase of treasury stock	_	_	_	_	_	(64)
Disposition of treasury stock	_	_	_	_	_	1
Net changes of items other than shareholders' equity	594	194,919	(6,145)	189,368	5,329	194,697
Balance at March 31, 2014	\$7,792	\$125,632	\$(6,145)	\$127,279	\$22,521	\$2,158,460

## **Consolidated Statements of Cash Flows**

ears ended March 31, 2014 and 2013	Millions of	yen	Thousands of U.S. dollars (Note 2)	
	2014	2013	2014	
Cash Flows from Operating Activities:				
Income before income taxes and minority interests	¥ 24,005	¥ 14,737	\$ 233,239	
Adjustments:	-			
Depreciation and amortization	11,101	9,973	107,862	
Amortization of goodwill	356	431	3,459	
Interest and dividend income	(476)	(416)	(4,624	
Interest expenses	802	712	7,791	
Foreign exchange gain, net	(4,745)	(3,286)	(46,101	
Equity in earnings of an affiliate	(522)	(200)	(5,075	
Loss on sales and disposal of property, plant and equipment, net	206	48	1,998	
Loss on write-down of investments in securities	_	0		
Changes in assets and liabilities:				
(Increase) decrease in accounts and notes receivable	(3,810)	8,329	(37,023)	
(Increase) decrease in inventories	(1,479)	3,653	(14,366	
Increase (decrease) in accounts and notes payable	1,976	(8,096)	19,197	
Increase (decrease) in provisions	346	(614)	3,360	
Increase in net defined benefit liability	38		373	
Other, net	859	(21)	8,350	
Subtotal	28,657	25,250	278,440	
Interest and dividend received	626	566	6,085	
Interest paid	(766)	(707)	(7,442	
Income taxes paid	(4,852)	(4,714)	(47,148	
Net cash provided by operating activities	23,665	20,395	229,935	
Cash Flows from Investing Activities:				
Purchase of property, plant and equipment and intangibles	(10,797)	(15,282)	(104,908)	
Proceeds from sales of property, plant and equipment	260	123	2,528	
Increase in investments in securities, unconsolidated subsidiaries and affiliates	(16)	(16)	(160	
Increase in loans receivable	(8)	(4)	(75	
Collection on loans receivable	1,007	4	9,788	
Other, net	0	(109)	2	
Net cash used in investing activities	(9,554)	(15,284)	(92,825)	
Cash Flows from Financing Activities:				
Repayment of long-term debt	(20,000)	_	(194,326)	
Proceeds from long-term debt	20,000	_	194,326	
Cash dividends	(2,525)	(2,548)	(24,537	
Cash dividends to minority shareholders	(3)	(60)	(33	
Purchase of treasury stock	(7)	(2,566)	(64	
Proceeds from sales of treasury stock	0	(_,)	1	
Repayment of lease obligations	(255)	(214)	(2,477	
Net cash used in financing activities	(2,790)	(5,388)	(27,110)	
	44.054	F 4F7		
Foreign Currency Translation Adjustments on Cash and Cash Equivalents	11,054	5,457	107,405	
Net Increase in Cash and Cash Equivalents	22,375	5,180	217,405	
Cash and Cash Equivalents at Beginning of Year	115,968	110,788	1,126,775	
Cash and Cash Equivalents at End of Year	¥138,343	¥115,968	\$1,344,180	

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

THK CO., LTD. and consolidated subsidiaries

## 1. Basis of Presenting Consolidated Financial Statements

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

The accompanying consolidated financial statements include

certain reclassifications and rearrangements to present them in a form that is more familiar to readers. Certain amounts previously reported may have been reclassified to conform to the current year financial statement presentation. Such reclassifications have been made solely for comparability of the consolidated financial statements, and do not affect net income or net assets. In addition, the notes to the consolidated financial statements include information that is not required under Japanese GAAP, but which is provided herein as additional information.

## 2. United States Dollar Amounts

U.S. dollar amounts presented in the consolidated financial statements are included solely for the convenience of the readers. These translations should not be construed as presentations that the yen amounts actually represent or could be converted into U.S. dollars at that or any other rate. For this purpose, the rate of ¥102.92 to U.S. \$1, the approximate rate of exchange prevailing in Tokyo on March 31, 2014, have been used for the translation of the accompanying consolidated financial statements as of March 31, 2014 and for the year then ended.

## 3. Summary of Significant Accounting Policies

#### (a) Consolidation

The accompanying consolidated financial statements include the accounts of the Company and its subsidiaries that are controlled by the Company. Under the effective control approach, all majority-owned companies are to be consolidated. Additionally, those companies over which the Company is able to directly or indirectly exercise control are to be consolidated even if the holding ratio equals 50% or less. All significant inter-company transaction accounts and unrealized inter-company profits are eliminated upon consolidation. For consolidated subsidiaries and an affiliate whose closing dates are different from that of the Company, certain adjustments necessary for consolidation have been made.

The Company had 36 subsidiaries as of March 31, 2014 and 2013. The consolidated financial statements for the years ended March 31, 2014 and 2013 include the accounts of the Company and its 33 consolidated subsidiaries (collectively, "the Group"). Investments in the remaining three subsidiaries including THK Brasil LTDA are not consolidated and stated at cost, because these companies are small in size and if these companies had been consolidated, the effect on the consolidated financial statements would not have been significant.

The excess of the cost of acquisition over the fair value of the net assets of an acquired subsidiary (goodwill) at the date of acquisition is amortized over 5 to 10 years by the straight-line method.

The fiscal year closing date of 25 overseas consolidated subsid-

iaries, excluding THK India Pvt. Ltd., is December 31. In consolidating these accounts, financial statements as of and for the year ended December 31 are used after making necessary adjustments for consolidation to the significant intercompany transactions during the period between January 1 and March 31. The fiscal year closing date of other consolidated subsidiaries is March 31.

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

Under Japanese GAAP; (1) 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, (2) financial statements prepared by foreign subsidiaries in accordance with either International Financial Reporting Standards or the generally accepted accounting principles in the United States of America tentatively may be used for the consolidation process, (3) however, the following items should be adjusted in the consolidation process so that net income is accounted for in accordance with Japanese GAAP unless they are immaterial; 1) amortization of goodwill: 2) scheduled amortization of actuarial gain or loss of pensions that has been directly recorded in net assets; 3) expensing capitalized development costs of research and development; 4) cancellation of the fair value model accounting for property, plant, and equipment and investment properties and incorporation of the cost model accounting; 5) exclusion of minority interests from net income, if contained.

The Company had three affiliates and three unconsolidated subsidiaries as of March 31, 2014 and 2013. Under the control concept, companies over which the Company directly or indirectly has the ability to exercise significant influence are accounted for using the equity method. For the years ended March 31, 2014 and 2013, the Company has applied the equity method to investment in SAMICK THK CO., LTD. Investments in the remaining affiliates and unconsolidated subsidiaries (THK Brasil LTDA, etc.) are stated at cost. If the equity method had been applied to the investments in those companies, the effect on the consolidated financial statements would not have been significant.

#### (b) Translation of Foreign Currency Financial Statements

Assets and liabilities of foreign subsidiaries and an affiliate are translated into Japanese yen at exchange rates prevailing at the balance sheet date. Net assets except for minority interest account at beginning of year are translated into Japanese yen at historical rates. Profit and loss accounts are translated into Japanese yen using the average exchange rate during the year. Differences in yen amounts arising from use of different rates are presented as foreign currency translation adjustments in accumulated other comprehensive income of net assets section.

## (c) Inventories

Inventories, except for work in process, are stated at cost determined principally by the gross average method. Work in process for ordered products is stated at cost determined principally by the specific identified cost method. If acquisition cost of an inventory exceeds its net selling value, the carrying amount of such inventory is written down to its net selling value and the difference is charged to income.

#### (d) Financial Instruments

#### Securities

Investments in securities are classified and accounted for, depending on management's intent, as follows: (1) trading securities, which are held for the purpose of earning capital gains in the near term, are reported at fair value, and the related unrealized gains and losses are included in earnings; (2) held to maturity debt securities, which are expected to be held to maturity with the positive intent and ability to hold to maturity, are reported at amortized cost; and (3) available-for-sale securities, which are not classified as either of the aforementioned securities, are reported at fair value, with unrealized gains and losses, net of applicable taxes, reported as a separate component of net assets. If the fair value of availablefor-sale securities is not readily determinable, such investments are stated at cost.

