## Striving to Become a Global

The Tsubaki Group's

# Challenges and Strategies

In this section, we explain the challenges faced by the Tsubaki Group as well as the initiatives and growth strategies that will be instituted to overcome these challenges and achieve sustainable growth.

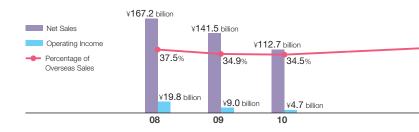
### Policies of Medium-Term Management Plan 2012

- Strengthen our foundation as a manufacturer
- Implement reforms to become a solutions-provider company
- 3 Always place customers first
- 4 Hone the "global best" management strategy
- 5 Develop human resources

### Key Points of Medium-Term Management Plan 2012

Due to the impacts of the Lehman Shock, sales and income dropped for two consecutive years starting with the fiscal year ended March 31, 2009. In response to this situation, under Medium-Term Management Plan 2012 (for the fiscal years ended March 31, 2011-2013) we worked to strengthen our foundations to ensure adaptability toward the rapidly changing operating environment. Specifically, we achieved a substantial improvement in productivity through production reform activities while simultaneously stepping up development and sales of products designed to realize superior levels of energy efficiency and environmental performance. In Chain Operations and Materials Handling Systems Operations, we conducted two overseas M&A transactions. At the same time, we advanced the globalization of our operations by establishing a chain manufacturing base in China and a materials handling systems manufacturing base in Indonesia. In developing human resources, we introduced the overseas trainee system and launched new initiatives including Tsubaki Technical Skills Olympics, innovation workshops, and Kurumaza Meetings (roundtable meetings). These initiatives help improve employee awareness and motivation and share a sense of urgency throughout the organization.

#### **Numerical Targets and Performance**



## Long-Term Vision 2020

Aim to become a leading global company with an unshakable position (share) in target markets

### Global Leader

Aim to develop products that will win the leading share of the global market

#### Niche Leader

Aim to develop products that will win the leading share of specific fields and regions

## Policies of Mid-Term Management Plan 2016

- 1
- Transition to a marketoriented corporate culture
- Enhancement of earning power
- 2
- Expansion of businesses that leverage the collective strengths of the Group
- Development and utilization of human resources

## Key Points of Long-Term Vision 2020 and Mid-Term Management Plan 2016

Long-Term Vision 2020 illustrates our grand design for the Tsubaki Group in 2020, shortly after we celebrate the 100th anniversary of our founding in 2017. The vision calls on us to establish an unshakable position (share) in target markets and thereby become a global leader with net sales of ¥300.0 billion, 70% of which is to come from overseas, and an operating income margin of 10%. As a practical action plan to pursue the realization of this grand design, we commenced Mid-Term Management Plan 2016 (for the fiscal years ending March 31, 2015–2017) in the fiscal year ending March 31, 2015. Mid-Term Management Plan 2016 has four basic policies, the first of which is to "transition to a market-oriented corporate culture." To advance this transition, we have divided the global market into five regions: America, Europe, China, the Indian Ocean Rim, and East Asia, which includes Japan. By quickly developing and manufacturing products that match the market needs of each region, we will realize the further globalization of our operations. The second basic policy is to pursue the "expansion of businesses that leverage the collective strengths of the Group." In this pursuit, we will create horizontal organizational links between vertically integrated business lines to maximize synergies. As the third policy, we will target the "enhancement of earning power." In accomplishing this, the Company will promote globally optimal production and accelerate innovation with regard to production facilities and technologies. We anticipate that these efforts will help us improve production efficiency while reducing environment impacts. The fourth and final basic policy is to advance the "development and utilization of human resources." In this area, we are educating young employees and fostering employees capable of competing on the global stage while also empowering female employees. At the same time, we are endeavoring to develop a workplace environment in which all employees will feel motivated in their work and exercise their full potential.



## An Interview with the CEO



### Question

In the fiscal year ended March 31, 2015, Tsubakimoto Chain posted higher sales and income for the fifth consecutive year, setting a new record for consolidated net sales as well as for all income figures. What have been your policies for managing Tsubakimoto Chain over the six years since you became president in the fiscal year ended March 31, 2010?

