Materials Handling Equipment / Logistics

As a market leader with extensive knowledge of global logistics needs, Toyota Industries provides a range of materials handling equipment, mainly lift trucks, and logistics solutions to customers.

Business Overview in Fiscal 2016

In the materials handling equipment market, an increase in sales in Europe, North America and Japan compensated for weaker sales in China and drove continued growth globally. Based on the conditions of respective markets, Toyota Industries augmented its production and sales activities and launched new products. As a result, unit sales of our mainstay lift trucks for fiscal 2016 increased 17,000 units, or 7%, to a total of 239,000 units over the previous fiscal year. Also, in a bid to expand our business domains, we acquired the lift trucks of Taiwan-based Tailift Co., Ltd. and the logistics solutions of customers.

Business Activities in Fiscal 2016

The lift truck market in 2015 sustained growth primarily in developed countries. Amid this environment, we carried out sales expansion activities for remodeled internal-combustion lift trucks and electric lift trucks, while offering solutions designed to achieve greater logistics efficiencies, enhancing responsiveness to large-order customers and ensuring reliable after-sales services.

To increase our presence in emerging countries, we acquired the lift truck business of Taiwan-based Tailift Co., Ltd. in August 2015. Capitalizing on Tailift’s strengths, we aim to expand sales in emerging countries where market expansion is expected over the medium to long term.

Toyota Industries Commercial Finance, Inc. (TICF), which was established in the United States with the aim of strengthening our sales financing operations for materials handling equipment, commenced operations in October 2015. In order to respond to customers’ needs for the lease and rental of materials handling equipment, TICF will strive to strengthen its value chain, from sales of new equipment to maintenance services during the lease period and sales of used equipment after the expiration of the lease contract. We plan to extend our reach to Europe, Asia and other regions and reinforce our sales financing operations on a global scale.

As for the Logistics Solutions Business, which is represented by automated storage and retrieval systems and automatic guided vehicle systems, we are working to meet a wide range of needs by providing consulting services for customers’ logistics-related issues as well as assisting them with installation and operation of equipment. In the e-commerce industry, which has been growing in recent years, we have been proactively making various proposals and successfully acquiring new orders.

In the field of aerial work platforms, sales of Aichi Corporation, which possesses the top brand*1 in this field in Japan, were negatively affected by a cutback in capital investment by the telecommunication industry. On the other hand, sales grew in line with rises in demand for the replacement of aging facilities in the electric power industry, demand for construction and such social infrastructure work as tunnel and bridge inspections in the leasing industry as well as demand for mechanization in the railway industry. Thus, overall sales of aerial work platforms increased, and Aichi posted sales exceeding the previous fiscal year’s level.

*1: Survey by Aichi Corporation

No. 1 Market Share in Lift Truck Unit Sales for the 50th Consecutive Year

In Japan, growing environmental consciousness has triggered a drastic change in the lift truck market. Based on the keywords of 3Es (Energy, Environmental protection and Ecological thinking), we promoted sales of the new GENEO internal-combustion lift trucks equipped with our own engines with greater environmental performance. We also introduced the remodeled GENEO-Ecore compact electric lift truck fitted with our originally developed highly efficient AC motor that significantly reduces overall power consumption. Through these efforts, we offer products precisely matched to customers’ needs. As a result, unit sales in fiscal 2016 increased 4% year-on-year to 40,000 units. Toyota Industries achieved a share of 46.8% in the Japanese market and maintained its top position*2 for the 50th consecutive year.

*2: ALOMA stands for Asia, Latin America, Oceania, Middle East and Africa.