For other than temporary declines in fair value, investments in securities are written down to the net realizable value and the difference is charged to income.

#### Derivatives

The Group uses a variety of derivative financial instruments, including forward foreign currency exchange contracts and interest rate swap contracts to manage foreign exchange risks and interest rate risks. The Company has established a control environment, which includes policies and procedures for risk assessments and approval, and reporting and monitoring of transactions involving derivative financial instruments. The Group does not hold or issue derivative financial instruments for speculative purposes.

Derivative financial instruments are stated at fair value and changes in fair value are recognized as gains or losses. If forward foreign currency exchange contracts qualify the required condition under the related Japanese accounting standards, the hedged foreign currency assets and liabilities are translated at the contract rates and no gains or losses are recognized.

For interest rate swap contracts which qualify the required condition under the related Japanese accounting standards, the differential paid or received under the swap contracts are recognized and included in the interest income or expenses.

## (e) Property, Plant and Equipment

Property, plant and equipment of the Company and its domestic consolidated subsidiaries are depreciated mainly using the declining-balance method, whereas the straight-line method or accelerated methods are mainly applied to those of foreign subsidiaries. However, buildings, except for building attachments, acquired by the Company and its domestic consolidated subsidiaries on or after April 1, 1998 are depreciated using the straight-line method.

The range of useful lives is principally from 5 to 50 years for buildings and structures and from 4 to 12 years for machinery and equipment.

Normal repairs and maintenance, including minor renewals and improvements, are charged to income as incurred.

#### (f) Intangibles

Intangible assets are amortized using the straight-line method. Software for internal use is amortized on a straight-line basis over a period of five years, the estimated useful life of the software.

#### (g) Allowance for Doubtful Receivables

Allowance for doubtful receivables is stated in amounts considered

to be appropriate based on the Group's past credit loss experience and an evaluation of potential losses in the receivables outstanding.

#### (h) Accrued Bonuses to Employees

Accrued bonuses to employees are stated at an estimated amount to be paid in the following year based on the employees' compensation in the current year.

## (i) Reserve for Directors' and

#### **Corporate Auditors' Retirement Benefits**

Reserve for directors' and corporate auditors' retirement benefits represents the liability at amount that would be required if all eligible directors and corporate auditors retired at each balance sheet date.

## (j) Reserve for Product Warranty

Reserve for product warranty is stated at amount based on the Group's past experience in order to cover possible warranty liabilities.

#### (k) Lease

The Group leases certain computers, equipment, software, and other assets. Lease assets are mainly included in machinery, equipment and others in the consolidated balance sheets. Depreciation of lease assets is computed using the straight-line method over the leasing period with no residual value.

#### (I) Accounting for Employees' Retirement Benefits

Net defined benefit liability is recorded at the amount of projected benefit obligations, net of plan assets, based on the estimated amount at March 31, 2014 in order to provide for the retirement benefits of the employees.

In determining projected benefit obligations at reporting period, the straight-line basis is used.

Amortization of unrecognized actuarial differences is initiated from the following fiscal year on a straight-line basis over a period from 5 to 18 years. Past service costs are amortized on a straightline basis over a period of 15 years within employees' average remaining service period when incurred.

Actuarial gains and losses and past service costs that are yet to be recognized in profit or loss are recorded as remeasurements of defined benefit plans under accumulated other comprehensive income within the net asset section, after adjusting for tax effects.

In determining the amount of net defined benefit liability and retirement benefit expenses, some small sized consolidated companies apply a simplified method that the amount that would be required if all employees retired at the fiscal year end on a voluntary basis is regarded as retirement benefit obligations.

#### (m) Asset Retirement Obligations

Under ASBJ Statement No. 18, "Accounting Standard for Asset Retirement Obligations" and ASBJ Guidance No. 21, "Guidance on Accounting Standard for Asset Retirement Obligations", legal obligations associated with the retirement of long-lived assets shall be recognized as the sum of the discounted cash flows required for future asset retirement at the time that the obligations are incurred. If the asset retirement obligation cannot be reasonably estimated, such obligation shall be recognized as a liability in the period when it becomes reasonably estimated. Upon initial recognition of a liability, the cost is capitalized as part of the related long-lived assets and depreciated over the remaining estimated useful life of the related asset.

Under rent agreements of the head office and other spaces, the Group is obliged to pay restoring costs at relocation. The asset retirement obligation, however, is not reasonably determinable because the rent periods are uncertain. The Group also has an obligation for disposal costs of PCB (polychlorinated biphenyl) -contained wastes and contamination survey on land. The asset retirement obligation, however, is not reasonably determinable because the time of performance, amount, and other factors of such obligations are uncertain. Therefore, the aforementioned obligations are not recognized in the accompanying consolidated financial statements.

#### (n) Foreign Currency Translation

All monetary assets and liabilities denominated in foreign currencies, whether long-term or short-term, are translated into Japanese yen at exchange rates prevailing at the balance sheet date. Gains and losses from translation are recognized in the consolidated statements of income to the extent that they are not hedged by forward foreign currency exchange contracts.

## (o) Consumption Taxes

Japanese consumption taxes are levied at the flat rate of five percent on all domestic consumption of goods and services, with certain exemptions. The consumption taxes received by the Company and domestic subsidiaries on sales are excluded from net sales but are recorded as a liability. The consumption taxes paid by the Company and domestic subsidiaries on purchases of goods and services are excluded from costs or expenses but are recorded as an asset. The net balance of liability after offsetting against assets is included in "Other current liabilities" in the consolidated balance sheets.

## (p) Income Taxes

Japanese income taxes consist of corporate income taxes, local inhabitants' taxes and enterprise taxes.

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

## (q) Cash and Cash Equivalents

Cash and cash equivalents are composed of cash on hand, bank deposits that can be withdrawn on demand and short-term investments with original maturity of three months or less and which carry a minor risk of fluctuations in value.

#### (r) Per Share Information

Net assets per share is computed by dividing net assets except minority interests at the year end by the number of common stock outstanding at the year end.

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.

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

#### (s) Accounting Changes

Effective March 31, 2014, the Company applied Accounting Standard for Retirement Benefits (ASBJ Statement No. 26, revised on May 17, 2012) and Guidance on Accounting Standard for Retirement Benefits (ASBJ Guidance No. 25, revised on May 17, 2012), except for the provisions stated in Paragraph 35 of ASBJ Statement No. 26 and Paragraph 67 of ASBJ Guidance No. 25, and recorded retirement benefit obligations, net of plan assets, as "Net defined benefit liability (or Net defined benefit asset)" and included unrecognized actuarial gains and losses and unrecognized past service costs in "Net defined benefit liability (or Net defined benefit asset)."

Pursuant to the transitional treatment prescribed in Paragraph 37 of ASBJ Statement No. 26, the Company added the effects from the changes to "remeasurements of defined benefit plans" under accumulated other comprehensive income.

As a result, the Company recorded net defined benefit asset of ¥33 million (\$320 thousand) and net defined benefit liability of ¥4,084 million (\$39,680 thousand). Accumulated other comprehensive income decreased by ¥632 million (\$6,145 thousand).

The effects on per share information are described in Note 18.

## (t) New Accounting Standard in Issue Not Yet Adopted Accounting Standard for Retirement Benefits

On May 17, 2012, the ASBJ issued ASBJ Statement No. 26, "Accounting Standard for Retirement Benefits" and ASBJ Guidance No. 25, "Guidance on Accounting Standard for Retirement Benefits," which replaced the Accounting Standard for Retirement Benefits that had been issued by the Business Accounting Council in 1998 with an effective date of April 1, 2000, and the other related practical guidance, and followed by partial amendments from time to time through 2009.

Under the revised accounting standard, taking into the accounts the viewpoints of improvement of financial reporting and international trends, accounting treatment for actuarial gains and losses and past service costs that are yet to be recognized in profit or loss, the calculation method for retirement benefit obligations and service costs and expansion of the related disclosure requirements have been revised.

