## BUSINESS REVIEW REVIEW BY GEOGRAPHIC REGION

# Japan

#### **Operating Conditions and Performance Review**

As a result of the recovery in the global economy, the Japanese economy moderately recovered, with a favorable trend in exports and capital investment. The acceleration of automation and robotization has led to a favorable shift in overall demand for THK products for general machinery and machine tools, in addition to mainly semiconductor manufacturing equipment in the electronics field, which led to net sales of ¥99 billion.

#### Year Ended December 2017 (Results)

#### Sales

- To expand sales to a wide range of customers, THK has developed efficient sales activities that utilize various IT tools and semi-custom order products.
- THK accelerated the pace of efforts to develop new business areas, including seismic isolation, medical equipment, renewable energy, and robotics. The Company also ramped up efforts to cultivate new markets such as the IoT and self-driving car fields.

#### Production

 The Company improved its productivity through the automation and robotization of its production processes, as well as through various means that utilize the IoT, such as the Eagle System.

#### Other

 THK steadily improved profit margins by continuing to adopt a proactive stance toward various improvement activities and further strengthening its business base.

#### Year Ending December 2018 (Plan)

#### Sales

- To continue expanding sales to a wide range of customers, THK will promote efficient sales activities that utilize various IT tools and semi-custom order products.
- THK will accelerate the pace of efforts to develop new business areas, including seismic isolation, medical equipment, renewable energy, and robotics.

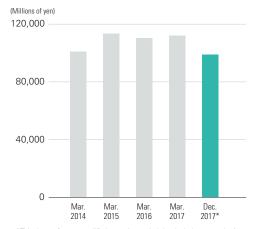
#### Production

- The Yamagata plant is undergoing an expansion, with new facilities being built in order to increase LM Guide, ball screw, and actuator production.
- THK will further improve its productivity through the automation and robotization of its production processes, as well as through the visualization of the distribution of work among its production processes via data analysis and a new system derived from the Eagle System.

#### Other

• Looking ahead, THK will increase sales and steadily improve profit margins by continuing to adopt a proactive stance toward various improvement activities and further strengthening its business base.

#### Net Sales



\*This data reflects a modified reporting period that includes 9 months from consolidated companies whose fiscal years ended in March and 12 months from consolidated companies whose fiscal years ended in December.

Bases (As of December 31, 2017)			
Sales offices	43		
Production facilities	12		
Development bases	1		
Distribution centers	3		
	Sales offices Production facilities Development bases		

#### Group Companies (As of December 31, 2017)

• THK CO., LTD.
• THK INTECHS CO., LTD.
• TALK SYSTEM CO., LTD.
• THK NIIGATA CO., LTD.
• THK RHYTHM CO., LTD.
• NIPPON SLIDE CO., LTD.
• TRA Holdings, CO., LTD.

## **BUSINESS REVIEW REVIEW BY GEOGRAPHIC REGION**

# **The Americas**

#### **Operating Conditions and Performance Review**

Year Ended December 2017 (Results)

Year Ending December 2018 (Plan)

its product lineup to match market needs.

efficient sales activities targeting a wide range of customers.

Sales

**Production** 

Sales

**Production** 

14

Eagle System.

In the Americas, economic recovery continued with steady consumer spending and capital investments. The Company worked diligently to generate new demand from existing customers by unifying production and sales while developing new business areas, including the medical equipment and aircraft fields as well as energy-related fields. Under those circumstances, the Group saw a steady trend in demand for products related to electronics and machine tools, which led to net sales of ¥67.1 billion.

• The THK Group expanded its market share by generating new demand from existing

customers and taking business from competitors. In addition, the Group strengthened its

• THK ramped up its sales activities in new business areas in order to generate new demand.

• The Company improved its productivity through the automation and robotization of its production processes, as well as through various means that utilize the IoT, such as the

• THK will actively develop various initiatives aimed at expanding sales to a wide range of

• The Company will continue to actively drive sales activities in new business areas such

• THK will take full advantage of its position as the only company in its industry to main-

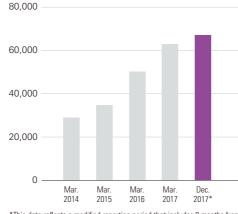
• The Company will accelerate various initiatives, including the automation and robotiza-

tion of its production processes, in order to further improve its productivity.

tain a production platform in North America. At the same time, the Company will expand

customers, including holding exhibitions that utilize its mobile showroom.

as medical equipment, aircraft, and robotics to generate new demand.