## A Enhancement of Check and Act Functions

When I assumed the position of president, my first order of business was to revise our medium-term management plan. The Group had previously been establishing three-year medium-term management plans. However, it was not uncommon for these plans to undergo yearly rolling updates without first sufficiently evaluating the successes of plans or acting with regard to the issues they faced. The first plan we launched after I became president was Medium-Term Management Plan 2012, which was for the fiscal years ended March 31, 2011-2013. Beginning with this plan, I put an end to rolling updates, and made sure we performed the appropriate checks to confirm that the plan's strategies were being implemented effectively and acted quickly to resolve any issues. In other words, I enhanced the "check" and "act" functions of the plan-do-check-act, or PDCA, cycle.

## A Clear Definition of Long-Term Vision

With regard to the "plan" function of the PDCA cycle, we established Long-Term Vision 2020 in 2014, clearly defining our grand vision for the Group over the long term. This vision set forth the clear long-term goals of turning overseas operations into growth

drivers and leading the global market and niche markets. The vision also made it easier to formulate action plans (medium-term management plans) and for employees to take action for advancing our strategies.

## Improvement of Employee Skills and Motivation

I also set my sights on strengthening the "do" function of the PDCA cycle. After becoming president, I launched several new initiatives designed to share recognition of the issues faced by the Company among employees and contribute to improved motivation. These initiatives included innovation workshops, which are meant to help cultivate the next generation of leaders, and *Kurumaza* Meetings, which provide a forum for direct communication between young employees and myself.

I believe that our ability to increase both sales and income for five consecutive years and continue rewriting our previous performance records can be attributed to these innovative initiatives. Furthermore, our focus on efforts to heighten employees' ability to address problems was a major factor behind the strengthening of the "do" function. I would like to take this opportunity to thank the shareholders and investors, financial institutions, and all of the stakeholders that have supported us and been understanding toward our growth strategies.

#### Question

Tsubaki has been accelerating the reinforcement of its network of overseas bases to support further globalization. How was progress on this front during the fiscal year ended March 31, 2015?

## A

## Promotion of Globalization in Manufacturing and Sales

In the fiscal year ended March 31, 2015, we established a power transmission product sales company in South Korea. We also converted a materials handling systems manufacturing company in India and a sprocket manufacturing company in China into subsidiaries.

In addition, we established a new factory in Tianjin as our second automotive parts manufacturing base in China. In this manner, we made strides forward in reinforcing our network of overseas bases from the perspectives of both manufacturing and sales. These measures, I believe, will help advance the development and manufacture of products that fully respond to the market needs, expansion of businesses that leverage the collective strengths of the Group, and enhancement of earning power, all of which are policies of Mid-Term Management Plan 2016. (See map below.)

Going forward, we will reinforce the ability of Tsubaki products to compete on the global market in order to expand market shares.

### Question

Mid-Term Management Plan 2016 has defined the four policies of transition to a market-oriented corporate culture, expansion of businesses that leverage the collective strengths of the Group, enhancement of earning power, and development and utilization of human resources. How was progress in relation to these policies during the first year of the plan?



#### Massive Improvements in Productivity

Of the four policies, the most progress was made with regard to the enhancement of earning power.

In Chain Operations, we are in the process of advancing manufacturing reform initiatives at major plants in Japan as well as overseas.

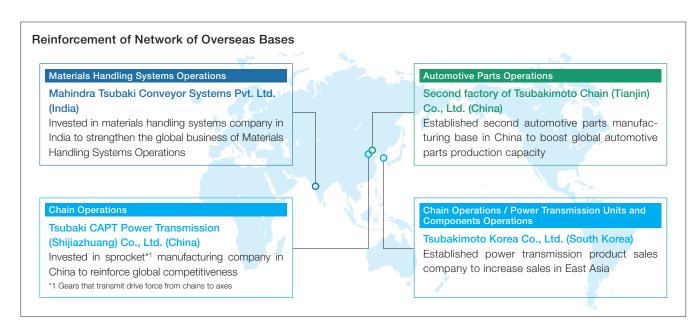
Manufacturing reform initiatives are being conducted at major domestic and overseas plants to improve labor productivity. For example, we implemented measures that realized massive declines in wasted time from unnecessary employee movement and time lost searching for parts, which enabled us to accelerate reductions in the number of assembly lines. The overall improvement in labor productivity at six major plants worldwide outstripped targets by 3% in the fiscal year ended March 31, 2015.