The Company applied the revised accounting standard from March 31, 2014, but the revision of the calculation method for retirement benefit obligations and service costs will be adopted from April 1, 2014.

The Company is currently in the process of measuring the effects of applying the revised accounting standard.

# Accounting Standards for Business Combinations and Related Standards and Guidance

On September 13, 2013, the ASBJ issued revised ASBJ Statement No. 21, "Accounting Standard for Business Combinations," No. 22, "Accounting Standard for Consolidated Financial Statements," No. 7, "Accounting Standard for Business Divestitures," and No. 2, "Accounting Standard for Earnings per Share" and revised ASBJ Guidance No. 10, "Guidance on Accounting Standards for Business Combinations and Business Divestitures" and No. 4, "Guidance on Accounting Standard for Earnings per Share."

These accounting standards were revised principally concerning "Treatment for changes in parent's ownership interest in a subsidiary that do not result in a loss of control in the additional acquisitions of shares in a subsidiary," "Accounting for acquisition-related costs," "Presentation of net income and change from minority interests to non-controlling interests," and "Provisional accounting treatments."

The Company expects to apply these standards and guidance from April 1, 2015, except for provisional accounting treatments, which are expected to be applied from business combinations to be implemented on or after April 1, 2015.

The Company is currently in the process of measuring the effects of applying the revised accounting standard.

## 4. Inventories

Inventories as of March 31, 2014 and 2013 comprised of the following:

	Millions	of yen	Thousands of U.S. dollars
	2014	2013	2014
Merchandise and finished goods	¥12,020	¥ 9,125	\$116,786
Work in process	5,185	4,288	50,382
Raw materials and supplies	11,561	10,686	112,332
Total	¥28,766	¥24,099	\$279,500

## 5. Long-lived Assets

In assessing whether there is an impairment of long-lived assets, assets are grouped basically based on the production facility units, managerial accounting and investment decision-making purposes. Idle assets and rental real estate are grouped at each unit level. Long-lived assets without identifiable cash flows, such as those held in corporate headquarters and sales branch facilities, are grouped as corporate level assets. For assets whose operating profitability has substantially worsened due to ongoing decline in their fair market value, the carrying amount of such assets are written down to its net realizable value and the differences are recorded as an impairment loss.

No impairment loss was recognized for the years ended March 31, 2014 and 2013.

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## 6. Investments in Securities

As of March 31, 2014 and 2013, available-for-sale securities with available fair value were as follows:

		Millions of yen	
		2014	
	Carrying amount	Acquisition cost	Net unrealized gain (loss)
Carrying amount (fair value) exceeds acquisition cost: Equity securities	¥2,159	¥993	¥1,166
Carrying amount (fair value) does not exceed acquisition cost: Equity securities	3	4	(1)
Total	¥2,162	¥997	¥1,165

		Millions of yen	
		2013	
	Carrying amount	Acquisition cost	Net unrealized gain (loss)
Carrying amount (fair value) exceeds acquisition cost: Equity securities	¥2,064	¥979	¥1,085
Carrying amount (fair value) does not exceed acquisition cost: Equity securities	3	4	(1)
Total	¥2,067	¥983	¥1,084

	Thousands of U.S. dollars		
		2014	
	Carrying amount	Acquisition cost	Net unrealized gain (loss)
Carrying amount (fair value) exceeds acquisition cost: Equity securities	\$20,976	\$9,651	\$11,325
Carrying amount (fair value) does not exceed acquisition cost: Equity securities	27	36	(9)
Total	\$21,003	\$9,687	\$11,316

As of March 31, 2014 and 2013, available-for-sale securities whose fair value is not reliably determinable were as follows:

	Millions of yen		Inousands of U.S. dollars
	2014	2013	2014
Available-for-sale securities Unlisted equity securities	¥173	¥173	\$1,686

These unlisted equity securities are not included in "Available-for-sale securities" in the above table.

"Acquisition cost" in the above table refers to the cost after deducting impairment losses. Impairment losses on available-for-sale securities value were recognized during the years ended March 31, 2014 and 2013 as follows:

		#T	mousanus or 0.3. uonars
	2014	2013	2014
Equity securities with fair value	¥—	¥—	\$—
Equity securities without fair value	—	0	—

When the fair value of each issue of securities declined more than 50% of the acquisition cost, impairment losses were recognized. When the fair value declined between 30% and 50% of the acquisition cost, whether the impairment losses should be recognized or

not is determined by considering the financial positions as of the latest fiscal year end and operating results for the past two fiscal years and comparing the average month-end closing market price during the past 24 months with the acquisition cost by each issue.

The following available-for-sale securities were sold during the years ended March 31, 2014 and 2013:

	Million	s of yen	Thousands of U.S. dollars
	2014	2013	2014
Equity securities:			
Sales proceeds	¥ 4	¥—	\$ 35
Gain on sales	1		12
Loss on sales	—		_

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## 7. Long-term Debt

Long-term debt as of March 31, 2014 and 2013 consisted of the following:

	Millions of ye	en	Thousands of U.S. dollars
	2014	2013	2014
1.940% Unsecured syndicated loan payable to banks, due in 2014	¥ —	¥20,000	\$ —
1.350% Unsecured straight bonds due in 2014	10,000	10,000	97,163
0.461% Unsecured straight bonds due in 2015	7,000	7,000	68,014
0.715% Unsecured straight bonds due in 2017	13,000	13,000	126,311
0.850% Unsecured straight bonds due in 2018	10,000	10,000	97,163
0.430% Unsecured straight bonds due in 2018	10,000	—	97,163
0.660% Unsecured straight bonds due in 2020	10,000	_	97,163
	¥60,000	¥60,000	\$582,977

Annual maturities of long-term debt as of March 31, 2014 are as follows:

			Million	s of yen		
	2014					
	Due within 1 year	Due after 1 to 2 years	Due after 2 to 3 years	Due after 3 to 4 years	Due after 4 to 5 years	Due after 5 years
Bonds	¥10,000	¥7,000	¥ —	¥13,000	¥20,000	¥10,000
Bank loans	—	_	_	_	—	
Total	¥10,000	¥7,000	¥ —	¥13,000	¥20,000	¥10,000

			Thousands of	of U.S. dollars		
	2014					
	Due within 1 year	Due after 1 to 2 years	Due after 2 to 3 years	Due after 3 to 4 years	Due after 4 to 5 years	Due after 5 years
Bonds	\$97,163	\$68,014	\$—	\$126,311	\$194,326	\$97,163
Bank loans	—	—	—	—	—	_
Total	\$97,163	\$68,014	\$—	\$126,311	\$194,326	\$97,163

## 8. Employees' Retirement Benefits

### Year ended March 31, 2014

## 1. Outline of the retirement benefit plans adopted

The Company and consolidated subsidiaries adopt contributory and non-contributory defined benefit plans and defined contribution plans.

Under the defined benefit corporate pension plans (all are contributory), lump-sum severance benefits or pensions based on salaries and service years are provided.

Under lump-sum payment plans (all are non-contributory), lumpsum payments based on salaries and service years are provided. Under some defined benefit corporate pension plans and lump-sum payment plans of certain consolidated subsidiaries, net defined benefit liability and retirement benefit expenses are calculated using a simplified method.

Some consolidated subsidiaries participate in Welfare Pension Fund Plans of multi-employer plans and if the plan assets attributable to those companies cannot be calculated reasonably, they are accounted for in the same manner as the defined contribution plans.

