

Toyota Industries in Progress

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Progress 1 Materials Handling Equipment



Unifying Forces to Maximize Synergies

Toyota Industries' Materials Handling Equipment Segment consists mainly of TOYOTA Material Handling Company (TMHC), the global leader in counterbalanced lift trucks, and the BT Industries Group, the world's top name in warehouse trucks. This segment also includes Aichi Corporation (Aichi), a Toyota Industries subsidiary that holds a dominant share of Japan's market for aerial work platforms. Toyota Industries is building a solid position in the increasingly competitive industrial equipment industry as a leading manufacturer of lift trucks by offering optimum solutions to meet customer needs.

Pursuing Further Integration— Establishment of the Toyota Material Handling Group







The establishment of the Toyota Material Handling Group was announced at the Toyota Industries World Convention 2005, which gathered over 1,200 TOYOTA/BT-related people from more than 60 countries.

Above: President Tetsuro Toyoda (then Toyota Industries Executive Vice President and TMHC President). Below: Per Zaunders (BT Industries President)



President Tetsuro Toyoda (then Executive Vice President)

President Tetsuro Toyoda (then Toyota Industries Executive Vice President and TMHC President) stated at the Toyota Industries World Convention 2005:

"I want to announce the Toyota Material Handling Group (TMHG). As our internal organization, TMHG will be more integrated with stronger global coordination for realizing our common interest in our mutual success."

"I would like to emphasize that TMHG will be a true global integration that does not consider nationalities or company origin."

"The purpose of the integration is not just to combine the organizations but to achieve higher targets. TMHG will be designed to realize the original purpose of our integration: attaining our full potential."

"Of course, we will continue to capitalize on the strengths of our separate brands. We will endeavor to make our present sales network even stronger."

Chairman Tadashi Ishikawa (then President) remarked:

"In establishing TMHG, it is exactly the time to step up to a new level of integration as we have now reached the stage for completing the integration of TMHC and the BT Industries Group."

"With a supporting philosophy of placing utmost value on customers, TMHG offers the world's top level of high quality to ensure customer satisfaction in every region worldwide. While compiling newly developed technologies for realizing our philosophy, we will stress the participation of all persons and the allocation of their roles. These persons include personnel from the Toyota and the BT Industries Group; persons at manufacturers, sales outlets and cooperating companies; and staff involved in sales, development and manufacturing. This approach conveys the meaning embodied in 'United We Grow,' the slogan of the Toyota Industries World Convention 2005."



Chairman Tadashi Ishikawa (then President)

TMHC and the BT Industries Group have made steady progress in expanding synergies by mutually supplying each other's brand products, sharing sales and production know-how, exchanging personnel and jointly procuring components. Building upon this success, Toyota Industries' Materials Handling Equipment Segment has set a new ambitious target of becoming "undisputed No. 1" in the global lift truck market. To achieve this goal, in July 2005 we established the Toyota Material Handling Group (TMHG), a new organization that we expect will facilitate further integration of the operations of TMHC and the BT Industries Group and maximize synergies.



Representatives from TOYOTA/BT distributors in various regions pledged solid unity and their efforts to achieve higher goals.

TMHG's Organization

TMHG has divided its global operations into Europe, North America and International, and a Board has been established as the decision-making body within each of these three regional organizations. A Management Committee—made up of representatives of each regional organization as well as the head of finance and the global head of operations from the headquarters in Japan—manages TMHG as a whole. Comprised of relevant sections of each regional organization, the Sub-Committees handle such principal functions as quality, R&D, manufacturing, production and product planning and human resources development as well as undertake common global coordination for each of these functions, as well as promote the sharing and exchange of information and know-how.

To minimize any operational disruptions accompanying the integration, TMHG's Management Committee will consider the ideal form in terms of integration and organization. On this basis, we will determine and design an optimal organizational structure as we take our utmost efforts to achieve further integration one step at a time. In view of the strategic importance of this integration, Toyota Industries' President Tetsuro Toyoda will concurrently serve as TMHG's president.



Toyota Industries and BT Industries are jointly developing a new three-wheel lift truck incorporating advanced AC technology. This product will be introduced into the European market after being customized for respective brands.

TMHG's Values and Principles

TMHG's 10 Values and Principles, which represents a common ground in proceeding with further integration of TMHC and the BT Industries Group, are as follows.

- 1. Be **customer-focused** and responsive to customers' requirements.
- 2. Become **undisputed No. 1** on a global basis as well as in key regions.
- 3. Develop international leadership and management by maximizing our present human resources.
- 4. Shoot for high financial performance.
- 5. Meet challenges in terms of **both volume and** efficiency.
- 6. Commit to **Toyota's high-quality** standards in products, services and operations.

- 7. Move to standardized processes, clarify Key Performance Indicators and share information to increase transparency.
- Aim for more integrated product development through the aggressive development and sharing of key components.
- 9. The regions are the core of the new organization and their teams must commit to achieving the above targets and follow the principles.
- 10. Functional coordination, global standardization and other collective efforts will be strengthened and regional leaders are strongly expected to place high priority on important horizontal coordination.



Brand Portfolio

The Materials Handling Equipment Segment will continue providing products under the TOYOTA and BT brands, with TMHC and the BT Industries Group committed to maintaining close mutual cooperation on a global scale within the TMHG framework. In this way, Toyota Industries intends to fully utilize the assets of BT Industries' BT and Raymond brands solidly positioned in both Europe and North America. Although not a part of the TMHG organization, Aichi also expects to maintain its own brand as a top manufacturer of aerial work platforms in Japan.

TOYOTA Material Handling Company



Materials handling equipment manufactured by TMHC is sold in Japan under the brand name of TOYOTA L&F (Logistics and Forklifts), which refers to materials handling systems as well as industrial vehicles and equipment. Outside Japan, the TOYOTA INDUSTRIAL EQUIPMENT brand/emblem is used.

BT Industries Group Europe and other regions except North America North America North America BT Industries uses the brand names BT in Europe and other regions, and Raymond in North America.

and other regions, and Raymond in North America. BT Industries also uses the Cesab, Prime-Mover and Lift-Rite brand names in certain markets.

Aichi Corporation



Aichi manufactures and sells aerial work platforms, digger derricks and other equipment. Aichi uses the AICHI brand throughout the world. Visit *www.aichi-corp.jp* for further information.

TOYOTA Material Handling Company

Globally Focused Execution of Unified Development, Production, Sales and Decision-Making

TMHC was established as an in-house company in April 2001 after Toyota Industries took over the industrial equipment sales and marketing operations of Toyota Motor Corporation. This consolidation was aimed at cultivating materials handling equipment as a core business within the Toyota Group and firmly positioning Toyota Industries as one of the world's foremost comprehensive manufacturers of materials handling equipment and systems. TMHC strives to meet customer needs through implementing unified development, production and sales functions and quick decision-making via a global perspective.