In Automotive Parts Operations, we began constructing a new assembly factory building in the Saitama Plant in February 2013. At this plant, we are advancing manufacturing reform initiatives, and had initially set the targets of realizing improvements in productivity of 30% for the new assembly factory building and 15% for entire plant. However, we were able to achieve improvements that greatly exceeded these targets in the fiscal year ended March 31, 2015.

In addition, we have made large strides in improving design productivity in Materials Handling Systems Operations. By employing modular design principles and encouraging employees to utilize finished blueprints for other projects, we witnessed a substantial increase in the amount of net sales generated by one design, from ¥390,000 in the fiscal year ended March 31, 2014, to ¥630,000 in the fiscal year ended March 31, 2015.

With regard to the transition to a market-oriented corporate culture, we have divided the global market into five regions: America, Europe, China, the Indian Ocean Rim, and East Asia, which includes Japan. By promoting the development and manufacture of products that fully respond to the market needs of each region, we aim to increase sales. This approach is gradually creating results as the Company has already launched products that were refined to match the needs of specific markets. Examples of such products include conveyor chains for China, backstop cam clutches for the United States, and lubricant-free Lambda chains for the food industry in Europe.

As for the expansion of businesses that leverage the collective strengths of the Group, we have been promoting the shared usage of facilities within the Group, and the benefits of these efforts



#### An Interview with the CEO

are being felt. For example, we have developed a system through which frames for the chip conveyors supplied to the machine tool industry are manufactured at a materials handling systems factory in Indonesia, and then delivered to the customer after undergoing final assembly at a site nearby them. Going forward, we will not only encourage facility sharing but also work to step up inter-business coordination in terms of sales and technologies.

The development and utilization of human resources is a task that will take time to come to fruition, and we have yet to see any noteworthy results accordingly. At the moment, we are pushing forward with steadfast efforts through the overseas trainee system and other existing training and education programs, and are also promoting human resource development at manufacturing sites by encouraging the sharing of techniques. In addition, we invited a total of 112 engineers and manufacturing leaders from overseas factories to Japan to undergo training in the fiscal year ended March 31, 2015. Automotive parts training was conducted at the Saitama Plant, the core manufacturing base for Automotive Parts Operations, while industrial-use chain training took place at the Kyotanabe Plant.

### Question

While there appears to be discrepancies in the progress of initiatives based on the four policies of Mid-Term Management Plan 2016, it seems as though a strong start was cut toward accomplishing the goals of the plan. What tasks do you think will need to be addressed to achieve the goal of becoming a global leader that was set forth by Long-Term Vision 2020?



## 1. Expansion of Businesses in China and Europe

A task that needs to be addressed in both Chain Operations and Automotive Parts Operations is the expansion of businesses in China and Europe, where our market share is still quite low.

Resolving this issue will no doubt require us to conduct local production in these markets.

In Chain Operations, we must work to get our Chinese manufacturing subsidiaries on the track toward suitable performance, and are advancing productivity improvement initiatives and accelerating the shift toward local production to accomplish this. At the same time, we need to establish manufacturing bases in Europe, a task that we are addressing through M&As and other activities.

In Automotive Parts Operations, we have already laid the foundations for boosting production capacity and strengthening cost competitiveness in China by creating our second automotive parts manufacturing base in this country. Similarly, in Europe we sought to create a second manufacturing base to supplement our base in England by establishing a new subsidiary in the Czech Republic in July 2015. Operations are slated to commence at this subsidiary in 2017.

## A

## 2. Development of New Technologies and Products

Technologies and products are the lifeblood of manufacturers. It would not be an exaggeration to say that the growth of the Tsubaki Group up until today has been supported by the competitive position we have developed with regard to both of these factors.

With regard to our roller chains, for example, throughout our history we have continued to release a new generation of chains that dwarfed the previous generation in terms of quality and performance about once every decade. In the fiscal year ending March 31, 2016, we plan to sequentially release the next generation of each line of chains, and thereby further solidify our dominating competitive edge in terms of technologies and products.