## 2. Defined Benefit Plans

 The changes in projected benefit obligations for the year ended March 31, 2014, were as follows:

	Millions of yen	Thousands of U.S. dollars
Beginning balance of projected benefit obligation	¥12,163	\$118,184
Service cost	736	7,154
Interest cost	235	2,284
Actuarial differences	22	217
Retirement benefits paid	(291)	(2,831)
Other	18	170
Ending balance of projected benefit obligations	¥12,883	\$125,178

(2) The changes in plan assets for the year ended March 31, 2014, were as follows:

	Millions of yen	Thousands of U.S. dollars
Beginning balance of plan assets	¥7,548	\$73,340
Expected return on plan assets	133	1,289
Actuarial differences	628	6,102
Contribution from the employer	728	7,073
Retirement benefits paid	(205)	(1,986)
Ending balance of plan assets	¥8,832	\$85,818

(3) Reconciliation between the ending balances of defined benefit obligations and plan assets and net defined benefit liability recorded in the consolidated balance sheet

	Millions of yen	Thousands of U.S. dollars
Contributory defined benefit obligations	¥12,037	\$116,955
Plan assets	(8,832)	(85,818)
	3,205	31,137
Non-contributory defined benefit obligations	846	8,223
Net liability (asset) recorded in the consolidated balance sheet	¥4,051	\$39,360
Net defined benefit liability	4,084	39,680
Net defined benefit asset	(33)	(320)
Net liability (asset) recorded in the consolidated balance sheet	¥4,051	\$39,360

(4) The components of retirement benefit expenses for the year ended March 31, 2014, were as follows:

	Millions of yen	Thousands of U.S. dollars
Service cost	¥ 736	\$ 7,154
Interest cost	235	2,284
Expected return on plan assets	(133)	(1,289)
Amortization of actuarial differences	51	492
Amortization of prior service costs	139	1,345
Retirement benefit expenses on defined benefit plans	¥1,028	\$ 9,986

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

The components of remeasurements of defined benefit plans are as follows:

	Millions of yen	Thousands of U.S. dollars
Unrecognized prior service costs	¥1,731	\$16,815
Unrecognized actuarial differences	(751)	(7,297)
Total	¥ 980	\$ 9,518
Note: Account before tax effect		

Note: Account before tax ef

## (6) Plan assets

a. Components of plan assets

Plan assets consisted of the following:

i fall about consisted of the following.	
Debt securities	22%
Equity securities	40%
General account	36%
Other	2%
Total	100%

b. Method of determining the long-term expected rate of return on plan assets

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

 (7) Weighted-average actuarial assumptions used for the year ended March 31, 2014, were set forth as follows:
 Discount rate: 2.0%

Long-term expected rate of return: 1.5%

## 3. Defined Contribution Plans

The amount of the required contribution to the defined contribution plans of the Company and its consolidated subsidiaries is ¥405 million (\$3,936 thousand).

## 4. Multi-Employer Plans

The amount of the required contribution to the Welfare Pension Fund Plans of multi-employer plans which are accounted for in the same manner as defined contribution plans is ¥51 million (\$502 thousand).

(1) Latest funding status of multi-employer plans as of March 31, 2014

	Millions of yen	U.S. dollars
Plan assets	¥ 43,895	\$ 426,496
Benefit obligations on pension financing calculation	54,935	533,764
Net	¥(11,040)	\$(107,268)

(2) The Company's share of contribution to the multi-employer plans for the year ended March 31, 2014 was 3.64%.

## (3) Supplementary explanation

The amount of "Net" shown in the above table (1) consisted of the outstanding balance of past service costs for pension financing calculation purpose in an amount of ¥5,389 million (\$52,359 thousand) and deficit brought forward in an amount of ¥5,651 million (\$54,909 thousand). Past service costs under the multiemployer plans are amortized on a straight-line basis over a period of 19 years. The share shown in the above note (2) does not agree with the actual Group's share of the funding status.

#### Year ended March 31, 2013

On October 1, 2011, the Company abolished its tax-qualified pension plan and transferred to defined benefit corporate pension plan and partially to defined contribution pension plan. Certain domestic consolidated subsidiaries and certain overseas consolidated subsidiaries have lump-sum retirement payment programs and Welfare Pension Fund Plan (defined benefit pension plan). When certain qualified employees retire, additional retirement benefits will be paid. Other domestic and overseas consolidated subsidiaries mainly have defined contribution plans.

Reserve for employees' retirement benefits as of March 31, 2013 consisted of the following:

	Millions of yen
Projected benefit obligations (Note)	¥12,163
Fair value of plan assets	(7,548)
	4,615
Unrecognized actuarial differences	87
Unrecognized past service costs	(1,869)
	¥ 2,833
Prepaid pension expense	(¥176)
Reserve for employees' retirement benefits	¥ 3,009
Nata, In computing projected honofit chligations, partoin demostic concellented	aubaidiariaa applied a

Note: In computing projected benefit obligations, certain domestic consolidated subsidiaries applied a simplified method and certain overseas consolidated subsidiaries applied the relevant provisions of their local accounting standard.

Net periodic pension and severance costs for the year ended March 31, 2013 were as follows:

	Millions of	of yen
Service cost (Note)	¥	729
Interest cost		224
Expected return on plan assets		(31)
Recognized prior service cost		139
Recognized actuarial differences		122
Other (contribution to defined contribution plans)		404
Net periodic pension and severance costs	¥1	,587
Note: Employage' contribution to Wolfara Ponsion Fund is deducted from convice costs	Potiromon	t honofit

expenses of certain domestic and overseas consolidated subsidiaries are included in service costs.

Assumptions used for calculation of the above information were as follows:

Discount rate	2.0%
Expected rate of return on plan assets	0.5%
Amortization of unrecognized actuarial differences	5-18 years

The method of attributing expected benefits to service periods is the straight-line method.

Past service costs are amortized on the straight-line method over a definite period (15 years) within the employees' average remaining service periods when incurred.

## 9. Committed Line of Credit

As of March 31, 2014, the Group had committed lines of credit amounting to ¥15,000 million (\$145,744 thousand). None of the committed lines of credit were used.

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## **10. Contingent Liabilities**

As of March 31, 2014, the Group had no material contingent liabilities.

## 11. Notes Receivable and Payable

March 31, 2013 falls on bank holidays. The following notes receivable and payable matured on that date were accounted for as if they were settled on that date:

Milliono of yon

	IVIIIIOIIS OI YEII
Notes receivable	¥1,405
Notes payable	—

## **12. Net Assets**

The Companies Act of Japan (the "Act") requires that at least 50% of the paid-in capital of new share issues be transferred to the "Common stock" account and the amount not exceeding 50% of the paid-in capital be included in capital surplus as "Additional paid-in capital".

Under the 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. Interim dividends may be paid at any time during the fiscal year upon resolution by the Board of Directors if the company has prescribed so in its articles of incorporation.

The 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.

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The Act requires that an amount equal to 10% of dividends must be appropriated as a legal reserve or as additional paid-in capital 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 Act, the total amount of additional paid-in capital and legal reserve may be reversed without limitation. The Act also provides that common stock, legal reserve, additional paid-in capital, other capital surplus and retained earnings can be transferred among the accounts under certain conditions upon resolution of the shareholders.

The changes in the number of issued shares of common stock and treasury stock during the years ended March 31, 2014 and 2013 were as follows:

	Number of shares				
	April 1, 2013	Increase	Decrease	March 31, 2014	
Outstanding shares issued: Common stock	133,856,903		_	133,856,903	
Treasury stock: Common stock	7,260,392	2,927	50	7,263,269	

An increase in treasury stock is due to acquisition of 2,927 shares of less than one share unit.

A decrease in treasury stock is due to additional purchase requisition of 50 shares of less than one share unit.

The treasury stock in the above table includes treasury stock (shares issued by the Company) acquired by an affiliate accounted for using the equity method which is attributed to the Company.

## Notes to Consolidated Financial Statements

		Number of shares				
	April 1, 2012	Increase	Decrease	March 31, 2013		
Outstanding shares issued: Common stock	133,856,903	_	_	133,856,903		
Treasury stock: Common stock	5,258,742	2,001,650	—	7,260,392		

An increase in treasury stock is due to acquisition of 2,000,000 shares based on the resolution of the Board of Directors' meeting and acquisition of 1,650 shares of less than one share unit.

The treasury stock in the above table includes treasury stock (shares issued by the Company) acquired by an affiliate accounted for using the equity method which is attributed to the Company.