Promoting Feasibility Test of Fuel Cell (FC) Lift Truck

Since October 2015, Toyota Industries has been conducting a feasibility test of its FC lift truck in a local wholesale market under a project hosted by Shunan City, Yamaguchi Prefecture. The test verifies the FC lift truck’s ability to achieve “Well to Wheel” CO2 emissions reduction under usage conditions that differ from factories and airports and a degree of operational improvement resulting from its use. We have also been engaging in a feasibility test of our FC lift truck in the international cargo area of Kansai International Airport since February 2015 and added two new practical use models for the test in 2016. The models are equipped with an FC system newly and specifically developed for lift...
In the expanding North American lift truck market, Toyota combined unit sales of TOYOTA and RAYMOND brands of approximately 86,000 units, up 16% from the previous fiscal year. Toyota, as a full-line supplier of lift trucks, remained the market share leader*5 in 2015 with 32% share. Toyota, as a full-line supplier of lift trucks, remained the market share leader*5 in 2015 with 32% share. In addition, both Toyota and Raymond implemented a new marketing strategy to strengthen their respective brands, including re-designed websites and new sales and marketing materials.

Expanding Product Lineup and Strengthening Brand Appeal

To further upgrade services to customers, we held the 4th Service Skills Contest in November 2015, in which a service representative from the 40 dealers across Japan participated. Through this contest, we aim to improve our servicing capabilities and raise awareness among service staff in order to provide services that bring even greater satisfaction to customers.

Toyota expanded its product offering with the launch of five electric lift trucks and one internal-combustion lift truck. In response to high levels of needs for logistics solutions, Toyota released into the market the newly developed T-Matics vehicle management system. T-Matics helps increase efficiency and uptime by allowing operators to easily track current usages and use collected data.

Raymond introduced models that improve operations efficiency and energy-saving performance. They include the Raymond Model 6210 Walkie Straddle Stacker, which stores pallets up to three levels high, and the Raymond Model 7310 Reach-Fork truck with unique four-directional travel capabilities. Both models contribute to greater efficiency in customer operations and work space. The Raymond Model 6210 Walkie Pallet Truck enables use in wider applications thanks to dust- and water-proof protection of electronic devices.

While working to raise product quality, Raymond has been carrying out various improvement activities at its production site and headquarters. Prime examples include the reconfiguration of manufacturing space and the upgrade of its warehouse management software by applying the Toyota Production System (TPS).

Further Solidifying Our Leadership Position

The North American lift truck market is expected to show continued growth in 2016. Toyota and Raymond will continue to provide innovative products, excellent customer service and solutions to our customers while focusing on the areas of automation, telematics and others. Through these initiatives, we aim to further solidify our leadership position.

In addition, both Toyota and Raymond implemented a new marketing strategy to strengthen their respective brands, including re-designed websites and new sales and marketing materials.

Reinforcing Quality and Production Functions

In fiscal 2016, Toyota celebrated 25 years of manufacturing lift trucks in North America. Throughout these years, Toyota has been committed to manufacturing operations with an emphasis on quality to satisfy our customers and received a number of awards, including 2015 Supplier of the Year from United Rentals, Inc., the largest equipment company in the world, in recognition of its product and service quality. On another front, Toyota consolidated the manufacturing and support functions into one large space. The project is designed to enhance communication between employees and repurpose factory floor space for improved manufacturing processes.

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European Market

Capturing Favorable Market Conditions to Expand Unit Sales

Except for Russia and some other countries, European economies in fiscal 2016 registered mild growth, and the lift truck market expanded from the previous year. Amid these conditions, Toyota Industries posted sales of 75,000 units, up 9% from the previous fiscal year.

Continuing to Offer Attractive Products and Logistics Solutions

Toyota Industries proactively launched a series of new products to meet various customer needs. In fiscal 2016, we introduced the BT Staxio P-series, which helps alleviate the burden on operators arising from long transport distances within large distribution centers. The series includes 11 platform stackers offering the right model for each application. The new electric counterbalanced lift truck Toyota Traigo 48 was also introduced, offering classleading energy efficiency while being highly productive in limited spaces and featuring a shorter turning radius to contribute to raising customers’ logistics efficiencies.