2004 Milestones

During calendar year 2004, Toyota Industries' total worldwide unit sales of TOYOTA-brand materials handling equipment (including lift trucks, shovel loaders, tow tractors and others) amounted to a record-high 103,756 units, marking the first time that annual sales surpassed the 100,000 unit mark. Moreover, this was the first time in the industry that annual sales of a single brand have exceeded 100,000 units.



TOYOTA materials handling equipment sales

Operating production bases in Japan, the United States, France

and China, TMHC provides outstanding products and services to customers through a global sales and service network comprising more than 300 base stations in over 50 countries.

Please visit *www.global-toyotalifts.com* for more information on TMHC's global sales network and products.

Operations in Japan

Mirroring a robust recovery in the Japanese economy, total demand in the domestic market for lift trucks in calendar year 2004 increased 10% over 2003, the first double-digit increase in 15 years. During the same period, TMHC sold 32,133 lift trucks, an increase of 10%, virtually the same growth rate as the market.

TMHC carried out proactive sales activities by strengthening its response to large-scale and wide-ranging customers and by promoting proposal-based marketing. In line with strengthening

our lineup of large internal combustion counterbalanced lift trucks, in August 2004, we commenced sales of 14 models of 10-ton to 24-ton lift trucks after a full model change in Japan and several countries overseas.





The series of 10- to 24-ton internal combustion counterbalanced lift trucks are the world's first models in their class to be fitted with a diesel turbo engine with a common rail direct injection system, achieving the highest level of power output, excellent fuel economy and clean exhaust emissions. They are also equipped with a highly durable 2-stator torque controller and efficient wet-type disk brake offering low maintenance and improved safety. For calendar year 2004, TMHC achieved a market share of 42.6% for sales of lift trucks in Japan, the same record-high level as in the previous year. This marks the sixth consecutive year that Toyota Industries' market share has surpassed 40% and the 39th consecutive year that TMHC has maintained its top-ranked position in the Japanese lift truck industry.

Looking Ahead

In 2005, Toyota Industries expects the domestic market for lift trucks to continue to show solid growth. Amid this environment, we will work to expand sales and market share by providing products and services that we hope will deliver even greater customer satisfaction. Efforts are to include carrying out proposal-based marketing that offers solutions that accurately address customer needs as well as promoting a fleet management program to major customers.

In Japan, TMHC develops, produces and sells a wide lineup of materials handling systems that include racks, automatic guided vehicle systems, and automated storage and retrieval systems.

TMHC supplies TOYOTA-brand products through a strong and well-organized sales network of 41 dealers nationwide.

TMHC's Extensive Product Lineup in the Japanese Market

TMHC responds precisely to customer needs with an extensive product lineup-from lift trucks to automated storage and retrieval systems-for warehousing, storing and low-level or high-level order picking. Very narrow

aisle trucks and other warehouse trucks supplied by BT Industries make TMHC's product line even more comprehensive.



Counterbalanced lift trucks

Walkie rider trucks

Automatic guided vehicle systems

High-speed sorting equipment

Standardization of OPS System in the GENEO Series (7 Series)

The GENEO Series (7 Series overseas), Toyota Industries' mainstay lift trucks, will now come equipped with the operator presence sensing (OPS) system as standard specification to enhance operator safety. In Japan, starting with the GENEO (7FG/D overseas) internal combustion counterbalanced lift truck produced from August 2005, the lineup will be expanded to include the GENEO-B (7FB), GENEO-R (7FBR) and GENEO-E (7FBE) electric lift trucks produced from September 2005. For the overseas markets, we plan to release principal products along a similar timeframe.

When the OPS system senses the operator is not in

a normal operating position, it stops powered travel and powered hydraulic functions (loading OPS system* and traveling OPS system**) to minimize the likelihood of accidents due to operational errors and when the operator is out of the operating position.

- * The loading OPS system automatically stops powered loading operations when the operator is not positioned normally. This function minimizes the likelihood of serious accidents that may arise from the operator inadvertently trying to work from an unsafe position.
- ** The traveling OPS system senses whether the operator is properly seated via a seat switch. When the operator is not properly seated, the system automatically stops powered travel.

Products for the Japanese Market - Industrial Vehicles



GENEO (7FD25) Internal combustion counterbalanced lift truck



GENEO-B (7FB15) Electric counterbalanced lift truck



GENEO-E (7FBE15) Three-wheel electric counterbalanced lift truck



GENEO-R (7FBR15) Electric reach truck



2TE18 Electric tow tractor

Products for the Japanese Market – Materials Handling Systems



Partner Rack Rail-less mobile rack



Rack Sorter B Automated storage and retrieval system (Plastic container type)



Rack Sorter P Automated storage and retrieval system (Pallet type)



Road Sorter H (ACBH10) Automatic guided vehicle system



2AFBR15 Automatic guided lift truck



APLB8 Automatic guided pallet truck



Toyota Industries in Progress Materials Handling Equipment

Operations in the United States

Headquartered in Irvine, California, Toyota Material Handling, U.S.A. (TMHU) has led the industry as the top-selling lift truck supplier in the United States for the past three years. Of the Toyota lift trucks sold in the U.S., 99% are manufactured in North America with the majority being built at Toyota Industrial Equipment Manufacturing (TIEM), based in Columbus, Indiana.

According to Industrial Truck Association data, in 2004 the industry as a whole enjoyed more than 20% growth over 2003. Also during 2004, the 200,000th Toyota lift truck rolled off the line at TIEM. In addition, TMHU introduced several Toyota products to the United States rounding out its line to include new electric reach trucks, counterbalanced electric stand-up rider trucks, an electric pallet truck and an electric stand-up tugger model.

TMHU also announced the results of its customer satisfaction survey that measures satisfaction with dealers' sales process, service and parts support, and product quality. The program, Voice of the Customer (VOC), found that 92% of Toyota customers would recommend their local dealership based on their experience with the sales and delivery process.

Toyota closed 2004 with three industry honors, including *Modern Materials Handling* magazine

naming Toyota the largest lift truck supplier in the world for the fourth year in a row. In addition, Crist Information & Research ranked Toyota as the manufacturer with the largest market share in the United States, and a survey conducted by Reed Research Group of 600 *Modern Materials Handling* readers ranked

Thousands of attendees visited the Toyota booth at Promat, the largest materials handling show in North America.

Toyota first in quality and value.