## Year ended March 31, 2014

The following cash dividend payments were approved during the fiscal year:

General shareholders' meeting held on June 15, 2013:

	Total amount Millions of yen (Thousands of U.S. dollars)	Per share amount Yen (U.S. dollar)	Dividend record date	Effective date
Common stock	¥1,139 million (\$11,071 thousand)	¥9.00 (\$0.09)	Mar. 31, 2013	Jun. 17, 2013

Board of Directors meeting held on November 7, 2013:

	Total amount Millions of yen (Thousands of U.S. dollars)	Per share amount Yen (U.S. dollar)	Dividend record date	Effective date
Common stock	¥1,393 million (\$13,531 thousand)	¥11.00 (\$0.11)	Sep. 30, 2013	Dec. 9, 2013

## Year ended March 31, 2013

The following cash dividend payments were approved during the fiscal year:

General shareholders' meeting held on June 16, 2012:

	Total amount Millions of yen	Per share amount Yen	Dividend record date	Effective date
Common stock	¥1,415 million	¥11.00	Mar. 31, 2012	Jun. 18, 2012
Board of Directors meeting held on November 13, 2012:				
	Total amount Millions of yon	Per share amount	Dividend record date	Effective date

	Millions of yen	Yen	Dividend record date	Effective date
Common stock	¥1,139 million	¥9.00	Sep. 30, 2012	Dec. 10, 2012

## **13. Amortization of Goodwill**

Amortization of goodwill included in selling, general and administrative expenses for the years ended March 31, 2014 and 2013 were

## 14. Research and Development

Research and development expenses included in cost of sales or selling, general and administrative expenses for the years ended March 31, 2014 and 2013 were ¥4,784 million (\$46,488 thousand) and ¥4,390 million, respectively.

## 15. Lease

The Group leases certain machinery, equipment, software, and other assets.

Lease commitments under non-cancelable operating leases as of March 31, 2014 and 2013 were as follows:

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	Millions of yen		Thousands of U.S. dollars
	2014	2013	2014
Due within one year	¥413	¥338	\$4,011
Due after one year	339	369	3,291
Total	¥752	¥707	\$7,302

## 16. 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 rate of approximately 38.0 % for the years ended March 31, 2014 and 2013.

As of March 31, 2014 and 2013, significant components of deferred tax assets and liabilities were as follows:

	Millions of yen		Thousands of U.S. dollars	
	2014	2013	2014	
Deferred tax assets:				
Valuation loss of investments in subsidiaries	¥ 8,142	¥ 7,760	\$ 79,108	
Reserve for employees' retirement benefits	1,005	965	9,767	
Accrued bonuses to employees	984	915	9,563	
Loss on devaluation of inventories	886	943	8,606	
Tax loss carried forward	847	1,076	8,227	
Unrealized gain on intercompany sales of inventories	831	670	8,073	
Unrealized gain on intercompany sales of property, plant and equipment	507	484	4,929	
Enterprise tax payable	443	210	4,302	
Net defined benefit liability	339		3,292	
Retirement benefits payable to directors and corporate auditors	316	314	3,070	
Impairment losses	291	336	2,825	
Other	984	1,059	9,571	
Total	15,575	14,732	151,333	
Less: valuation allowance	(9,684)	(9,645)	(94,098)	
Total deferred tax assets	5,891	5,087	57,235	
Deferred tax liabilities:				
Unrealized gains of marketable equity securities	(2,166)	(2,207)	(21,050)	
Unrealized gains on land revaluation	(1,298)	(1,298)	(12,614)	
Depreciation	(1,181)	(1,006)	(11,474)	
Special depreciation reserve for tax purpose	(43)	(67)	(413)	
Other	(158)	(82)	(1,531)	
Total deferred tax liabilities	(4,846)	(4,660)	(47,082)	
Net deferred tax assets	¥ 1,045	¥ 427	\$ 10,153	

¥356 million (\$3,459 thousand) and ¥431 million, respectively.

A reconciliation between the normal effective statutory tax rate and the actual effective tax rate reflected in the accompanying consolidated statements of income for the years ended March 31, 2014 and 2013 was as follows:

	2014	2013
Normal effective statutory tax rate	38.0 %	38.0 %
Lower tax rates applicable to foreign subsidiaries	(1.7)	(0.5)
Tax credit for research and development	(2.0)	(2.5)
Valuation allowance	2.3	(1.9)
Local effective tax rate differences	(1.1)	(0.6)
Equity in earnings of an affiliate	(0.8)	(0.5)
Other	(0.3)	1.1
Actual effective tax rate	34.4 %	33.1 %

## Adjustments of deferred tax assets and liabilities due to a change in the corporate income tax rate:

The New Tax Reform Act proclaimed on March 31, 2014 will repeal the Special Recovery Tax from the fiscal year beginning on or after April 1, 2014. As a result, the normal effective statutory tax rate to be used in computing deferred tax assets and liabilities has been reduced from 38.0% to 35.6% for the temporary differences estimated to be expired in the fiscal year beginning on April 1, 2014. As a result, deferred tax assets, net of deferred tax liabilities, decreased by ¥139 million (\$1,351 thousand) and income taxes — deferred increased by the same amount.

## **17. Comprehensive Income**

The components of other comprehensive income for the years ended March 31, 2014 and 2013 were as follows:

	Millions of y	en	Thousands of U.S. dollars
	2014	2013	2014
Net unrealized gain on available-for-sale securities:			
Gain (loss) recognized during the year	¥ 80	¥ (92)	\$ 780
Reclassification adjustment to net income	—	0	_
Amount before tax effect	80	(92)	780
Tax effect	(26)	53	(256)
Net unrealized gain (loss) on available-for-sale securities	54	(39)	524
Foreign currency translation adjustments:			
Gain recognized during the year	19,662	8,428	191,043
Reclassification adjustment to net income	_		_
Amount before tax effect	19,662	8,428	191,043
Tax effect	—		_
Foreign currency translation adjustments	19,662	8,428	191,043
Share of other comprehensive income of an affiliate accounted for under the equity method:			
Income recognized during the year	801	548	7,783
Reclassification adjustment to net income	3	(1)	25
Share of other comprehensive income of an affiliate accounted for under the equity method	804	547	7,808
Total other comprehensive income	¥20,520	¥8,936	\$199,375

## **18. Per Share Information**

Per share information as of and for the years ended March 31, 2014 and 2013 is a	as follows:		
	Yen		U.S. dollars
	2014	2013	2014
Net income—basic	¥ 123.16	¥ 76.96	\$ 1.20
Net assets	1,736.51	1,479.41	16.87

Diluted net income per share for the years ended March 31, 2014 and 2013 is not presented since the Company did not have any kind of securities with potential dilutive effect in the fiscal years.

As noted in Note 3(s), the Company applied the revised account-

ing standards for retirement benefits and follows the transitional treatment prescribed in Paragraph 37 of ASBJ Statement No. 26. As a result, net assets per share at March 31, 2014 decreased by ¥4.99 (\$0.05).

## **19. Financial Instruments and Related Disclosures**

#### (1) Policy for financial instruments

The Group's use of its surplus funds is limited to short-term deposits and other low-risk financial assets. As to raising funds, the Group finances by issuing bonds and bank loans in accordance with business plans. The Group does not hold or issue derivative financial instruments for speculative purposes.

#### (2) Nature and risks of financial instruments

Notes and accounts receivable are subject to credit risks of customers. Receivables denominated in foreign currencies arising from the Group's global business are subject to foreign currency exchange risks. The Group controls these risks by utilizing forward foreign currency exchange contracts applicable to net amounts of receivables and payables denominated in foreign currencies.

Most investment securities consist of equity securities and are subject to market value volatility risks.

Most of notes and accounts payable are due within a year. Bonds and bank loans are financed for working capital or capital investment use for which the maximum redemption/repayment period is six years and one month. The Group controls interest rate risks by utilizing interest rate swap contracts.

The Group utilizes forward foreign currency exchange contracts and interest rate swap contracts to manage foreign exchange risks and interest rate risks. Use of derivatives is limited to operating purposes.

## (3) Risk management

(a) Credit risks—The Group controls customers' credit risks in accordance with internal rules for controlling receivables. Appropriate departments of the Group monitor major customers' financial conditions to promptly obtain information about possible bad debts. Because the counterparties of derivatives are limited to major international financial institutions, the Group does not anticipate any losses arising from credit risk.

- (b) Market risks—The Group utilizes forward foreign currency exchange contracts and interest rate swap contracts to manage foreign exchange risks of each currency and interest rate risks in relation to bank loans. As to investments in securities, fair value and financial condition of investees are periodically reviewed. Derivative transactions are executed and controlled by the Corporate Strategy Division. General manager of the Corporate Strategy Division reports results and conditions of derivative transactions at the Board of Director's meetings on a monthly basis.
- (c) Liquidity risks—Each company of the Group prepares and updates cash-flow plans and maintains appropriate amounts of ready liquidity.