In addition to low lift trucks, the lithium-ion range of electric lift trucks was expanded to include reach lift trucks and towing tractors. Lift trucks with lithium-ion batteries are 30% more energy-efficient than lead-acid batteries, significantly reducing CO2 emissions as well as energy costs. Besides offering new products, we proactively make logistics solutions proposals, such as the introduction of fleet management systems, thereby contributing to more efficient overall logistics of customers.
Sales Promotion Initiatives

Each sales and marketing company in Europe actively organized and participated in sales promotional events in the market. In the Netherlands, we took part in Logistica, the country’s largest trade fair held every three years, and welcomed approximately 1,200 visitors at the booth where we promoted our products and logistics solutions. In other countries, we appealed product offerings by organizing a customer event and other activities. Prior to the upcoming CeMAT Fair, a press preview conference was held in February 2016 in Hanover, Germany, inviting 100 journalists from 22 European countries. Under the theme for CeMAT 2016, “think CeMAT, think Toyota,” we highlighted a wide range of product offerings and logistics solutions as well as our dedicated initiatives to improve quality.

ALOMA* and Chinese Markets

Engaging in Sales Expansion Activities amid Slowing Markets

Toyota Industries covers the ALOMA markets of Asia, Latin America, Oceania, the Middle East and Africa as well as the Chinese market. We are serving these markets with a lineup consisting of TOYOTA, BT and RAYMOND brands.

In 2015, the market uptrend enjoyed during recent years took a downturn, resulting in stagnation in both markets. Amid this market condition, unit sales decreased 9% compared with the previous fiscal year to 38,000 units. Increased efforts for sales expansion, however, have been successful in keeping market share virtually unchanged.

Initiatives in Major Markets

Toyota Material Handling India Pvt. Ltd. is working to strengthen its sales network in India. In 2015, a new sales office and parts warehouse were opened in Gujarat to improve its customer service capabilities. Parts warehouses were also opened in Chennai and Pune to be closer to customers and deliver parts more quickly.

In October 2015, the used trading facility in Antwerp, Belgium, was opened. Dealers from all over the world have the opportunity to buy used Toyota lift trucks from one single source from wide product offerings. In Germany, an online shop was launched as a new sales channel, which raises customer convenience by enabling quick order placement of spare parts, and already indicates incremental business opportunities.

In Brazil, amid a slowing economic condition, Toyota Material Handling Mercosur Indústria e Comércio de Equipamentos Ltda (TMHM) stepped up company-wide sales expansion activities primarily in strategic areas while working to improve the local procurement ratio of parts for internal-combustion lift trucks that TMHM manufactures.

In Argentina, TMHM held the annual Dealer Convention in September 2015 in Buenos Aires. A total of 16 dealers participated, including two newly assigned dealers from Bolivia and Paraguay, and actively engaged in discussions regarding sales policies and strategies in the region.

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In Singapore, Toyota Material Handling Marketing Asia Pacific Pte. Ltd. (TMHMAP) was established in 2015 and replaced the previous Asia Regional Office in Singapore to strengthen the relationship with distributors in the Asia and Pacific region. TMHMAP continuously works closely with distributors in an effort to raise its responsiveness in terms of sales and after-sales services and to meet customer expectations.

In China, amid rising needs for electric lift trucks, we worked to strengthen the sales structure of electric lift trucks at Toyota Material Handling (Shanghai) Co., Ltd. and further reinforce the sales and service networks in principal regions. We are also promoting cooperation with Talift, which became a subsidiary of the Toyota Industries Group in August 2015, and considering strategies to create synergies.

Providing Reliable Support to Customers’ Logistics Efficiencies

While 2015 showed a decrease in demand for lift trucks in the ALOMA and Chinese markets, growth is expected to remain weak during 2016. Amid this prospect, we will continue to strive for providing reliable support to improve customers’ logistics efficiency by capturing the needs of both new and existing customers regardless of the market situation.

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Toyota Industries offers customers highly advanced, efficient logistics services through consigned operation of distribution centers and land transportation services.

Business Overview in Fiscal 2016

Both the logistics services business and the land transportation services business for automotive parts increased. However, as we sold our stakes in two subsidiaries, one engaging in cash collection and delivery and cash proceeds management services and the other in data storage, management, collection and delivery services, net sales in fiscal 2016 declined ¥11.1 billion, or 11%, from the previous fiscal year to ¥86.9 billion.