2004 Milestones

TMHU started the year by exhibiting at Promat, North America's most comprehensive showcase of materials handling and logistics technologies. This was Toyota's first corporate appearance in 12 years at the show that attracted 35,000 attendees.

At the same time, TMHU expanded its order picker lineup by launching an electric narrow aisle order picker along with six newly enhanced electric pallet truck models.



A compressed natural gas option is available for Toyota's 4,000-6,500 lb. internal combustion cushion and 3,000-6,500 lb. pneumatic lift truck models.

TMHU also introduced a TIEM factory-installed compressed natural gas (CNG) fuel option in response to the new U.S. Environmental Protection Agency (EPA) and California



Toyota's new National Customer Center 360-degree showroom features a comprehensive collection of Toyota's current lift trucks as well as the first Toyota lift truck sold in the U.S. in 1967 and the first lift truck built at TIEM in 1990.

on several lift truck models, carries the Underwriters Laboratory (UL) listing and is certified to meet 2005 EPA and CARB emissions regulations in all 50 states. Toyota reinforced its total solutions philosophy by becoming the first, and currently only, lift truck manufacturer to develop this factory-installed, EPA- and CARB-certified option for the U.S. market.

Air Resources Board (CARB)

regulations. This option is available

Looking Ahead

Industry growth is forecast to continue at a slower pace in 2005. Amid this environment, Toyota's commitment to the U.S. market is reflected in its US\$11 million investment in the 108,000-square-foot expansion of the TIEM facility that houses the National Customer Center. To further support its customers, this expansion resulted in a newly enlarged sales office and a 42,500-square-foot addition to Toyota's distribution center. The TIEM campus now totals 859,000 square feet of manufacturing and support space and houses nearly 800 associates.

Toyota has 70 authorized Toyota Industrial Equipment dealers with a total of 186 U.S. dealership locations nationwide to offer comprehensive customer service support, including one-stop shopping for both new and certified used lift trucks, parts, service and financing.

For more information on TMHU, visit www.toyotalift.com.

Operations in Europe

Based in Brussels, Belgium, Toyota Industrial Equipment Europe (TIEE) is one of the largest suppliers of materials handling services and products in Europe, with 20 distributors operating in 27 countries. Toyota's European lift truck production plant, located in Ancenis, France, is certified with ISO 14001. The European Parts Centre is based here, allowing Toyota's European distributors to source and supply more than 20,000 spare parts within 24 hours.

Market Development

In terms of overall performance in 2004, the European market showed signs of recovery from a challenging 2003 and grew by 8%, reaching its highest level ever. The European market for counterbalanced lift trucks also improved, with sales increasing by 12%. Compared to 2003, the market for warehouse equipment grew by 5%.

TIEE reported excellent results, outperforming the European market with an increase in sales of over 12%. The company also continued to develop its network across Europe in 2004 and reported strong sales in the fast-growing Central European region, with a record increase of 30%.

Innovation in customer services was strong in 2004, with the ASEC service certification program established by TIEE

to set industry-leading standards in customer satisfaction. ASEC assesses all aspects of after sales such as how Toyota deals with its customers, procedures followed by engineers, and health, safety and environmental requirements. This will ensure that Toyota's high-quality service is consistently delivered across Europe.



Toyota Industrial Equipment, S.A., our lift truck production base in France, manufactures approximately 14,000 lift trucks annually for the European market.

Product Development

In 2004, TIEE continued to enhance its materials handling range with the introduction of an innovative Deluxe Cabin and a new-generation lineup of heavy-duty stackers (7SLL). Available on 7IC models, with capacity ranging from 2 to 3.5 tons, the Deluxe Cabin provides complete



7SLL heavy-duty powered stacker

driver comfort in all weather and working conditions. The 7SLL series is built around the Toyota Powerdrive system, which significantly improves safety, reliability and performance, and

with lift heights of up to 5.4 meters, ensures accurate and safe handling in congested areas.

Looking Ahead

The Central and Eastern European market is expected to grow further in 2005 with investment in these countries set to continue.

Although the first quarter of 2005 has shown the market increasing by 5% year-on-year, there are some concerns

about an economic slowdown in Europe in 2005.

TIEE's sales & marketing office in Brussels, Belgium

TIEE has a comprehensive plan for growth in the next year, including the development of a range of customized solutions to ensure customer satisfaction throughout Europe. These solutions will include innovative, high-quality products supported by a broad array of value-added services such as driver training, finance, rental and fleet management.

Toyota Fleet Management will help businesses identify the issues affecting their materials handling systems. Through detailed and accurate analysis, TIEE will clarify the decision-making process to help customers invest in the right solution.

Encompassing 350 service outlets, TIEE will continue to strengthen its sales and service network. TIEE remains committed to after-sales service and support, and will focus on offering tailor-made service packages that meet each and every customer's needs.

For further information please visit www.toyota-tiee.com.



Products for the North American Market



7FGU70 Internal combustion pneumatic tire counterbalanced lift truck



7FBEU15 Three-wheel electric counterbalanced lift truck



7FGCU25 Internal combustion cushion tire counterbalanced lift truck



7FBCU25 Electric cushion tire counterbalanced lift truck



7FGCU35-BCS Internal combustion cushion tire counterbalanced lift truck—boxcar special model



7BPUE15 Electric order picker

Products for the European Market

Internal combustion counterbalanced

lift truck with deluxe cabin



7FBMF25 Electric counterbalanced lift truck



7SLL Powered stacker

7FG/DF30



7FBEF18 Three-wheel electric counterbalanced lift truck



7FBRE14 Electric reach truck



LOP10CF Low-level order picker with elevating cabin



Per Zaunders President and CEO

BT Industries Group

"Our clear customer and market focus is crucial."

BT Industries is distinguished by its close relationships with customers. We are in the market to meet their logistics needs. Every day we have to prove our ability to develop together with customers as well as anticipate their needs for efficient materials handling, and then supply solutions optimally designed for each customer's unique situation.

We hold very strong positions in priority customer segments, where we are experts at developing solutions for efficient materials handling. Our customer and market focus has been crucial to establishing BT Industries as the world's leading supplier of materials handling solutions based on electric warehouse trucks.

Strong Performance in 2004

The year 2004 was a very strong year for the entire lift truck industry, with higher volumes than ever before. All the major markets—Europe, North America and Japan—reported growth.

We strengthened our position as the world's leading supplier of warehouse trucks. Our increased market shares are the result of a strong product range, a good reputation in the market and an attention to what customers want. Success in the growing global market has necessitated a major expansion in the BT Industries Group's production volumes.

Thanks to our employees' competence, ability to design effective solutions and focus on quality in every aspect of their work, we have been able to achieve improved productivity. The emphasis on customers and quality awareness in every part of the BT Industries Group is a key factor if we are to remain successful.