#### (4) Other information

Fair values of financial instruments are based on quoted prices in active markets. If quoted price is not available, other rational valuation techniques are used instead. Because such valuation techniques include certain assumptions, results may differ if different assumptions are used in the valuation. The contract amounts for derivatives listed in Note 20 do not represent volume of underlying market risks of the derivative transactions.

Financial instruments whose fair value is readily determinable as of March 31, 2014 and 2013 are as follows:

		Millions of yen	
		2014	
	Carrying amount	Fair value	Difference
Assets:			
(1) Cash and cash equivalents	¥138,343	¥138,343	¥ —
(2) Trade accounts and notes receivable	52,557	52,557	_
(3) Investments in securities			
Available-for-sale securities	2,162	2,162	_
Total	¥193,062	¥193,062	¥ —
Liabilities:			
(4) Trade accounts and notes payable	¥ 25,411	¥ 25,411	¥ —
(5) Long-term debt—Bonds	60,000	60,590	590
Total	¥ 85,411	¥ 86,001	¥590
Derivatives	¥ —	¥ —	¥ —

		Millions of yen	
		2013	
	Carrying amount	Fair value	Difference
Assets:			
(1) Cash and cash equivalents	¥115,968	¥115,968	¥ —
(2) Trade accounts and notes receivable	46,116	46,116	
(3) Investments in securities			
Available-for-sale securities	2,067	2,067	
Total	¥164,151	¥164,151	¥ —
Liabilities:			
(4) Trade accounts and notes payable	¥ 20,846	¥ 20,846	¥ —
(5) Long-term debt—Bonds	40,000	40,627	627
(6) Long-term debt—Bank loans	20,000	20,000	_
Total	¥ 80,846	¥ 81,473	¥627
Derivatives	¥ —	¥ —	¥ —

		Thousands of U.S. dollars	
		2014	
	Carrying amount	Fair value	Difference
Assets:			
(1) Cash and cash equivalents	\$1,344,180	\$1,344,180	\$ —
(2) Trade accounts and notes receivable	510,660	510,660	_
(3) Investments in securities			
Available-for-sale securities	21,003	21,003	_
Total	\$1,875,843	\$1,875,843	\$ —
Liabilities:			
(4) Trade accounts and notes payable	\$ 246,904	\$ 246,904	\$ —
(5) Long-term debt—Bonds	582,977	588,705	5,728
Total	\$ 829,881	\$ 835,609	\$5,728
Derivatives	\$ —	\$ —	\$ -

Notes:

(1), (2) and (4)—As these items are settled within a year and have fair values approximately equal to their carrying amounts, they are stated at the carrying amounts.

(3)—Fair value of equity securities is stated at quoted market price. Fair value information of investment securities is discussed in Note 6.

(5)—Fair value of bonds is stated at present value of a total amount of its principal and interest discounted by a rate determined considering its remaining periods and credit risks.

(6)—Bank loans are payable with variable interest rates. Fair value of bank loans is stated at carrying amount because fair value of such bank loans is considered approximately equal to its carrying amount based on the following assumptions; (a) variable interest rates reflect the current market rate, and (b) the Company's credit status has not significantly changed after the issuance. Derivatives—Details and information are discussed in Note 20.

Financial instruments which do not have quoted market prices and whose fair value is not reliably determinable are not included in the table above. Such financial instruments as of March 31, 2014 and 2013 are as follows:

	Millions of	yen	Thousands of U.S. dollars
	2014	2013	2014
Unlisted equity securities	¥173	¥173	\$1,686

Detailed information about investments in securities is discussed in Note 6.

Maturity analysis for financial assets as of March 31, 2014 is as follows:

	Million	Millions of yen 2014	
	20		
	Due within one year	Due after one year	
(1) Cash and cash equivalents	¥138,343		
(2) Trade accounts and notes receivable	52,557 —		
Total	¥190,900	_	
	Thousands of	of U.S. dollars	
	20	14	

	20	14
	Due within one year	Due after one year
(1) Cash and cash equivalents	\$1,344,180	—
(2) Trade accounts and notes receivable	510,660	—
Total	\$1,854,840	—

Maturities of long-term debts as of March 31, 2014 are disclosed in Note 7.

## 20. Derivatives and Hedging Activities

The Group utilizes interest rate swap agreements to hedge interest rate risks associated with its bank loans. The Group's interest rate swaps qualify for hedge accounting and meet specific matching criteria under Japanese GAAP and are not remeasured at market value but the differential paid or received under the swap agreements are recognized and included in interest expenses or income. Fair value information of such derivatives as of March 31, 2014 and 2013 is as follows:

.....

There were no derivatives outstanding as of March 31, 2014.

		Millions of yen	
		2013	
	Contract Ar	Contract Amount	
	Within one year	Over one year	Fair value of derivative instruments
Interest rate swaps (fixed rate payment, floating rate receipt)	¥20,000		(¥210)

Fair value of derivative instruments in the table above is stated at amount obtained from financial institutions, the counter parties of the contracts.

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## 21. Segment Information

The reportable segments are component of the Group for which separate financial information is available, and whose operating results are reviewed periodically by the Board of Directors to determine allocation of operating resources and evaluate its performance.

The Group's main products are machinery parts such as LM (linear motion) guides and ball screws, and transportation equipment-related parts such as link balls and suspension ball joints. In each country, local subsidiaries establish its comprehensive business strategies and conduct its business activities in a similar way that the Company and domestic subsidiaries do in Japan.

Therefore, the reportable segment information consists of the five

geographical segments, namely; (1) Japan, (2) The Americas (the United States and other), (3) Europe (Germany, France and other), (4) China, and (5) Other (Taiwan, Singapore and other) based on the Group's production/sales structure.

Segment income is computed based on operating income. The reportable segment information is prepared under the same accounting policies as discussed in Note 3. Inter-segment sales and transfer are stated at amounts based on their fair market values. All adjustments in the following tables are inter-segment elimination on consolidation.

Segment information of the Group as of March 31, 2014 and 2013 and for the years then ended is as follows:

## Reportable segments

						Millic	ns of yen			
						2	014			
		Japan	The Americas	Eu	rope	China	Other	Total	Adjustments	Consolidated
Sales to customers	¥1	07,436	¥28,618	¥1	8,292	¥19,858	¥11,26	2 ¥185,466	¥ —	¥185,466
Inter-segment		39,628	13		40	3,792	70	9 44,182	(44,182)	—
Total	1	47,064	28,631	1	8,332	23,650	11,97	1 229,648	(44,182)	185,466
Segment profit (loss)	¥	16,434	¥ 1,166	¥	180	¥ (614)	¥ 67	7 ¥ 17,843	¥ (473)	¥ 17,370
Assets	¥3	800,546	¥44,939	¥2	5,073	¥62,267	¥18,24	6 ¥451,071	¥(114,654)	¥336,417
Other items										
Depreciation and amortization	¥	5,664	¥ 1,153	¥	469	¥ 3,366	¥ 30	5 ¥ 10,957	¥ 144	¥ 11,101
Amortization of goodwill		62	_		—	_	29	4 356	—	356
Investment in an affiliate accounted for under the equity method		3,896	_		_	_	-	- 3,896	-	3,896
Increase in property, plant and equipment and intangibles		3,103	1,950		257	4,958	82	5 11,093	(643)	10,450

				Millions	of yen			
				201	3			
	Japan	The Americas	Europe	China	Other	Total	Adjustments	Consolidated
Sales to customers	¥107,006	¥22,308	¥15,063	¥13,427	¥10,562	¥168,366	¥ —	¥168,366
Inter-segment	32,720	40	12	4,241	324	37,337	(37,337)	—
Total	139,726	22,348	15,075	17,668	10,886	205,703	(37,337)	168,366
Segment profit (loss)	¥ 11,576	¥ 1,010	¥ (378)	¥ (335)	¥ 291	¥ 12,164	¥ (471)	¥ 11,693
Assets	¥282,065	¥36,176	¥19,176	¥47,390	¥15,586	¥400,393	¥(107,247)	¥293,146
Other items								
Depreciation and amortization	¥ 6,178	¥ 809	¥ 506	¥ 2,276	¥ 240	¥ 10,009	¥ (36)	¥ 9,973
Amortization of goodwill	62			_	369	431		431
Investment in an affiliate accounted for under the equity method	2,811	_	_	_	_	2,811	_	2,811
Increase in property, plant and equipment and intangibles	4,384	2,405	641	7,415	334	15,179	(973)	14,206