With an aim of optimizing logistics in each customer’s activities undertaken at logistics sites based on the thinking existing distribution centers generated a relatively steady profit. Toyota Industries operates distribution centers for various services, net sales in fiscal 2016 declined ¥11.1 billion, or 11%, from the previous fiscal year to ¥86.9 billion.

Toyota Industries has been pushing for “concentration and selection” of our operations to focus on businesses that are closely linked to our core businesses in the materials handling equipment and automobile-related fields. As part of this effort, we sold our stakes in two subsidiaries, Asahi Security Co., Ltd. and Wanbishi Archives Co., Ltd., in December 2015. The former was sold to SECOM Co., Ltd. and the latter to Nippon Express Co., Ltd.

In addition to cash collection and delivery services tailored to each customer’s specific needs, Asahi Security offers comprehensive services that include management of gift certificates and accounting operations at customers’ retail outlets. Furthermore, the company provides security services integrating the monitoring by security devices and dispatch of security guards on a 24/7 basis. Wanbishi Archives provides support to financial institutions and government agencies to ensure the security and efficient use of their information assets. Under its robust security structure, Wanbishi Archives offers a comprehensive range of services covering the entire lifecycle of critical information assets in electronic, paper or other forms, from storage and utilization to destruction.

Both companies have attained a certain level of growth by providing these value-added logistics services to customers and benefited from our support in achieving operational improvements. Nevertheless, in order to make significant growth in the future, we believe that it will be beneficial for them to work with companies that can generate greater business synergies. We decided to sell off our stakes after holding discussions with both companies.

Materials Handling Equipment / Logistics

Land Transportation Services

The Taikoh Transportation Group provides land transportation services under consignment from many automotive parts manufacturers. The group collects finished parts from manufacturers, compiles them by their destination and delivers to automakers “what is needed, when it is needed and in the quantity needed.”

During fiscal 2016, despite a slowdown in automobile production in Japan, we acquired a steady logistics volume in the transportation of automotive parts. Under these circumstances, we continued to conduct various profit improvement activities, including the promotion of efficient cargo transport, while at the same time aggressively undertaking activities to ensure safe and environment-conscious operations.

We will continue to further reinforce our sales activities to capture new customers and, ultimately, to expand business operations.

Sale of Shares of Two Consolidated Subsidiaries

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Automobile

In the fields ranging from vehicle assembly to engines, car air-conditioning compressors and car electronics, Toyota Industries continues to meet the expectations and trust of its customers.

Vehicle

Business Overview in Fiscal 2016

In the automobile industry, market conditions were sluggish in Japan, Latin America and other emerging countries but remained strong in North America. Consequently, global sales were on par with the previous year.

In fiscal 2016, unit sales of the Vitz (Yaris outside Japan) and the RAV4 declined by 15,000 units, or 5%, from the previous fiscal year to 293,000 units. However, various factors, including the addition of a hybrid version of the RAV4, served to push up net sales by ¥21.0 billion, or 5%, to ¥480.0 billion.

Development and Production of Plastic Glazing

Toyota Industries’ plastic glazing panoramic roof has been used on TMC’s hybrid vehicle Prius α (Prius v in Europe and Prius v in North America). This product retains the beautiful surface quality typical of a glass roof yet is approximately 40% lighter than its glass counterpart, improving vehicle fuel efficiency and thus contributing to the reduction of CO2 emissions.

Our plastic glazing rear and quarter windows have been adopted on the RAV4, a limited-edition model released by TMC in 2016, and have contributed to achieving a reduction in weight and a lower center of gravity. Moreover, this rear window offers the world’s first diecast for a plastic glazing product.

Toyota Industries will continue to develop attractive new products that leverage the distinctive characteristics of plastic glazing.

Highest-Level SEQCD to Contribute to Production of Attractive Toyota Cars

In recognition of Toyota Industries’ comprehensive strengths in vehicle quality, delivery, cost and safety as the highest among all Toyota-affiliated automobile body manufacturers, from Toyota Motor Corporation (TMC) we have received an award for excellence under the Toyota Quality Control Award program for four consecutive years.