Faster Product Development Essential

Our society is becoming increasingly dependent on transports and is demanding an ever-faster supply chain. We have to continuously meet demands for efficient materials handling solutions that improve our customers' productivity. To maintain and increase our competitiveness, our current products must be constantly updated. But that is not enough. We also have to be willing to forge ahead and develop the products of tomorrow.

Demand for fast and effective product development has never been higher. In recent years we have invested considerable resources in research and development, and the pace of product development has accelerated. Customers are noticing it in that we are now launching more new products than before. We are not going to stop there. Development certainly isn't.

Global Player Imbued with Local Strengths

One of our strengths is that we are perhaps the only true global company in our field. This is especially important now, when so many large companies prefer to work with a single supplier for all their lift truck needs wherever they operate in the world. These corporations account for a growing share of global trade, and it is very important to provide them with efficient materials handling solutions whether in Europe, North America or globally. BT Industries follows them in their development and serves as a professional partner.

It may seem contradictory, but we at BT Industries have managed to combine global coverage with strong, local business acumen. Our culture stresses delegation of responsibility and authority. By allowing decisions to be made far down in the organization, we achieve important benefits, particularly in terms of flexibility and motivation. The local companies are the ones that know their markets and can best manage their business.

Extensive Cooperation and Inspiration

Since 2000, BT Industries has been part of Toyota Industries Corporation. BT Industries is the world leader in warehouse trucks and TOYOTA Material Handling Company (TMHC) is the world leader in counterbalanced trucks. Together, we have a competitive advantage that takes in every continent, customer segment and truck type.

During the year we entered a more intensive stage of our cooperation with TMHC. We are part of the same group and both companies manufacture lift trucks. I believe that cooperation can and should be expanded, so that we can benefit from each other's strengths.

For example, quality is a primary concern for both BT

Industries and TMHC. BT's vision is to have the warehouse truck industry's highest quality. In this constantly ongoing effort, we can obtain inspiration and suggestions from TMHC, with its very strong quality image.

Continued High Demand in 2005

BT Industries is well prepared for the strong market to continue in 2005, although we do expect the fast pace of growth in 2004 to slow. Capacity utilization in our plants is very high, and we will bolster our efforts to raise productivity and efficiency and thereby improve our competitive strength. There is still some concern about raw material prices, including for crude steel, which is our most important input good. But because of our established position as the market leader with a strong product range and world-class employees, I am positive about BT Industries' opportunities.

Per Zaunders

President and CEO BT Industries AB

BT Products





Pro Lifter Hand pallet truck



Reflex Reach truck

Opus Low-level order picking truck



Pro Lifter M Motorized hand pallet truck



Opal High-level order picking truck



Orion Electric pallet truck



Vector Very narrow aisle truck



Ixion Stacker truck



Cargo Counterbalanced truck

Raymond Products





Raymond Model 7400 Reach-Fork Truck Reach truck



Raymond Model 112XD Pallet Truck Electric pallet truck



Raymond EAS*i* Pacer Stand-Up Counterbalanced Truck Electric counterbalanced truck



Raymond EAS*i* Orderpicker Truck Order picking truck



Raymond Swing-Reach Truck Very narrow aisle truck

Progress 2 Car Air-Conditioning Compressors



Integrating Cutting-Edge Technologies to Lead the Global Market

Besides serving as a core business of the Automobile Segment, our Car Air-Conditioning Compressor Business also represents one of Toyota Industries' key strategic businesses. Toyota Industries takes advantage of its outstanding technologies to efficiently develop and manufacture top-quality products matched to customer needs, and by doing so has spurred enhancements in comfort and technological advances of vehicles manufactured and sold by the world's premier automakers. Our excellent technologies and quality in car air-conditioning compressors, together with unrelenting efforts to build a global production network, exemplify the spirit of Toyota Industries' "United We Grow" slogan.

Second-to-None Technology Development Capabilities

Toyota Industries' car air-conditioning compressors have earned extensive praise for unrivalled quality and reliability from Toyota Motor Corporation (TMC) and the world's other top automakers. Our Car Air-Conditioning Compressor Business has solidly established its competitive superiority, highlighting technological capabilities that are unmatched by other makers.

Toyota Industries' Car Air-Conditioning Compressor Business boasts a long tradition of creating revolutionary new products in anticipation of changing market needs, which has been instrumental in driving the technological innovation of automakers. Among our accomplishments, in the 1980s we developed a compact, lightweight 10-cylinder swash-plate fixed-displacement compressor that realizes excellent reliability at high operating speeds. In the 1990s we demonstrated our commitment to environmental protection by developing a one-way swash-plate variable-displacement compressor that reduces the load on the engine to raise fuel efficiency. Further, in the late 1990s we introduced an externally controlled variable-displacement clutchless compressor that improves acceleration and saves energy consumption by sensing changes in the external environment.

Toyota Industries' development of car air-conditioning compressors has also focused on addressing such urgent environmental issues as destruction of the earth's ozone layer and global warming. As part of these efforts, in 2002 Toyota Industries and DENSO Corporation (DENSO) developed an electrically driven compressor for fuel-cell hybrid vehicles that uses CO₂ as a substitute refrigerant for hydrofluorocarbons. Also working with DENSO, in 2003 Toyota Industries developed a two-way compressor with a built-in motor for hybrid cars. This compressor is driven alternately by the engine during driving and by a built-in motor during engine stop, thereby realizing an optimal balance between fuel efficiency and comfort when the car air-conditioner is in operation. Further underscoring our technological and competitive superiority, all of these revolutionary compressors were developed and commercialized ahead of our competitors.

Leading the Market with Outstanding Technological Capabilities

Toyota Industries' total global production and sales of car air-conditioning compressors in fiscal 2005 totaled 18.2 million units, representing the top share of the global market.

In the Japanese market, during fiscal 2005 we sold approximately 5.5 million compressors to TMC and other principal domestic automakers, making us the market leader.

In the United States, during fiscal 2005 Toyota Industries sold 7.1 millions of mainly fixed-displacement compressors (including exports and local production) to U.S. automakers and Japanese auto manufacturers in North America.

Meanwhile, in Europe, we sold approximately 5.1 million variable-displacement compressors (including exports and local production) during fiscal 2005.

Automobile Trends and Toyota Industries' Product Development



Topic

Toyota Industries first began producing compressors in January 1960. More than four decades later, cumulative production of car air-conditioning compressors in Japan, Europe and the United States reached 200 million units at the end of April 2004. What's truly remarkable is that while it took around 36 years for cumulative production to reach 100 million units as of July 1996, aggregate production soared to 200 million units within a mere span of eight years.



