

Rack Sorter P (Automated storage and retrieval system, pallet type)



Geneo (1-3.5 ton Internal Combustion Forklift)
(8-Series and Toyota Toner overseas)

Materials Handling Equipment Business

Putting the Customer First, with the Themes of "Safety", "Environment" and "Ease of Operation"

Environmental Responsibilities

Forklifts

- To help curb global warming by conserving energy during operation
- To prevent air pollution by reducing emission of exhaust gases
- To dispose of hydraulic oils and spent batteries properly
- To develop and supply products that comply with the safety and environmental standards of each region in which our products are sold

Automated Storage and Retrieval Systems and Automatic Guided Vehicle Systems

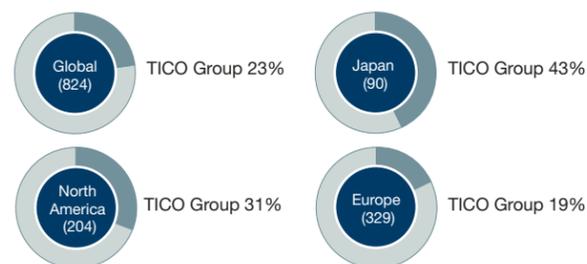
- To help curb global warming by reducing the level of electricity consumed during operation
- To reduce noise during operation
- To dispose of hydraulic oils and spent batteries properly

Social Responsibilities

Forklifts, Automated Storage and Retrieval Systems and Automatic Guided Vehicle Systems

- To maintain and improve the reliability and durability of our products
- To prevent adverse impacts on the health of users by minimizing emissions of exhaust gases, noise and other factors
- To provide after-sales service to enable customers to continue to use our products safely and efficiently

Graph 1 Toyota Industries' Share of Global Forklift Market
January-December 2006 (thousand units)



Fulfilling Our Responsibility as the Global Leader in Forklifts

Toyota Industries recognizes our responsibility as a global leader in forklifts. In order to fulfill this responsibility, we continually enhance our activities in the area of research and development of new products that anticipate customer needs, and ensure the continuous improvement of quality, sales, and service to achieve customer satisfaction. We expect to continue to take the initiative and contribute to society by attempting to ensure that we meet this responsibility.

In fiscal year 2006, the Toyota Material Handling Group (TMHG) began operations by combining the operations of TOYOTA Material Handling Company and our overseas subsidiary, BT Industries. This framework enables these two companies to increase their mutual understanding through joint development of new products and production preparation. Based on the principle of "the customer comes first", TMHG will pursue business activities that will continue to gain the confidence of our customers.

Pursuing Customer Benefits Through Actual Observation and Analysis of Customer Operations

Forklifts play an important role in our customers' manufacturing and distributing processes, so our customers expect their forklifts to work continuously without breaking down. We believe that this makes reliability and durability the two key factors that our customers expect from our forklifts. We gave reliability and durability top priority in the development of the Geneo, launched in Japan in September 2006, with an emphasis placed on safety, the environment, and ease of operation.

We have built a global network for sales and after-sales service to better serve our customers. The forklift industry differs from the auto industry, where customers go to dealers' showrooms to choose a vehicle. Our sales staff and service mechanics actually visit our customers' factories, warehouses, and other premises where our products are used to observe and analyze our customers' needs, operating conditions, and environment. They then propose optimized solutions, taking into account efficiency, safety, environmental performance, and other factors. Other support services that we offer our customers include regular servicing, recommendations for servicing and repairs appropriate to the operating situation, and safety training seminars. (See topics.)

To meet our customers' demands for improved efficiency and quality of materials handling services, we have also developed a wide range of materials handling equipment and logistics management systems, as well as proposing improvements based on the principles of the Toyota Production System (TPS). By helping our customers to ensure a safe, efficient, and well-organized workplace, we hope to help them reap the benefits of using our products, such as simultaneous cost reductions and efficiency improvements, the prevention of potential losses from down-time or low efficiency, and of course, a safe working environment.

Supporting Our Distributors and Dealers Worldwide

As part of our commitment to providing better sales and after-sales service, Toyota Industries provides comprehensive support to its distributors and dealers throughout the world. We provide materials for sales promotions and solutions proposals to help sales staff to provide even better proposals to our customers. Other ways in which we help our distributors to improve the quality of their sales and after-sales service include the introduction of a certification program to facilitate proper recognition of skills, and to motivate sales staff and service mechanics, and the provision of well-organized training to upgrade their skills.