In October 2015, following a minor model change of the RAV4 for markets outside Japan, we initiated production of a hybrid model of the RAV4 in addition to the conventional internal-combustion models. In the face of the shrinking automobile market in Japan, we are further strengthening our already superior level of safety, the environment, quality, cost and delivery (SEQCD). We also are working to leverage our ability to quickly start up production and a flexible structure in terms of vehicle models and production volume to contribute to production in Japan of Toyota vehicles.
Toyota Industries’ Diesel Engines Highly Acclaimed by Customers Worldwide

Toyota Industries’ diesel engines, mounted in a variety of Toyota vehicles sold around the world, have gained high market recognition for their clean emissions, fuel efficiency and high performance. The V-type 8-cylinder UD diesel engine is installed in the Land Cruiser for markets outside Japan, including Australia, Russia and the Middle East. As a successor model of KD diesel engines, we commenced production of GD diesel engines in June 2015. These engines, which are installed in TMC’s Land Cruiser Prado and other vehicles, are equipped with a turbocharger, for which we participated in the development and started production in-house, and boast significantly higher performance.

As part of efforts to increase the production of GD diesel engines, an additional production line went into operation in January 2016 at our Hekinan Plant in Aichi Prefecture to manufacture the turbocharger to be mounted on GD diesel engines. In March, Toyota Industries Engine India Pvt. Ltd. (TIEI), a consolidated subsidiary in India engaging in the manufacture of engines, also initiated production of GD diesel engines.

Development Competitive Diesel and Gas/ Gasoline Engines in Non-Automotive Fields

Toyota Industries’ engines are highly renowned for their excellent environmental performance in non-automotive fields as well. These engines are used for a wide variety of applications, including our forklift trucks, and adopted by GHP*1 manufacturers in Japan and CHP*2 manufacturers worldwide.

We expanded our lineup of industrial engines with the addition of the Toyota 1KD industrial diesel engine, which is equipped with a turbocharger developed in-house, and the Toyota 1FS gas/gasoline engine in March 2013, followed in December 2015 by the Toyota 1ZS industrial diesel engine equipped with a turbocharger developed in-house. These three new engines offer downsized displacement compared with conventional models with equivalent output, which results in higher fuel efficiency, cleaner emissions and a reduction in size.

For the Creation of Better Engines

Fuel efficiency and emissions standards are becoming more and more strict, as called for in the twenty-first session of the Conference of the Parties (COP21) held in Paris, France, in November 2015, and as evidenced by India imposing increasingly severe regulations on diesel engines. Even before such trends became prevalent, Toyota Industries has been carrying out development of next-generation automobile engines that can clear Euro 6 and other stringent emission standards, as well as engines for materials handling equipment and general purposes featuring greater fuel efficiency and lower costs. In November 2014, TMC and Toyota Industries agreed to gradually consolidate diesel engine development and production functions into the company’s diesel engine development and production functions. Accordingly, we will step up our efforts to achieve shorter development cycles with improved efficiency in order to develop and produce diesel engines with greater competitiveness.

For our general-purpose engines, we will plan, develop and produce a lineup of products matched to customers’ needs while actively promoting sales activities.

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balance between performance and prices of fixed-displacement type products targeting emerging countries.

In the field of variable-displacement type compressors, we developed the SES series that simultaneously offers greater fuel efficiency and a reduction in weight, and it has been adopted by TMC in its Corolla, as well as by Daihatsu Motor Co., Ltd. and GM.

As for fixed-displacement type scroll compressors for light and compact vehicles, we developed the SCSE series, which possesses such excellent properties as lighter weight, greater fuel efficiency and quieter operation. It has been installed in an increasing number of vehicle models of Daihatsu Motor Co., Ltd. and GM.

Since initially being installed in the second-generation Prius, our electric compressors for hybrid vehicles (HVs) and electric vehicles (EVs) have been mounted in all of TMC’s HVs from the fourth-generation Prius to the LS600h.