200 millionth compressor



Toyota Industries is steadily globalizing production bases in its Car Air-Conditioning Compressor Business. We produce compressors through a tripolar structure encompassing Europe, the United States and Japan. We expect that establishing new production bases in the United States and China will further strengthen this structure. Additionally, Toyota Industries licenses production in Asia (excluding Japan) and South America. By carrying out production near our markets, we are better able to supply products precisely tailored to local needs, as well as to reduce shipment costs and exchange rate risks.

Building a Global Production Structure

Responding to growing demand, Toyota Industries is working to build an optimal production structure, with bases in Japan, North America, Europe and Asia.

In Japan, our largest production base, we have built an efficient three-plant integrated production structure in Obu, Higashiura and Kariya, covering all phases from production of materials to processing and assembly and thereby ensuring the stable production of car air-conditioning compressors.

In the United States, Michigan Automotive Compressor, Inc. (MACI)*, our U.S. production base, produces swash-plate fixed-displacement compressors.

In July 2004, Toyota Industries and DENSO jointly established a second North American compressor production base, TD Automotive Compressor Georgia, LLC (TACG), near Atlanta in the U.S. state of Georgia. TACG is slated to commence operations in December 2005. While fixeddisplacement compressors have been the main compressor used in North America, in view of increasing global environmental awareness, Toyota Industries anticipates rising demand for variable-displacement compressors, which offer excellent energy efficiency. Determined to meet this expected higher demand, Toyota Industries established TACG as a new plant specializing in variable-displacement compressors in the southern United States, where automakers have been setting up operations. TACG plans to produce 2 million compressors annually by 2010.

Our European production base, TD Deutsche Klimakompressor GmbH (TDDK), produces swash-plate variable-displacement compressors.

* MACI and TDDK are joint ventures with DENSO. As of March 31, 2005, Toyota Industries held 60% and 65%, respectively, of the shares of these companies.

* TACG is capitalized at US\$27 million as of March 31, 2005. Toyota Industries North America, Inc. (a holding company controlling Toyota Industries' North American operations) invested 65% of this capital and DENSO International America, Inc. (a company controlling DENSO's North American operations) invested 35%.

In May 2005, Toyota Industries established a joint venture, TD Automotive Compressor Kunshan Co., Ltd. (TACK) in Kunshan, as its second car air-conditioning compressor production base in China, another vital geographic region. TACK is scheduled to begin producing variable-displacement compressors in April 2006. Yantai Shougang DENSO Co., Ltd. (YSD, in which Toyota Industries holds a 15% stake), a joint venture established in 1994 with Shougang Corporation, will also begin producing variable-displacement compressors in addition to its current fixed-displacement compressors. YSD will



Obu Plant produces aluminum die casts for compressors.



Higashiura Plant processes compressor pistons.



Kariya Plant develops and assembles compressors.



MACI, Toyota Industries' U.S. production base for car air-conditioning compressors

TACG, Toyota Industries' second North American production base (Artist's rendering)



TDDK, Toyota Industries' European production base

supply compressors to users in northern China while TACK will supply customers in the southern part of the country.



In Europe, the proportion of new cars fitted with car air-conditioners, once relatively low, is rising and now exceeds 70%. Toyota Industries will strive to expand sales by securing new customers and further cultivating new markets, with efforts centered on supplying products that closely match the needs of the European market.

In the United States, we will redouble efforts to secure new orders, while in China, where automobile sales continue to expand, we will actively undertake sales promotion activities in cooperation with DENSO.

All of Toyota Industries' car air-conditioning compressors are supplied to DENSO, which in turn sells these to leading automakers worldwide. DENSO not only sells our compressors as a single unit, but also incorporates them in DENSO's car air-conditioning systems.

Looking Ahead

To ensure future growth, our activities will focus mainly on further penetrating overseas markets.

Fixed-Displacement Type



10S17 compressor (Swash-plate type)



SCS06 compressor (Scroll type)

Continuous Variable-Displacement Type



7SBU16 compressor (Swash-plate type)



7SEU17 compressor (Externally controlled, clutchless type)



For Hybrid Vehicles



ES18 electric compressor (Hermetic scroll type)



ES27 electric compressor (Hermetic scroll type)

Progress **3** Vehicles/Engines



Applying Our Combined Knowledge and Synergies to Produce a Global Lineup of Automobile-Related Products

In close cooperation with Toyota Motor Corporation (TMC), Toyota Industries' Vehicle and Engine businesses are engaged in a wide range of automobile-related businesses, including the manufacture of engines and the assembly of automobiles themselves. Both the Vehicle and Engine businesses are also proactively contributing to TMC's global expansion strategy and working hard to be a reliable, cost-efficient and flexible supplier of engines and automobile-related products.

Recognizing that the source of our competitiveness lies in ensuring outstanding production capability, we will strive to constantly improve this core component of operations while further enhancing our products in terms of quality, cost and technology.

Vehicle Business

Toyota Industries undertakes operations involved in TMC's car production as one of the vehicle assembly arms within the Toyota Group. As a core business that provides stable revenues, our Vehicle Business assembles mainly compact and midsize automobiles under consignment from TMC. Currently, we are manufacturing two models, the RAV4 for Europe and the United States and the Vitz (Yaris in Europe), the latter of which was re-launched in Japan in February 2005 after a full model change.



Chairman Tadashi Ishikawa (then President) speaks at the ceremony for the latest Vitz (Yaris) coming off the production line at TMC's Takaoka Plant in February 2005. In Japan, the vehicle is assembled at the Takaoka Plant and Toyota Industries' Nagakusa Plant.

Our Vehicle Business is renowned for its top-class quality and quick production launch within the Toyota Group. The Toyota Production System ensures that waste is thoroughly removed from production operations and precious plant space is efficiently utilized.

The Vehicle Business's automobile assembly operation began with the Publica (van) and Corolla (van) in the late 1960s and early 1970s. Underpinned by these successful operations, the full-fledged assembly business commenced with the Starlet at the Nagakusa Plant in 1978. We have been manufacturing the Vitz, the successor vehicle of the Starlet, since 1999. The first-generation Vitz prompted an expansion in the compact car market in Japan, and was later recognized as global standard compact car. The latest Vitz packs the most advanced safety

Vehicles

features and environmental technologies and delivers the highest quality bar none.

In producing the most recent Vitz model, we launched production in an unprecedented short period of time to reduce pre-production expenses by incorporating new process improvement measures. We digitalized the preparation process and re-designed its structure so that we could shorten the lead-time and get the job done faster and more efficiently. Specific measures entailed the use of TMC's "Compass" system to reorganize processes and create unified standards. We also utilized three-dimensional data processing to improve processes virtually, and closely reviewed the specifications of processes and equipment. In re-designing the preparation structure, we completely removed every conceivable barrier among relevant manufacturing, production technology and quality control departments involved. Subsequently, by eliminating such factors as communication gaps-an impediment to speed-and delayed decision-making, we were able to implement concurrent engineering where everyone could work in unison to handle multiple tasks at the same time.