#### Bases (As of December 31, 2017)

United States	Sales offices	7	
	Production facilities	3	
Canada	Sales offices	1	
	Production facilities	2	
Mexico	Production facilities	1	
Brazil	Sales offices	1	

#### Group Companies (As of December 31, 2017)

• THK Holdings of America, L.L.C.

• THK America, Inc.

• THK Manufacturing of America, Inc.

• THK RHYTHM NORTH AMERICA CO., LTD.

- THK RHYTHM MEXICANA, S.A. DE C.V.
- THK RHYTHM AUTOMOTIVE MICHIGAN CORPORATION
- THK RHYTHM AUTOMOTIVE CANADA LIMITED
- THK BRAZIL INDUSTRIA E COMERCIO LTDA.

## **Europe**

### **Operating Conditions and Performance Review**

In Europe, the economy continued to show a steady trend. In the fiscal year under review, THK strove to generate new demand from existing customers by unifying production and sales while developing aggressive sales activities to explore new business areas, including the fields of medical equipment, aircraft, and robotics. As a result, net sales stood at ¥54 billion.

#### Year Ended December 2017 (Results)

#### Sales

- THK worked to generate new demand from existing customers and to improve customer satisfaction.
- The Company actively pursued efficient sales activities aimed at a wide range of customers by developing various IT tools.

#### Production

• The Company improved its productivity through the automation and robotization of its production processes, as well as through various means that utilize the IoT, such as the Eagle System.

#### Development

• The THK Group pursued R&D activities with a unified effort that included the linear motion-related R&D activities of THK and the automobile-related activities of THK RHYTHM and the German R&D division of TRA.

### Year Ending December 2018 (Plan)

#### Sales

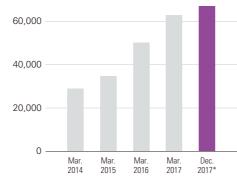
- THK will continue to generate new demand from existing customers and work to further improve customer satisfaction by enhancing aspects of customer service such as on-time delivery and technical support.
- THK will actively develop various initiatives aimed at expanding sales to a wide range of customers, such as acquiring prospective customers at exhibitions.

#### Production

• The Company will actively promote the automation and robotization of its production processes and develop various means that utilize the IoT, such as the Eagle System, in order to further improve its productivity.

#### Development

• THK will continue to coordinate with THK RHYTHM's and TRA's automotive R&D divisions to further its R&D efforts.



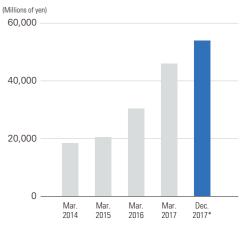
\*This data reflects a modified reporting period that includes 9 months from consolidated companies whose fiscal years ended in March and 12 months from consolidated companies whose fiscal years ended in December

# **Net Sales**

(Millions of ven



#### **Net Sales**



\*This data reflects a modified reporting period that includes 9 months from consolidated companies whose fiscal years ended in March and 12 months from consolidated companies whose fiscal years ended in December

#### Bases (As of December 31, 2017)

24000 (/ 10 01 2000)		
Germany	Sales offices	2
	Production facilities	1
	Development bases	1
United Kingdom	Sales offices	1
reland	Production facilities	1
taly	Sales offices	1
Sweden	Sales offices	1
Austria	Sales offices	1
Spain	Sales offices	1
France	Sales offices	1
	Production facilities	1
Turkey	Sales offices	1
Czech Republic	Sales offices	1
	Production facilities	1
Netherlands	Sales offices	1
Russia	Sales offices	1

### **Group Companies** (As of December 31, 2017)

- THK Europe B.V. • THK GmbH • THK France S.A.S.
- THK Manufacturing of Europe S.A.S. • THK Manufacturing of Ireland Ltd.
- THK RHYTHM AUTOMOTIVE GmbH
- THK RHYTHM AUTOMOTIVE CZECH a.s.
- THK CAPITAL UNLIMITED COMPANY
- THK FINANCE UNLIMITED COMPANY

## **BUSINESS REVIEW REVIEW BY GEOGRAPHIC REGION**

# China

### **Operating Conditions and Performance Review**

Year Ended December 2017 (Results)

screws and its mainstay LM Guides.

needs of emerging markets.

Year Ending December 2018 (Plan)

business areas and new customers.

range of customers.

expanding its equipment.

**Production** 

Sales

Production

Eagle System.

Development

Sales



(Millions of ven)

60.000

In conjunction with an expansion in demand that has accompanied investment in smartphones and automobiles in China, FA has progressed against the backdrop of rising wages and a shortage of labor, which in turn has broadened demand for the Company's products. Capitalizing on the sales and production structures it has strengthened over time, THK captured that demand and converted it into sales, resulting in ¥41.4 billion in net sales.