## Notes to Consolidated Financial Statements

						Thousands of	U.S. d	ollars					
						201	4						
		Japan	The Americas	E	Europe	China		Other	Total		Adjustments	(	Consolidated
Sales to customers	<b>\$1</b>	,043,881	\$278,061	\$1	77,731	\$192,944	\$	109,424	\$ 1,802,041	\$	_	\$1	,802,041
Inter-segment		385,040	127		392	36,840		6,890	429,289		(429,289)		_
Total	1,	,428,921	278,188	1	78,123	229,784		116,314	2,231,330		(429,289)	1	,802,041
Segment profit (loss)	\$	159,681	\$ 11,330	\$	1,749	\$ (5,970)	\$	6,578	\$ 173,368	\$	(4,594)	\$	168,774
Assets	\$2	,920,186	\$436,644	\$2	243,614	\$605,000	\$	177,287	\$ 4,382,731	\$(	(1,114,011)	\$3	,268,720
Other items													
Depreciation and amortization	\$	55,030	\$ 11,202	\$	4,561	\$ 32,708	\$	2,958	\$ 106,459	\$	1,403	\$	107,862
Amortization of goodwill		601	—		—	_		2,858	3,459		_		3,459
Investment in an affiliate accounted for under the equity method		37,858	-		_	_		_	37,858		_		37,858
Increase in property, plant and equipment and intangibles		30,149	18,950		2,492	48,169		8,020	107,780		(6,247)		101,533

## Sales to customers, by business

	Millions	Millions of yen		
	2014	2013	2014	
Industrial Equipment-Related Business	¥135,200	¥124,268	\$1,313,646	
Transportation Equipment-Related Business	50,266	44,098	488,395	
Total	¥185,466	¥168,366	\$1,802,041	

## Sales to foreign customers, by customers' location

outoo to foroign ouotomoro, by ouoton	looudon					
			Millions of	yen		
			2014	l .		
	Japan	The Americas	Europe	China	Other	Total
Sales to foreign customers	¥101,052	¥28,901	¥18,427	¥19,351	¥17,735	¥185,466

			Millions of	yen		
			2013	;		
	Japan	The Americas	Europe	China	Other	Total
Sales to foreign customers	¥101,444	¥22,527	¥15,194	¥13,204	¥15,997	¥168,366

			Thousands of U	.S. dollars		
			2014	4		
	Japan	The Americas	Europe	China	Other	Total
Sales to foreign customers	\$981,854	\$280,807	\$179,045	\$188,020	\$172,315	\$1,802,041

## 22. Subsequent Events

## Appropriation of retained earnings

The following appropriation of retained earnings as of March 31, 2014 was approved at the Company's shareholders' meeting held on June 21, 2014:

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	Total amount Millions of yen (Thousands of U.S. dollars)	Per share amount Yen (U.S. dollar)	Dividend record date	Effective date
Common stock	¥1,899 million (\$18,451 thousand)	¥15.00 (\$0.15)	Mar. 31, 2014	Jun. 23, 2014



## **Report of Independent Auditors**

To the Board of Directors and Shareholders of THK CO., LTD.

We have audited the accompanying consolidated balance sheets of THK CO., LTD. and its subsidiaries as of March 31, 2014 and 2013, and the related consolidated statements of income, comprehensive income, changes in net assets, and cash flows for the years then ended, and all expressed in Japanese yen.

#### Management's Responsibility for the 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. This responsibility includes: designing, implementing and maintaining internal control as management determines is necessary to enable the preparation and fair presentation of the consolidated financial statements that are free from material misstatement, whether due to fraud or error.

#### Auditor's Responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in Japan. Those standards require that we 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 THK CO., LTD. and its subsidiaries as of March 31, 2014 and 2013, and the consolidated results of their operations and their cash flows for the years then ended in conformity with accounting principles generally accepted in Japan.

#### Convenience translations

The U.S. dollar amounts in the accompanying consolidated financial statements with respect to the year ended March 31, 2014, are presented solely for convenience. Our audit also included the translation of yen amounts into U.S. dollar amounts and, in our opinion, such translation has been made on the basis described in Note 2 to consolidated the financial statements.

Grant Thornton Taiyo ASG LLC

Tokyo, Japan June 23, 2014

Member of Grant Thornton International Ltd

## **CORPORATE HISTORY**

Net Sales (Millions of yen) 300.000 -1971 1981 THK established THK America, Inc. (USA) established 1972 1982 Production and sale of LM guides began THK Europe GmbH (GER) established 1977 1984 KOFU Plant (JPN) established GIFU Plant (JPN) established 250.000 -1985 MIE Plant (JPN) established YAMAGUCHI Plant (JPN) established 1989 THK listed on over-the-counter (OTC) market 200.000 -THK TAIWAN CO., LTD. (TPE) established 150,000 -100,000 -Expansion of numerically controlled (NC) machine tools and factory automation 50,000 -1970s 1980s 0 1972 1973 1974 1975 1976 1977 1978 1979 1980 1981 1982 1983 1984 1985 1986 1987 1988 1989 1990 1991 1992

## The 1970s: Inauguration and Initial Period of Set Up

While rolling contact utilizing rotary bearings was a standard method for accomplishing rolling motion at this time, significant difficulties were encountered in introducing a rolling component to linear motion (LM).

In 1971, THK developed the ball spline, which enabled a higher level of linear motion precision and performance. This ball spline was the predecessor to THK's current flagship LM guide, which was first introduced in 1972.

In 1978, the Company's products were adopted by a U.S.-based pioneer of the Machining Center and world-class leader of its day. With this breakthrough, the use of LM guides in machine tools grew from strength to strength.



#### **Ball Splines**

Developed in the same year that THK was established, ball splines are the precursor to the LM guide. This revolutionary product allows balls to roll along an R-shaped groove machined into the spline axle, which in turn boost the load that the device can tolerate and permits the transmission of torque.

#### The 1980s: Significant Developments in Factory Automation (FA)

The "Oil Shock" saw the demise of heavy industry, pushing the technology-based industries, such as automobiles, semiconductors and home electric appliances, increasingly to the fore. Buoyed by depreciation in the value of the yen as well as the outstanding quality of products manufactured in Japan, export volumes to Europe and the United States climbed steadily. Under these circumstances, demand was high for the volume manufacture of quality products. With FA advancing across production frontlines, machine tool production volumes increased and the proportion of advanced machine tools with numerically controlled (NC) saw steady growth. Against this backdrop, the application of LM guides enjoyed explosive growth.



#### LM Guides

Developed utilizing the structure and mechanism of ball splines, LM guides today represent THK's flagship product range. Benefiting from the use of the Company's LM guides by a major U.S.-based machine tool manufacturer of its day, the application of THK's products in machine tools has seen significant growth.



Years ended March 31

## The 1990s:

#### The Rise of the Electronics Industry

During the 1990s, the number of LM guides used in semiconductor production equipment surged dramatically in line with the increase in semiconductor demand. Entering the 2000s, amid the proliferation of mobile devices and digital home electric appliances as well as the upswing in demand for semiconductor production, flat panel display production and related production equipment—products that applied LM guides—focusing mainly on second-generation LM guides with caged ball technology increased. In tune with the relentless advance of manufacturing globalization, THK accelerated its business development globally.



#### LM Guides with Caged Ball Technology

LM guides with caged ball technology were developed as the next generation in their line. In keeping the balls in place, the use of ball cage technology extends service life, reduces noise and enables long-term maintenance-free operation compared with first-generation LM guides.

#### Future Growth:

#### Increase in Demand for Machinery in Developing Countries as well as Progress Toward Electric-Powered Living

Looking at changes in THK's external operating environment, the Company is witnessing an increase in the number of industrial machinery produced. This is largely attributable to the ongoing development of newly emerging countries. At the same time, the impetus provided by higher interest in environmental protection is resulting in the move toward electric-powered living across a wide spectrum of areas.