Unified standards created using the "Compass" system

Reviewing processes and equipment using virtual three-dimensional data processing

This achievement marks significant progress in realizing greater production enhancement capability to produce high-quality, cost-efficient vehicles, thereby contributing to TMC's car manufacturing operations.



Engine Business

Toyota Industries' Engine Business manufactures diesel and gasoline engines ranging in capacity from 1500 cc to 5200 cc. Our automobile engines are manufactured under consignment from TMC and installed on designated TOYOTA cars. Our diesel engines developed in collaboration with TMC, in particular, offer high power and lighter weight, as well as lower noise and vibration. Moreover, Toyota Industries leads the world in market share of high-output, environmentally friendly industrial engines for lift trucks and other materials handling equipment in addition to engines like gas engine-driven heat pumps. The business also handles a variety of foundry parts incorporating sophisticated technologies.

Thanks to the adoption of the automatic guided vehicle system, our Engine Business maintains a structure that's flexible and responsive to production fluctuations. Quick production launch is another area in which we excel.

The Engine Business is aggressively engaged in the development of environmental technologies. In relation, the proportion of diesel engine vehicles is increasing, especially in Europe, based on the idea that diesel engines are more environmentally friendly in terms of fuel efficiency and lower CO₂ emissions. At the same time, TMC is striving to elevate its presence in the European market, and plans to increase sales by augmenting the diesel vehicle lineup. Toyota Industries aims to contribute to their European strategy through joint development of diesel engines with TMC and production of high-quality diesel engines.

In line with this goal, in March 2005 we started production of 2.2-liter direct-injection AD diesel engines at the Hekinan Plant in Japan and at Toyota Motor Industries Poland Sp.zo.o.* (TMIP), a joint venture in Europe with TMC. The engine is fitted in the Avensis that TMC produces in the United Kingdom and is slated to equip the Corolla that TMC assembles in Europe.

Together with the Hekinan Plant, the Kyowa and Higashichita plants collectively serve as mother plants for overseas counterparts that manufacture engines and foundry parts. In this key role, these plants spearhead the adoption of the latest production technology developed in Japan and facilitate the maturity of the production process and technology before transferring the most current know-how and expertise to overseas bases.

* Toyota Industries' stake is 40%. Toyota Industries is chiefly responsible for production operations at TMIP.

In June 2005, the Higashichita Plant started producing 2.5-liter and 3.0-liter direct-injection KD diesel engines for TMC's Innovative International Multi-Purpose Vehicle (IMV) Project. This TMC project aims to establish a globally optimal production and supply structure by reciprocally supplying assembled vehicles as well as main components of pickup trucks and multi-purpose vehicles among manufacturing bases in Asia, Argentina and South Africa. To produce the engine, we launched the production line for manufacturing and processing of aluminum die cast components and assembly of engines within a short preparation period.

Toyota Industries will continuously make efforts to contribute to the successful establishment of the IMV Project. For example, in May 2004, Kirloskar Toyoda Textile Machinery Private Limited (KTTM), a Toyota Industries subsidiary in India that manufactures and sells textile machinery, started production of components for manual transmissions. KTTM supplies aluminum die cast components for manual transmissions and related components to Toyota Kirloskar Auto Parts Private Ltd. (a joint venture in India with TMC and the Kirloskar Group, in which Toyota Industries has a 26% stake), which in turn



AD diesel engine and TMIP staff





supplies manual transmission systems to the IMV Project.

Toyota Industry (Kunshan) Co., Ltd., our subsidiary in China, is manufacturing foundry parts mainly for automobile engines. To augment production capacity spurred by an increase in demand, in April 2004 we established our second manufacturing base in the country, Toyota Industry Automotive Parts (Kunshan) Co., Ltd. (TIAP), a joint venture in which Toyota Industries has a 60% stake, in cooperation with Taiwan-based Lioho Machine Works, Ltd. and Toyota Tsusho Corporation. TIAP commenced operation in April 2005.



Topic

Highly precise, extremely sturdy yet lightweight, this Toyota Industries-manufactured engine block was installed in the Toyota Tundra, which competed in the NASCAR race held in the U.S. and went on to win the 2004 Craftsman Truck Series title.

Engines



2AD diesel engine (Displacement: 2.2 liters, used in the Avensis)



2KD diesel engine (Displacement: 2.5 liters, used in the Hilux Vigo)



1HD-FTE diesel engine (Displacement: 4.2 liters, used in the Land Cruiser)



2AZ-FE gasoline engine (Displacement: 2.4 liters, used in the Estima)



1FZ-FE gasoline engine (Displacement: 4.5 liters, used in the Land Cruiser)

Progress **4** Electronics



Uniting with Key Electronics Industry <u>Players to</u> Drive Our Future Growth

Toyota Industries manufactures and sells low-temperature polysilicon TFT-LCDs and semiconductor package substrates through joint ventures. Furthermore, Toyota Industries not only engages in the development, manufacture and sales of power electronics components for automobiles such as DC-DC converters but also pursues the development and commercialization of advanced electronics technologies. Viewing electronics as a promising field where further growth in markets is likely, we regard our Electronics Business as an important source of future growth. Accordingly, Toyota Industries will allocate management resources to this field as we commit our concerted energy and effort to ensure the successful development of this business in the years ahead.

Low-Temperature Polysilicon TFT-LCD Panels

ST Liquid Crystal Display Corp. (STLCD) was established as a 50-50 joint venture with Sony Corporation. Since Toyota Industries' investment is not a majority stake, we account for STLCD as an affiliate by the equity method rather than as a subsidiary. STLCD is currently securing a stable level of earnings in spite of the adverse impact of inventory adjustments in the IT and digital industries, and nonetheless, represents one of the core operations of our Electronics Business.

STLCD manufactures small and medium-sized low-temperature polysilicon (poly-Si) TFT-LCD panels mainly for use in digital still and video cameras and mobile phones. It has built an optimal production system by combining Sony's superb LCD development capabilities with Toyota Industries' renowned expertise in quality control and manufacturing technology. Since commencing mass production in 1999, STLCD has won the trust of a broad range of customers for its product quality, cost competitiveness and reliable delivery times, which is further attested to by its milestone achievement of reaching 100 million panels in September 2004.