Considering the Work and Global Environments

Forklifts are closely linked to customers' costs and their working environment, therefore highlighting the need for environmental consciousness. In internal combustion engine forklift development, we have made efforts to improve fuel efficiency, decrease the amount of harmful substances, such as NOx, found in the emissions, developed DPFs (diesel particulate filters) and low-emission trucks (which use LPG and CNG), and reduced overall noise levels. Electric forklifts have also become quite popular, as we have achieved the same level of performance by utilizing an AC motor system that extends running time and improves energy efficiency.

As customers become more and more aware of their working environments, more electric trucks are being introduced for indoor use. Certain challenges remain in this area however, such as initial costs and the down-time required for recharging batteries. We are also promoting the sale of low-emission trucks (that use LPG and CNG) and the development of environmentally conscious

products. R&D activities to ensure cost reductions, better performance, and shorter recharging time of electric trucks are other examples of our efforts.

Hybrid technology is another greatly anticipated technology for achieving major improvements in the fuel efficiency of internal combustion engine forklifts. Drawing on the understanding of hybrid technology and parts available within the Toyota Group, Toyota Industries has developed a highly efficient hybrid system for forklifts that is reliable, durable and inexpensive. A concept model of this hybrid forklift was revealed at Logis-Tech Tokyo 2006 in September. We believe that the hybrid forklift provides the same performance as conventional internal combustion forklifts, but with major improvements in fuel efficiency, providing excellent performance in terms of both the environment and economy. Technological development for the commercialisation of the hybrid forklift is continuing. In 2005, we exhibited the prototype of our fuel-cell forklift and attracted a great deal of attention. With the comprehensive technology of the Toyota Group, we are working toward developing it for practical use.

We are also promoting recycling and responsible disposal activities together with our dealers. Forklifts have a high recycling rate because they are made mainly of steel and iron. However, proper treatment by specialist companies is necessary when disposing of oil used in the hydraulic systems for loading and unloading, and the lead batteries used in electric trucks.

We ensure that dealers carry out the necessary disposals properly when performing maintenance, parts replacement, and trade-ins. As the number of electric forklifts in operation continues to increase, our industry must deal with the issue of proper disposal of spent batteries.



Hybrid Forklift (Concept Model)

TOPICS The Start of a Driving Program for Forklift Operators

Spreading safe driving skills and contributing to safe operation and the elimination of accidents

Toyota Industries has continued to improve the "safety" of forklift. It has developed an original system, "SAS"^{*1}, to contribute to safe operation and improve operating efficiency. This system has been equipped on the Geneo series of forklift and has achieved a level of safety that is top in the world. However, many of the accidents that occur at the worksite are caused by human error. Therefore, it was thought that safety countermeasures are necessary not only from the machinery side, but also that maintaining and improving the safety awareness of the operators is essential as well. In accordance with this, the "TOYOTA Material Handling Customer Center"^{*2} (located in Ichikawa City, Chiba Prefecture) our general exhibition facility for materials handling equipment, was expanded and a "safe driving program" aimed at re-educating operators about safe driving was started at this facility.

The "safe driving program" is targeted at certified operators and they will learn from real examples of past accidents about the kinds of operations that are dangerous. They will also receive thorough reinstruction about safe driving through special training in how to predict dangerous outcomes before they occur. This re-education for certified operators is a proactive initiative to eliminate accidents and

TOYOTA Material Handling Company will develop an appropriate program which utilizes its many years of experience as a forklift manufacturer. This program is planned to start during 2007 and an estimated 1400 operators are expected to attend.

^{*1} System of Active Stability: This is our proprietary system that provides superior stability during turning and load handling by detecting various pieces of information, such as the angle of the steering wheel and the weight and height of the load being carried, and then controlling them.

^{*2} TOYOTA Material Handling Customer Center
Location: Ichikawa City, Chiba Prefecture
Start of operation: April 2001 (the new annex was completed in April 2007)
Site area: 5,282 m²
Main building (4 floors) Floor space 6,273 m²
New annex (3 floors) Floor space 2,149 m²