• In China, the THK Group has expanded its sales network while cultivating new business

areas and new customers. The Group has also worked to expand its market share in ball

• The Company improved its productivity through the automation and robotization of its

production processes, as well as through various means that utilize the IoT, such as the

• In collaboration with the Group's R&D operations in Japan, the engineering division of THK (CHINA) CO., LTD., continued to make efforts to develop products that reflect the

• By launching Omni THK, a website that allows customers to do everything from selecting

products to placing orders with ease, the THK Group will strengthen its sales to a wide

• THK MANUFACTURING OF CHINA (CHANGZHOU) CO., LTD., will increase its production

of LM Guides, and each production facility is working to strengthen its production by

• The Company will strive to further improve its productivity through the automation and

robotization of its production processes, as well as through the acceleration of activities

that utilize the IoT, such as transmitting machine utilization status to employees in real



consolidated companies whose fiscal years ended in March and 12 months

#### Bases (As of December 31, 2017)

China	Sales offices	31
	Production facilities	6
	Development bases	1

#### Group Companies (As of December 31, 2017)

- DALIAN THK CO., LTD.
- THK MANUFACTURING OF CHINA (WUXI) CO., LTD.
- THK MANUFACTURING OF CHINA (LIAONING) CO., LTD.
- THK RHYTHM CHANGZHOU CO., LTD.

# **Asia and Other**

### **Operating Conditions and Performance Review**

As the THK Group expands its sales network in the ASEAN region and other parts of the world, the Group undertook aggressive sales activities to generate new demand from existing customers and acquire new customers. Those activities, and the effect of the expanded demand in China that was felt in certain regions, resulted in net sales of ¥24.8 billion.

#### Year Ended December 2017 (Results)

#### Sales

- In Taiwan, the Company expanded sales to its current customers and a wide range of customers by enhancing its sales and distribution network and strengthening its customer service
- In the ASEAN region, the THK Group utilized Omni THK to further expand sales to a wide range of customers, even in regions where there are no THK sales offices.

#### Production

• In addition to undertaking a variety of improvement activities across its production processes, the THK Group promoted automation and robotization. Through these means, the Group expanded production output and lowered manufacturing costs.

### Year Ending December 2018 (Plan)

#### Sales

- In Taiwan, THK will bolster sales by generating new demand from existing customers and taking business from competitors. In addition, the Company will increase sales to a wide range of customers by expanding its sales and distribution network and strengthening its customer service.
- In the ASEAN region, the THK Group will utilize Omni THK and other means to further expand sales to a wide range of customers.

#### Production

- At THK MANUFACTURING OF VIETNAM CO., LTD., an additional factory will be constructed in order to increase Miniature LM Guide production
- THK India Private Limited will construct a new plant to produce LM Guides.
- . In addition to undertaking a variety of improvement activities across its production processes, the THK Group will promote automation and robotization. Through these means, the Group will expand production output and lower manufacturing costs.



\*This data reflects a modified reporting period that includes 9 months from from consolidated companies whose fiscal years ended in December

- THK (SHANGHAI) CO., LTD.

- THK RHYTHM GUANGZHOU CO., LTD.

#### • THK MANUFACTURING OF CHINA (CHANGZHOU) CO., LTD.

#### Development

• In collaboration with the Group's R&D operations in Japan, the engineering division of THK (CHINA) CO., LTD., will continue to make efforts to develop products that reflect the needs of emerging markets.

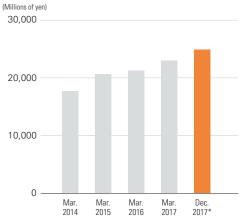
time via a system derived from the Eagle System.

## • THK (CHINA) CO ITD

## • In China, the THK Group will continue to expand its sales network while cultivating new



#### **Net Sales**



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Bases (As of December 31, 2017)			
Taiwan	Sales offices	3	
Singapore	Sales offices	1	
India	Sales offices	5	
Thailand	Sales offices	1	
	Production facilities	1	
South Korea	Sales offices	13	
	Production facilities	4	
Vietnam	Production facilities	1	
Malaysia	Production facilities	1	

### **Group Companies** (As of December 31, 2017)

- THK TAIWAN CO., LTD.
- THK LM SYSTEM Pte. Ltd.
- THK RHYTHM (THAILAND) CO., LTD.
- THK MANUFACTURING OF VIETNAM CO., LTD.
- THK RHYTHM MALAYSIA Sdn. Bhd.
- THK India Private Limited
- SAMICK THK CO., LTD.