## A

## 3. Development of New Human Resource Systems

Whether we are talking about globalization or developing a competitive position for technologies and products, all of our efforts are supported by our human resources.

Long-Term Vision 2020

Aim to become a leading global company with an unshakable position (share) in target markets

Net sales ¥300 billion

Operating income margin

10%

Percentage of overseas sales

70%

The Company's current human resource systems were created in the fiscal year ended March 31, 2004, and were aimed at enabling employees to undertake ambitious endeavors by increasing the transparency of these systems and making them more easily accepted. Measures such as the abolishment of seniority rights based on length of service and other measures were revolutionary for the time. Today, however, our business is expanding and rapidly becoming more global, and these systems are proving to have compatibility issues with our current operations.

For this reason, we plan to drastically revise our human resource systems over the two-year period beginning with the fiscal year ending March 31, 2016. Main points of these revisions will include supporting the contributions of female employees and otherwise responding to the diversification of human resources and implementing flexible position rotations for personnel.

### Question

Last, what is your basic policy for improving corporate value?



## Simultaneous Improvement of Social Value and Financial Value

In addition to the strong growth of sales and income, the Tsubaki Group is also achieving substantial improvements in capital efficiency, as evidenced by the rise in ROE to 10.9% during the fiscal year ended March 31, 2015. Amid these increases in performance and capital efficiency, we are also witnessing smooth growth in the Company's stock price, stimulated by our raising

dividend payments for two consecutive years beginning with the fiscal year ended March 31, 2014. Based on these factors, I can confidently say that the financial value of the Tsubaki Group is on the rise.

However, corporate value, I feel, is something that should be measured as the sum of both financial value and social value. As a manufacturing company, I think Tsubaki's first objective should be the creation of countless unrivaled products that cannot be imitated with the aim of contributing to improved productivity and energy savings for customers and environmental preservation for society. I believe that increasing social value in this manner will also lead to higher financial value.

For this reason, I am confident that our strategy of developing operations on a more-global scale based on superior technologies and products will improve both social value and financial value, and subsequently overall corporate value.

As we take on these challenges, I would like to ask our stakeholders for their continued support and understanding.

> C. Osa Isamu Osa

> > Chairman and CEO, Representative Director

## Verification of Shareholder Value Over Past Five Years

In this section, we would like to verify the rise in value of the Company for its shareholders over the five-year period beginning with the fiscal year ended March 31, 2011, the first year of Medium-Term Management Plan 2012.

In the fiscal year ended March 31, 2010, consolidated net income was ¥3,175 million. By the fiscal year ended March 31, 2015, net income had grown substantially, to ¥14,153 million. ROE improved from 4.0% to 10.9% over the same period.

Dividend payments have also increased continually. From  $\pm 6.00$  per share in the fiscal year ended March 31, 2010, dividend payments were raised to  $\pm 7.00$  per share in the fiscal year ended March 31, 2011;  $\pm 10.00$  per share in the fiscal year ended March 31, 2014; and then  $\pm 16.00$  per share in the fiscal year ended March 31, 2015.

As the Company proceeded to increase earnings, improve capital efficiency, and enhance shareholder returns, its stock price continued to rise, growing from ¥449 on March 31, 2010, to ¥1,001 on March 31, 2015. Over this five-year period, the total shareholder return was 133%, meaning that shareholders who commenced investment on March 31.

2010, saw their investment increase by 2.33 times leading up to March 31, 2015.

## Stock Price and Total Shareholder Return (Change in Comparison to March 31, 2010)



-Total Shareholder Return -Company Stock Price Growth Versus Nikkei 225 Growth -Company Stock Price Growth Versus Average Machinery Sector Stock Price Growth

## **Review of Operations**

## Chain Operations and Power Transmission Units and Components Operations



We will accelerate the global development of our business and improve our competitiveness in terms of technologies and prices.

Tetsufumi Matsuura

Director & Senior Managing Executive Officer

## Market Growth Potential and Tsubaki's Characteristics

Together with the growth of the global economy, we are witnessing the continued expansion of the markets for chains and power transmission products used in various industries, such as the automotive, LCD / semiconductor, machine tools, energy and resource, and food industries. The potential for growth is particularly strong in market segments for high-value-added products, such as those used for improving productivity, saving energy, and creating clean manufacturing environments in a variety of industries.