STLCD's products excel in such basic features as high resolution and low energy consumption. A new display device using Sony's System-on-Glass technology is also being developed. Incorporating the display device and its driver circuits into a single glass substrate, this technology enables highly reliable, lightweight and miniaturized display modules.

Responding to increases in demand, STLCD has continued expanding production capacity. With the proliferation of digital

cameras and camera-equipped mobile phones, we expect a continued rise in demand for its high-performance LCD panels, whereby STLCD additionally invested approximately ¥10.0 billion in 2004 to bolster its production facilities. STLCD's monthly production capacity currently stands at 40,000 panels (600 x 720mm).

In a noteworthy development, Sony acquired the LCD panel manufacturing business of International Display Technology Co., Ltd. and subsequently established ST Mobile Display Corporation (STMD) in March 2005 to manufacture low-temperature poly-Si TFT-LCD panels for mobile devices. Foreseeing sustained growth in demand for the product, Toyota Industries made a 20% capital investment in STMD.



ST Liquid Crystal Display Corp.

Semiconductor Package Substrates

In 1998, Toyota Industries established TIBC Corporation (TIBC), a joint venture with Ibiden Co., Ltd. (Ibiden). This marked our



TIBC Corporation

entry into the business for semiconductor package substrates, which are essential components of PCs, digital still and video cameras, mobile phones, home video game consoles, IC cards and memory cards. Leveraging Ibiden's extensive technologies, TIBC has steadily expanded its product line, manufacturing flexible printed circuit (FPC) substrates for IC cards, wire bonding package substrates and flip chip package substrates.

TIBC's semiconductor package substrates are sold via Ibiden to major integrated device manufacturers (IDMs) and semiconductor-packaging companies in South Korea and Taiwan for use in PCs, mobile phones and other products. TIBC's FPC substrates are also marketed through Ibiden to SIM-card and smart card suppliers mainly in Europe and China for integration into credit cards and telephone cards.

Semiconductor Package Substrate Trend and TIBC's Production Engineering Development



Car Electronics

Toyota Industries' Electronics Division develops and manufactures automobile-related electronics components.

Fitted in Toyota Motor Corporation's (TMC) Prius hybrid car, our DC-DC converters were developed by utilizing our wealth of know-how and experience in the development of control devices for electric counterbalanced lift trucks. Regarded as one of the key devices in hybrid cars, the converter down-converts the high-voltage DC current of the main battery to a lower voltage to recharge the auxiliary battery and supply power to lights, wipers, the horn and other in-car devices. The division also develops and manufactures compact, low-cost DC-DC converters for electric power steering (EPS) systems for hybrid cars, which are installed in the TMC's Harrier Hybrid and Kluger Hybrid. Other products include a broad range of DC-AC inverters for cars with hybrid and conventional engines that convert currents into the same voltage as household electricity.

Looking to the future, we expect that strong worldwide

Car Electronics Products for Hybrid Cars



demand for environment-friendly vehicles will likely be accompanied by steady growth in demand for hybrid cars. With this in mind, the Electronics Division will redouble its efforts to build a strong position as a manufacturer of power electronics devices for hybrid cars.

New Electronics

The New Electronics Sub-Division handles the R&D and commercialization of various electronics technologies. For instance, the sub-division undertakes joint research on radio tuners under a business alliance between Toyota Industries and Niigata Seimitsu Co., Ltd. Together, we have developed and commercialized ultracompact, power-efficient FM radio tuner utilizing "Full CMOS RF IC technology." This device integrates all radio tuner functions, including "radio frequency" circuits, into a single "integrated circuit" chip using "complementary metal-oxide semiconductor" process technology. The tuner is optimal for use in such portable devices as mobile phones and MP3 players. The New Electronics Sub-Division also develops and manufactures small wireless LAN modules compatible with next-generation communications platforms. Further, the sub-division developed organic light-emitting diodes (OLEDs) that achieve an ideal balance in terms of excellent color reproduction, brightness and life span. The commercialization of an OLED backlight for LCDs is currently underway.

Toyota Industries built a new base in Anjo, Aichi Prefecture, for undertaking R&D and production of electronics products. We intend to gradually consolidate our electronics-related R&D and production facilities into the new Anjo Plant, which is currently working on pilot production in the run-up to commercialization of OLED backlights.

STLCD



Low-temperature polysilicon TFT-LCDs

TIBC



Wire bonding package substrate

Car Electronics



DC-DC converter for the PRIUS

New Electronics



Flip chip package

substrate

DC-DC converter for electric power steering for the Harrier Hybrid and Kluger Hybrid



Flexible printed circuit

(FPC) package substrate

DC-AC inverter for the Alphard Hybrid and Estima Hybrid (1.5kW)



DC-AC inverter for the Tacoma (400W)



IC chip (left) and radio tuner module incorporating the IC chip (right)



Wireless LAN module



Lighting for newscasters (Product developed using white OLED technology)



White OLED light source

Progress 5 Logistics Solutions



Building a Proprietary Business Model to Provide Optimum Logistics Solutions

Companies are increasingly striving to reduce their total logistics costs and improve overall logistics. To address such needs, Toyota Industries is undertaking the Logistics Solutions Business in Japan. By closely examining the flow of goods from the manufacturer to the consumer, we seek to create a proprietary business model that optimizes the entire process. Our track record includes a major chain retailer for whom we reformed in-store operations from the standpoint of shoppers. Also, to offer customized logistics solutions best suited to individual customers, we carry out logistics operations independently or via collaborative alliances that partner us with a variety of industry players. Through continuous improvements, reduced costs and increased efficiency, we are leading the way in ensuring smooth logistics operations for customers.

Applying Proprietary Know-How in the Logistics Solutions Business

In undertaking the Logistics Solutions Business, we offer a comprehensive solution to customers' logistics, from planning to the operation of distribution centers to improving their entire supply chain. This is the field of business where we can take advantage of our experience acquired through the production and sales of materials handling equipment as well as our production know-how as exemplified by the Toyota Production System. Toyota Industries regards "logistics" as an ongoing process that continues until a product passes the checkout counter at a retail store. By examining the optimum solution from consumers' perspectives, we aim to build proprietary business models that enable far-reaching improvements in the flow of goods, even through reforming logistics within retail outlets.

Providing Optimum Logistics Solutions Matched to Customer Needs

Executed under the initiative of the Advanced Logistics Division, Toyota Industries is exploring a variety of business formats for providing optimal solutions for individual customers. In addition to the establishment of Advanced Logistics Solutions Co., Ltd. (ALSO) as a wholly owned subsidiary, other avenues include engaging in planning, total design and operation of distribution centers through joint ventures with customers and logistics operators, as well as acquiring equity stakes in logistics operators.