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SCSE06 compressor (fixed-displacement scroll type)

ESB20 compressor (electric type)

To offer attractive products to the growing number of automakers worldwide now actively engaged in the development of HVs, we developed the ESB series, which is even more compact, fuel efficient and lighter weight. The ESB20 compressor mounted in the new Prius uses a newly developed motor and inverter and has an improved compression structure. We have succeeded in reducing its size and weight compared with the ES14 installed in the third-generation Prius models, while improving its air-conditioning capability by 30% and reducing power consumption by 8%.

Besides TMC, Ford Motor Company, Volkswagen, Honda Motor Co., Ltd. and Nissan Motor Co., Ltd., which are already using our electric compressors in their respective HVs and EVs, we will continue to ramp up our efforts to expand sales to other automakers in Japan, the United States and Europe.

Augmenting Technical Support Capabilities

We station our sales engineers in the United States, Germany, Italy and China and provide technical support locally, promoting sales expansion and activities to prevent quality issues from occurring.

In fiscal 2014, two of our consolidated subsidiaries, namely, Michigan Automotive Compressor, Inc. (MACI) in the United States and TD Deutsche Klimakompressor GmbH (TDK) in Germany, began to conduct design operations locally. A reduction in development lead time resulting from our local design operations has been received favorably by automakers. We plan to continue this initiative in the future.

Establishing Optimum Global Production and Supply Structures

To respond to growing demand for variable-displacement type compressors triggered by the enforcement of more stringent fuel efficiency standards, we are proceeding with augmentation of corresponding production capacities and commenced local production of key functional parts at our production bases in North America.

In Europe, the ASEAN countries and China as well, we are expanding production capacities and increasing the ratio of locally procured parts to accommodate growing demand for car air-conditioning compressors.

MACI is Toyota Industries’ oldest compressor manufacturing base outside Japan and celebrated its 25th anniversary in June 2015. Globalization of our Car Air-Conditioning Compressor Business, for which we now boast the world’s top share*, began from here. Currently, MACI operates the largest compressor plant in the United States with annual production of more than 5 million units of mainly variable-displacement type compressors, which possess such attributes as high efficiency, greater fuel economy and low environmental impact.

Cumulative production reached 100 million units in December 2015.

DC-DC converter mounted in the new Prius

Ceremony to commemorate the cumulative production of 100 million units

* Survey by Toyota Industries Corporation

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Auxiliary Power Source Devices

A DC-DC converter converts the high voltage of HV batteries to a lower voltage level to supply power to electronic control units, lights, wipers and other auxiliary devices.

For the new, fourth-generation Prius, by developing the world’s first thick copper substrate with excellent heat dissipation property and revising the way to integrate components on the circuit board, we reduced the volume and weight of the converter by 50% and 60%, respectively, compared with the product used on the third-generation Prius.

Leveraging our technologies accumulated in the field of DC-DC converters for HVs, we successfully developed and commenced sales of a DC-DC converter for use with start-stop systems, which can suppress a voltage drop at the time of engine restart, and have been promoting its sales to automakers.

A DC-AC inverter is equipped to use home electric appliances in a vehicle and has drawn a great deal of public recognition for its use as an emergency power source following the Great East Japan Earthquake. Since
commencing production in 1995, we have achieved cumulative production of 18 million units in March 2016. We have developed an on-board charger based on our technologies and cultivated know-how regarding EV chargers developed since the 1990s. The resulting on-board charger is mounted in the Prius Plug-in Hybrid.

In addition, we develop and produce inverters for electric car air-conditioning compressors for HVs and other electric-powered vehicles. These inverters have been contributing to increasing the product appeal of our car air-conditioning compressors. (See Special Feature 2 on pages 26–29 for details.)

We have also leveraged our inverter technologies related to electric car air-conditioning compressors and successfully developed a highly efficient, low-cost inverter for hydrogen circulation pumps. The new inverter has been adopted in TMC’s MIRAI FCV.