In Chain Operations, the Tsubaki Group is highly proficient in developing technologies and customizing products to match customer needs, and possesses a robust product lineup. Leveraging these strengths, we have captured the leading position in the industrial-use steel chain field with a 25% share of the global market. Meanwhile, we have strong domestic shares of 90% for cam clutches and 79% for power cylinders in Power Transmission Units and Components Operations.

## Review of Performance in the Fiscal Year Ended March 31, 2015

In Chain Operations, net sales were up 10.6% year on year and operating income increased 32.9% due to performance that was generally higher than the previous year in the global market.

In Power Transmission Units and Components Operations, net sales grew 4.4% and operating income rose 5.6% as the strong performance in Japan, America, and Europe offset the decline in sales and income in China stemming from economic slowdown.

## **Future Tasks and Growth Strategies**

#### **Expansion of Businesses in China and Europe**

Chain Operations are unrivaled in their position with the No. 1 share in the Japanese and U.S. markets. In order for these operations to grow further, there are two important tasks that will need to be addressed. First, we must build solid operating foundations in the Chinese market, which continues to display high growth rates. Second, we have to expand our share in the European market.

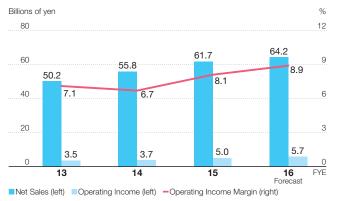
In China, we established a manufacturing company in Tianjin, which commenced production in the fiscal year ended March 31, 2014. As this company is still quite new, it is currently posting operating losses. Nonetheless, it has witnessed growth in the number of customer visits, and has been working to increase recognition by taking part in exhibitions and conducting public relations activities. As a result, this company began experiencing a sharp rise in inquiries from potential customers in 2015. Going forward, this company will focus on revising product specifications to meet the needs of the Chinese market while accelerating the diversification of material procurement sources to further boost price competitiveness.

In Europe, we are working to bolster our lineup of products that match the industry-standard specifications used in this region. Moreover, we will need to promote local production if we are to realize a full-fledged expansion of our share in the European market. To this end, we plan to form alliances with local manufacturers through M&As and other activities. In addition, we are examining various options for developing manufacturing bases, including establishing our own factory. We hope to make a definitive decision about our future course during the fiscal year ending March 31, 2016.

#### **Enhancement of Earning Power**

At the Kyotanabe Plant, we are advancing a manufacturing reform initiative program known as Manufacturing Innovation in Kyotanabe 2018 (MIK2018) that includes (1) realizing higher efficiency in

## Chain Operations Performance Trends and Outlook



the conveyance of items, (2) consolidating and downsizing production lines, and (3) introducing integrated mass production lines for certain products. The initial goal of the MIK2018 initiatives was to realize a 30% increase in labor productivity by the fiscal year ending March 31, 2019. However, the time frame for achieving this goal was later shortened by two years, to the fiscal year ending March 31, 2017. In the future, we plan to actively introduce state-of-the-art equipment to increase the speed of processing procedures. In addition, we will evaluate new processing methods, and pursue further improvements in profitability through means such as eliminating certain portions of heat treatment processes.

In Power Transmission Units and Components Operations, meanwhile, we are enhancing earning power by consolidating the manufacturing operations currently conducted in three bases into two and investing in high-quality facilities.

#### **New Products**

Throughout our history, we have continued to develop new roller chains with performance and quality that was substantially higher than previous offerings about once every 10 years. At the moment, we are focused on developing the next generation of roller chains, a new line of models that will feature further enhanced competitiveness, to commemorate the 100th anniversary of Tsubakimoto Chain. As the first in this line, we launched surface treated roller chain (NEP) in June 2015, a chain boasting massive improvements in corrosion resistance over previous models. Furthermore, we plan to introduce a new Lambda chain during the second half of the fiscal year. This chain is being developed for the food production industry, and will therefore be designed to help create clean manufacturing environments. In addition, we intend to release a new Super Roller Chain (heavy duty chain) with minimal levels of fatigue failure as well as other models commemorating our 100th anniversary.