In response, and as a part of THK's efforts toward Full-Scale Globalization, the Company will further fortify its integrated manufacturing and sales systems in the four geographic regions of Japan, the Americas, Europe and Asia. Particularly, the Company will accelerate the pace of sales network expansion with a greater sense of urgency throughout developing countries including China, which are anticipated to drive increasingly toward FA. Complementing this endeavor, THK will also upgrade and expand local production capacity.

In its efforts to promote the Development of New Business Areas, the Company will bolster the activities of both the FAI and ACE divisions. At the same time, we will work to capture the forecast surge in demand, associated with the projected shift toward electric-powered living, through the IMT Division, which was established in 2009. THK recognizes that efforts to reduce CO<sub>2</sub> emissions will become an increasingly essential component of business. This in turn is expected to underpin the growing emphasis on electric-powered products as the market focuses increasingly on energy efficiency across wide-ranging areas. Under these circumstances, components that complement this shift toward electric-powered products will gain in importance. In its efforts to take full advantage of these favorable conditions, THK will aggressively bolster its sales and marketing activities with the aim of expanding sales.

Taking all of the aforementioned into consideration, THK plans to increasingly realize the vast potential of its products, including LM guides. In this regard, we remain committed to achieving the long-term management target of ¥300 billion in consolidated net sales, an operating margin of 20% and a return on assets (ROA) of 15%.

## SUBSIDIARIES & AFFILIATE

As of March 31, 2014

Subsidiaries	Main Operations	Head Office	Percentage Owneo by the Company tly or Indirectly (%
THK INTECHS CO., LTD.	Manufacture and sale of vital machinery components and machinery	Tokyo, Japan	100.00
TALK SYSTEM CORPORATION	Sale of machinery parts and various types of equipment	Tokyo, Japan	99.00
THK NIIGATA CO., LTD.	Manufacture of ball splines	Niigata, Japan	100.00
THK RHYTHM CO., LTD.	Transportation equipment-related business	Shizuoka, Japan	100.00
THK RHYTHM KYUSHU CO., LTD.	Transportation equipment-related business	Oita, Japan	100.00
L Trading Co., Ltd.	Transportation equipment-related business	Shizuoka, Japan	100.0
NIPPON SLIDE CO., LTD.	Manufacture and sale of slide rails	Tokyo, Japan	100.0
THK Holdings of America, L.L.C.	Holding and management company	Illinois, U.S.A.	100.0
THK America, Inc.	Sale of LM guides, ball screws, spherical joints	Illinois, U.S.A.	100.0
THK Manufacturing of America, Inc.	Manufacture of LM guides, spherical joints	Ohio, U.S.A.	100.0
THK RHYTHM NORTH AMERICA CO., LTD.	Transportation equipment-related business	Tennessee, U.S.A.	100.0
THK RHYTHM MEXICANA, S.A. DE C.V.	Transportation equipment-related business	Guanajuato, Mexico	100.0
THK RHYTHM MEXICANA ENGINEERING, S.A. DE C.V.	Transportation equipment-related business	Guanajuato, Mexico	100.0
THK Europe B.V.	Holding and management company	Amsterdam, Netherlands	100.0
[HK GmbH	Sale of LM guides, ball screws, spherical joints	Ratingen, Germany	100.0
THK France S.A.S.	Sale of LM guides, ball screws, spherical joints	Champagne Au Mont d'or, France	100.0
THK Manufacturing of Europe S.A.S.	Manufacture of LM guides, ball screws, spherical joints	Ensisheim, France	100.0
THK Manufacturing of Ireland Ltd.	Manufacture and sale of ball screws	Dublin, Ireland	100.0
THK (CHINA) CO., LTD.	Holding and management company, sale of LM guides	Dalian, China	100.0
THK (SHANGHAI) CO., LTD.	Sale of LM guides, ball screws, spherical joints	Shanghai, China	100.0
DALIAN THK CO., LTD.	Manufacture and sale of ball screws, actuators	Dalian, China	70.0
THK MANUFACTURING OF CHINA (WUXI) CO., LTD.	Manufacture of LM guides	Wuxi, China	100.0
THK MANUFACTURING OF CHINA (LIAONING) CO., LTD.	Manufacture of LM guides	Dalian, China	100.0
THK MANUFACTURING OF CHINA (CHANGZHOU) CO., LTD.	Manufacture of LM-related parts, unit products	Changzhou, China	100.0
THK RHYTHM GUANGZHOU CO., LTD.	Transportation equipment-related business	Guangzhou, China	100.0
THK RHYTHM CHANGZHOU CO., LTD.	Transportation equipment-related business	Changzhou, China	100.0
THK TAIWAN CO., LTD.	Sale of LM guides, ball screws, spherical joints	Taipei, Taiwan	100.0
Beldex KOREA Corporation	Sale of glass-type substrate processing equipment (used in FPD production processes) and optical machinery	Seoul, South Korea	100.0
THK LM SYSTEM Pte. Ltd.	Sale of LM guides, ball screws, spherical joints	Kaki Bukit, Singapore	100.0
THK RHYTHM (THAILAND) CO., LTD.	Transportation equipment-related business	Rayong, Thailand	100.0
THK MANUFACTURING OF VIETNAM CO., LTD.	Manufacture of slide rails	Bac Ninh, Vietnam	100.0
THK RHYTHM MALAYSIA Sdn. Bhd.	Transportation equipment-related business	Penang, Malaysia	80.0
THK India Private Limited	Sale of LM guides, ball screws, spherical joints	Bangalore, India	100.0

Affiliate	Main Operations	Head Office	Percentage Owned by the Company, Directly or Indirectly (%)
SAMICK THK CO., LTD.	Manufacture and sale of LM guides	Daegu, South Korea	33.82

## **CORPORATE DATA**

As of March 31, 2014

## **Company Profile**

Head Office	3-11-6 Nishi-Gotanda, Shinagawa-ku, Tokyo 141-8503, Japan
Telephone	+81-3-5434-0351
Established	April 1971
Number of Employees	9,177 (consolidated); 3,372 (parent company)
Month of Ordinary	
General Meeting of Shareholders	June
URL	http://www.thk.com/
Independent Auditors	Grant Thornton Taiyo ASG

## **Stock Information**

Common Stock:	
Authorized	465,877,700 shares
Issued	133,856,903 shares
Stock Exchange Listing	Tokyo Stock Exchange
Stock Transfer Agent	Mitsubishi UFJ Trust and Banking Corporation
Number of Shareholders	18,944

## **Major Shareholders**

Shareholders	Number of Issued Shares Held	Shareholding Ratio (%)
The Master Trust Bank of Japan, Ltd., Trust Account	8,457,000	6.31
THK Co., Ltd.	7,259,887	5.42
Japan Trustee Services Bank, Limited, Trust Account	5,304,200	3.96
Akihiro Teramachi	3,646,000	2.72
MELLON BANK N.A. AS AGENT FOR ITS CLIENT MELLON OMNIBUS US PENSION	3,443,662	2.57
FTC Co., Ltd.	2,774,000	2.07
NORTHERN TRUST CO. (AVFC) RE 15PCT TREATY ACCOUNT	2,664,100	1.99
THE BANK OF NEW YORK 132812	2,023,800	1.51
RBC IST 15 PCT LENDING ACCOUNT	2,020,198	1.50
STATE STREET BANK AND TRUST COMPANY 505225	1,935,624	1.44

## **Shareholder Composition**

Shareholder Type	Number of Shareholders	Number of Issued Shares Held	Shareholding Ratio (%)
Financial Institutions	65	32,912,100	24.58
Securities Companies	43	1,571,754	1.17
Other Corporations	279	5,098,881	3.81
Overseas Institutions	423	68,993,129	51.54
Individuals and Others	18,183	18,021,152	13.46
Treasury Stock	1	7,259,887	5.42

## **Stock Price and Trading Volume**



# THK CO., LTD.

3-11-6 Nishi-Gotanda, Shinagawa-ku, Tokyo 141-8503, Japan Tel: +81-3-5434-0351 Fax: +81-3-5434-0353 URL: http://www.thk.com/