Principal Initiatives

March 2002:

Advanced Logistics Solutions Co., Ltd. (ALSO) established as a wholly owned subsidiary to plan logistics and operate distribution centers.

November 2002:

Commenced operation of a room-temperature distribution center for convenience stores commissioned by Mitsui & Co., Ltd.

November 2002:

Acquired a 5% share in Yukijirushi Access, Inc., a major dairy foods wholesaler. (Yukijirushi Access changed its name to Nippon Access, Inc. in April 2004.)

Invested in Teion Shokuhin Ryutsu Inc., which engages in storage and delivery of frozen and chilled foods (in which Toyota Industries has a 60% stake via indirect investment through ALSO).

October 2003:

KTL Co., Ltd. (KTL) established as a joint venture with Kokuyo Logitem Co., Ltd., a logistics subsidiary of Kokuyo Co., Ltd. (in which Toyota Industries has a 50.5% stake).

November 2003:

KTL commenced operation of the Kokuyo Tokyo Metropolitan Area Integrated Distribution Center (IDC).

March 2004:

Acquired a share of Fuji Logistics Co., Ltd. (Fuji Logistics, in which Toyota Industries has a 26% stake, with shares acquired from Fuji Electric Holdings Co., Ltd.).

April 2004:

TF Logistics Co., Ltd. established as a joint venture with Fuji Logistics for the transport and maintenance of information devices (in which Toyota Industries has a 51% stake).



Toyota Industries' Expanding Logistics Solutions Business





Diversifying Our Business Fields through Strategic Consolidation

On a different front, we took an important step in further bolstering our Logistics Solutions Business in March 2005 by acquiring Asahi Security Co., Ltd. (Asahi Security) and making the company into a wholly owned subsidiary. Asahi Security offers comprehensive cash management outsourcing services, including cash collection and delivery, cash proceeds management and equipment security, for the retail, services and transportation sectors. The acquisition is an excellent example

of our approach to broadening the spheres of our Logistics Solutions Business to cover the "flow of cash" received from consumers in exchange for merchandise in retail stores. We believe this move is in line with our business strategy for providing solutions that enable customers to optimize their overall supply chain.

We are ambitiously allocating management resources to our Logistics Solutions Business, applying our full efforts to accelerate the growth of this business and make it a pillar of Toyota Industries' future operations.



Operational Flow of Cash Collection/Delivery Service at Asahi Security

Asahi Security provides comprehensive cash management service. Utilizing specially reinforced vehicles and the Asahi VEDS Center*, Asahi Security collects sales proceeds from restaurants, supermarkets, convenience stores and other retail outlets, sorts the sales proceeds, sends sales reports to respective head offices/headquarters, makes deposits into respective bank accounts, and sorts and delivers change. By outsourcing cash management to Asahi Security, customers can focus on their sales activities.

* VEDS Center: Short for Valuables Exchange & Delivery System Center. Prepares change and sorts sales proceeds.

Progress **6 Textile Machinery**



Our textile machinery is broadly divided into spinning machinery, which spins bundles of fibers into yarns, and weaving machinery, which weaves yarns into fabric. To meet ever more sophisticated market needs, we incorporate advanced control, communications and mechatronics technologies into our machinery lineup. Through such endeavor, Toyota Industries

Delivering Leading-Edge Performance Backed by Proven Expertise

The history of the Toyota Group began with the invention of an automatic loom by company founder Sakichi Toyoda. Since then, the Textile Machinery Business, Toyota Industries' founding business, has had a tremendous impact on the development of the global textile industry. Today, the Textile Machinery Business develops, manufactures and sells superior-quality products the world over. With state-of-the-art technologies and finely tailored services, Toyota Industries strives to meet evolving customer needs.

has received global high acclaim for its mainstay air-jet looms, which boast the top global share, as well as for its ring spinning frames and roving frames.

Please visit www.toyota-industries.com/textile for further information.

Weaving Machinery

Toyota Industries manufactures and sells two types of weaving machinery: air-jet looms, which insert weft yarns using air, and water-jet looms, which use water for the same effect. We provide customers around the world with state-of-the-art products that we believe meet and exceed basic performance requirements demanding high speed and reliability as well

Toyota Industries offers spinning machinery, including high-speed ring

spinning frames and roving frames, to meet a wide variety of customer

needs. These products excel not only in spinning high-quality yarns but

also providing superior productivity. We also produce and sell drawing



JAT710 air-jet loom

Spinning Machinery



LW600 water-jet loom

as incorporate such advanced functions as monitoring and remote setting of the machines via the Internet. Toyota Industries also produces such preparatory machinery for weaving as sizing machines, which enables uniform, high-quality sizing of yarns.





Sizing machine for spun yarn

Filamaster Sizing machine for filament yarn

frames and combers.

Mackee

Toyota Kirloskar Textile Machinery Private Limited, our subsidiary in India, manufactures ring spinning frames for the local market.



DX8 drawing frame



VC5A comber



RX240NEW ring spinning frame

FL100 roving frame

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Progress 7 Automotive Stamping Dies

Creating Advanced Technology for Manufacturing Automotive Stamping Dies

Toyota Industries' Machinery & Tools Sub-Division designs and manufactures stamping dies for Toyota Motor Corporation (TMC), Toyota Industries' Vehicle Division and TOYOTA Material Handling Company (TMHC). Combining the skills of its experienced engineers and advanced digital technology, including simulation, the sub-division is receiving high acclaim for its manufacturing and quick delivery of superior-quality stamping dies. In recognition, the sub-division has regularly received TMC's "Super" Award for Quality Performance. Setting its sights on the potential growth of the Chinese automobile market, Toyota Industries also established Lio Fung Tool & Die (Kunshan) Co., Ltd. (LFTD, in which Toyota Industries has a 35% stake) as a joint venture with Taiwan-based Lioho Machine Works, Ltd. LFTD has been in operation since April 2004.

Through manufacturing stamping dies, Toyota Industries is exploring ways to support TMC's automobile business and contribute to their global strategy.



Hood panel trim die



Rear door outer draw die

Progress 8 Manufacturing Equipment

Independently Producing Critical Manufacturing Equipment

Toyota Industries produces its own essential manufacturing equipment such as machining and assembly equipment. Our Mechatronics Systems Department produces customized manufacturing equipment for the Compressor Division, Engine Division, TMHC, our affiliate ST Liquid Crystal Display Corp. and other divisions. This practice not only protects proprietary production know-how but also allows participation in their product development processes so that we can develop manufacturing equipment in short order and facilitate the quick launch of respective production lines. The department's business serves as a source of competitiveness for the entire Toyota Industries Group.



NC machine tool for aluminum parts



Circuit board inspection system with high-resolution line scan camera