### Power Transmission Units and Components Operations Performance Trends and Outlook





Integrated mass production line for steel Cableveyors®



Surface treated roller chain (NEP)

#### **Review of Operations**

## **Automotive Parts Operations**



We aim to become the undisputed global share leader.

Tadasu Suzuki
Director & Managing Executive Officer

## Market Growth Potential and Tsubaki's Characteristics

In automobile engines, timing chain drive systems are responsible for transmitting the rotation energy from crankshafts to camshafts, and maintaining the precise timing of the opening and closing of air injection and release valves. The market for timing chain drive systems is expanding rapidly due to the favorable increase in the number of automobiles produced worldwide and the fact that there was a shift from belt systems to chain systems that began in the 1990s.

Tsubaki has continued to push forward with technological development to boost the environmental performance of its timing chain drive systems, and today the Company has grown into a leading manufacturer, capable of standing shoulder-to-shoulder with rival U.S. manufacturers. In 2014, we held a 33% share of the global market. We aim to increase this to 42% by fiscal year 2020, thereby earning the title of undisputed global share leader.

## Review of Performance in the Fiscal Year Ended March 31, 2015

In Automotive Parts Operations, net sales increased 10.4% year on year while operating income grew 17.8%. In addition, the operating income margin rose 1.1 percentage points, to 17.8%. While the improvement in the operating income margin is due in part to the increased net sales and the benefits of the depreciated yen, this accomplishment should also be attributed to the impressive improvements realized in productivity. Centered on the core Saitama Plant, productivity improvement initiatives at our manufacturing bases in seven regions worldwide progressed to a degree that exceeded our targets.

### **Future Tasks and Growth Strategies**

## Strategy for Approaching European Automobile Manufacturers

The Tsubaki Group's timing chain drive systems have been adopted by automobile manufacturers in Japan, the United States, South Korea, Europe, and other parts of the world. However, in order for Automotive Parts Operations to realize further sales growth and become the undisputed global share leader, it is absolutely essential that we strategically approach major automobile manufacturers in Europe, where the ratio of manufacturers using Tsubaki systems is lower than in Japan, the United States, and South Korea.

For example, it is becoming increasingly common for new engines developed by European manufacturers to contain silent chains, necessitating that we enhance competitiveness in this area. For this reason, we are devoted to improving the performance of our silent chains (low stretching and low friction). At the same time, we are endeavoring to improve upon engineering capabilities, particularly with regard to tensioners and other low-friction items, as well as systems proposal capabilities. Through these measures, we will target increased orders.

#### Stronger Approach Toward Local Chinese Automobile Manufacturers

Growth in the automotive market in China continues to outpace the markets of developed countries, and it is believed that local Chinese automobile manufacturers will come to have an even larger presence in this market over the medium to long term. To respond to the needs of these local manufacturers, the Tsubaki Group expanded the engineering functions contained within its manufacturing subsidiary in Shanghai, and established a technology center in this city in July 2015. Going forward, this technology center will be leveraged as a base for strengthening ties with local automobile manufacturers as we strive to participate in engine projects from the development phase.

### **Automotive Parts Operations** Performance Trends and Outlook

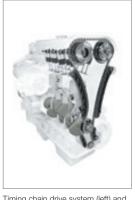


■Net Sales (left) ■ Operating Income (left) - Operating Income Margin (right)

### **Reinforcement of Global Production Network**

August 2015 saw the start of operations at a newly constructed automotive parts manufacturing base, the second factory of Tsubakimoto Chain (Tianjin) Co., Ltd. Alongside the site in Shanghai, this new factory is our second automotive parts manufacturing base in China. In addition to boosting production capacity in China, this base was established for the purpose of strengthening cost competitiveness by allowing certain parts previously exported from Japan to be produced locally in China.

We also commenced the construction of a new manufacturing base in Europe, the second after the existing base in England. This base will be built on a 41,000 m<sup>2</sup> site we have secured in the Czech Republic, and is scheduled to begin operation in 2017. In addition to supplementing the limited production capacity of the England base, the Czech base will function similarly to the new Tianjin factory, helping strengthen cost competitiveness through local production and thereby aiding us in approaching European automobile manufacturers.