Core Components for Drive Systems

Since 1967, we have been providing inverters for materials handling equipment and accumulating a pool of know-how and expertise on power electronics technologies. Utilizing such technologies, Toyota Industries applied its proprietary direct-cooling method to develop a device with significantly higher cooling performance in 2009. We have entered the field of core components for drive systems such as power control units (PCUs) for the third-generation Prius.

The new Prius offers a four-wheel drive (4WD) model for the first time in the series, and it is fitted with our rear inverter for 4WD use. This product converts the DC voltage of HV batteries to AC voltage and feeds power to the 4WD rear motor. The adoption of a forced air-cooling system eliminates the need to install cooling water piping, thereby providing greater space in mounting the inverter on vehicles. The inverter also features quieter operation as it is mounted near the cargo space.

In the future, we will augment our development efforts in order to increase orders for core components of drive systems, for which further growth is expected.

Charging Infrastructure

Toyota Industries sells public-use charging stands and home-use charging units for PHVs and EVs, which have been jointly developed with Nitto Kosyo Corporation.

We exhibited our new public-use charging stand at the 44th Tokyo Motor Show held in October 2015. This product consists of one main control stand that offers charging functionality as well as such features as communication, IC card-based user authentication and billing, and multiple low-cost, charging-only sub-stands. Besides the existing model’s features, the main control stand has an additional capability to control up to 10 sub-stands, thereby reducing the initial costs of installing multiple charging stands.

We are positioning this new charging stand as a standard model of the charging infrastructure and will strive to enhance its functionality to ensure that we continue to satisfy customer needs. Along with sales of charging stands, we will work to enhance maintenance, inspection and other services.

Based on the philosophy of founder Sakichi Toyoda, which reflects his strong commitment to manufacturing, Toyota Industries responds to a broad range of needs with its extensive product lineup, from air-jet looms, for which we enjoy the world-leading market share*1 in unit sales, to ring spinning frames and roving frames.

Business Overview in Fiscal 2016

The textile machinery market remained stagnant as economic growth slowed down in China and emerging countries in Asia. While sales of weaving machinery expanded, with unit sales of air-jet looms increasing 400 units, or 8%, year-on-year, to 6,200 units, sales of spinning machinery and yarn quality measurement instruments declined. As a result, net sales were down ¥2.5 billion, or 4%, from the previous fiscal year to ¥65.6 billion.

Business Development of Weaving and Spinning Machinery

In the field of weaving machinery, we introduced an enhanced electronic shedding device to our JATB10 air-jet loom, for which we enjoy the world’s top market share. This shedding device serves to increase textile variations by enabling the weaving of fabrics with complex patterns.

In the field of spinning machinery, we have added a feature to the RO300 high-speed ring spinning frame as an option to produce a new spun yarn called mosaic yarn*2.

Accelerating Development Activities to Contribute to a Low-Carbon Society

As many countries adopt regulations requiring high energy efficiency, electrification is expected to become more widespread not only for automobiles but also for materials handling equipment and other non-automotive products. Targeting the high-growth, electric-powered vehicle market, we will accelerate our development efforts to enhance our products in the fields of HVs, PHVs, EVs and FCVs, thereby contributing to a low-carbon society.

Textile Machinery

Participation in ITMA 2015

In November 2015, Toyota Industries participated in ITMA 2015, an international textile machinery exhibition held in Milan, Italy. A total of 1,600 companies from 46 countries participated in the event, including those in Europe, India and China, and there were more than 120,000 visitors. At this exhibition, we displayed our JATB10 air-jet loom, RO300 high-speed ring spinning frame and various other products and appealed the excellence of these products’ environmental performance and reliability. As for the TC012 comber co-developed with Truetzschler GmbH & Co. KG, our partner manufacturer of spinning machinery in Germany, we conducted a demonstration of its automatic lap Piecer. The system’s excellent stability during high-speed operation received high marks from visitors.

Uster Technologies AG, a Swiss-based consolidated subsidiary producing yarn quality measurement instruments, also participated in the exhibition to present, among others, the world’s first quality control system covering the entire spinning process and appealed its advanced total quality solutions.

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