Timing chain drive system (left) and low-stretching, low-friction silent chain (right)



Auto Engineering Lab serving as technology development nerve center (Saitama Plant)



Second factory of Tsubakimoto Chain (Tianjin) Co., Ltd., where operations commenced in August 2015 (China)

#### **Review of Operations**

## **Materials Handling Systems Operations**



We are pursuing technological innovation while accelerating globalization.

Toru Fujiwara

Representative Director &
Senior Managing Executive Officer

## Market Growth Potential and Tsubaki's Characteristics

The market for sorting, conveyance, storage, and other materials handling systems is growing together with global economic development. At the same time, however, inter-manufacturer price competition is becoming increasingly fierce. In this difficult environment, the ability to provide sophisticated solutions based on superior technological capabilities is becoming imperative to survival.

The Tsubaki Group boasts a strong share in the highly specialized segments of this market, such as those for paper feeding systems for the newspaper industry and bulk handling systems for transporting cement and other substances. In recent years, we have also been recognized as a cutting-edge manufacturer in fields such as storage systems for cells and other frozen samples in the life science field.

## Review of Performance in the Fiscal Year Ended March 31, 2015

In Materials Handling Systems Operations, net sales increased 14.2% year on year and operating income surged 62.8%.

In Japan, sales of systems for the logistics industry and the life science field proved favorable. In addition, profitability increased substantially as a result of reduced fixed costs and massive improvements in design productivity. Elsewhere, sales and income were down in America due to sluggish capital investment in resource- and energy-related fields, while strong performance of slag conveyors led to higher sales and income in Europe.

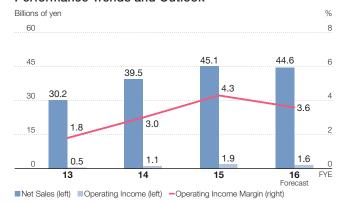
### **Future Tasks and Growth Strategies**

#### **Expansion of Customer Base and Business Scope**

In Materials Handling Systems Operations, we are pursuing innovation-fueled growth. At the same time, we are revising our current business structure, which is excessively focused on automobiles, steel working, and other heavy duty manufacturing industries. To this end, we are working to expand our customer base and business scope to include the life science field and the distribution and entertainment industries.

In the life science field, we recently launched Tsubaki Labo Stocker 150L (see page 15), a new addition to our promising line of systems for storing frozen microbe and pathogen samples. Unlike anything offered by our rivals, this new system has won high praise for its ultra-low temperature storage technologies and highspeed sample transportation technologies. Accordingly, we are seeing a rise in inquiries from universities and research institutions overseas as well as in Japan. For the logistics industry, we supply such promising products as Tsubaki Quicksort and Linisort, both of which are characterized by high-speed, high-precision sorting capabilities. Demand for these systems is expected to grow in Asia, where the rising cost of labor is causing a rapid increase in the need for labor-saving solutions. Zip Chain Lifter® (see page 16), another offering, is capable of higher-speed elevation and descent and more precise positioning than conventional hydraulic lifts. This product has proved popular among stage performancerelated companies and other customers, and we are working to expand the range of applications for which it is used outside of production lines.

### Materials Handling Systems Operations Performance Trends and Outlook





Tsubaki Quicksort system for realizing reliable sorting

## **Acceleration of Global Expansion**

In Materials Handling Systems Operations, we have achieved substantial increases in our worldwide supply capacity by acquiring Kabelschlepp GmbH in 2010 and then Mayfran Holdings, Inc., a major global manufacturer of slag conveyors and chip conveyors, in 2012. Furthermore, a major machine tool manufacturer recognized Tsubaki as a global supplier of chip conveyors in 2014. The Tsubaki Group is promoting the shared usage of Group manufacturing facilities to enhance its ability to provide just-intime production of items with the same quality and price anywhere in the world, and is also strengthening cost competitiveness. It is thereby working to accelerate the global expansion of its chip conveyor operations. However, global expansion is not only being pursued in chip operations. Rather, the Tsubaki Group is also endeavoring to develop operations in other areas on a global basis, and is leveraging its strength in providing batch shipments of products ranging from parts to modules and systems in this undertaking.



Tsubaki Labo Stocker employed by NIAS Genebank for permanent storage of seeds from around the world under low-temperature, low-humidity conditions



Chip conveyor for which global expansion is being accelerated