

At present, THK's business is highly focused on capital goods sectors such as machine tools, industrial robots and semiconductor production equipment. Our various ongoing new business development initiatives aim to broaden this base into consumer goods and related sectors with the goal of expanding usage of THK products. We have already established businesses in areas such as automotive components, seismic isolation devices and parts for consumer appliances.

FAI Division



The THK Group manufactures and sells parts that contribute to higher automotive safety.

Expanding usage of THK products as automotive components

FAI stands for Future Automotive Industry. THK established the FAI Division in 1999 with the aim of expanding usage of the Company's products as automotive components. The business has grown steadily since then, posting sales of approximately ¥7.0 billion in fiscal 2006.

Link balls, which are the main product currently sold by the division, are used in automobile undercarriages as the joint sections connecting the stabilizers to the suspension, and in other related applications. Many leading automakers in Japan, the Americas and Europe use link balls. THK's advantage in this area is an integral molding process for the production of aluminum die-casts. This makes the link balls much lighter than conventional steel versions, as well as highly resistant to corrosion or wear caused by abrasion. Awareness is growing steadily among automakers of the benefits offered by THK's high-performance products. In fiscal 2006, the division secured the use of THK link balls as standard parts in luxury models made by several of the world's leading automakers. This success reflected not only superior performance, but also the high level of THK capabilities in areas such as quality control and technical support.

The FAI Division also sells LM guides for use in the driver's seats of special vehicles adapted for people with physical disabilities. LM guides have attracted praise from customers in these settings because they play a critical role in facilitating the seat movements to raise and rotate the driver. The division aims to leverage these successes and positive endorsements to generate further growth in sales.

Production, sales and other business management functions are now in place across THK to support FAI Division operations. Business development efforts are focused on each of the major regions of Japan, the Americas and Europe. Divisional operations are horizontally integrated across each region, affording central control of functions such as resource management, internal communications and human resource development.

Expanding the ranges of models and automakers supplied

In May 2007, Rhythm Corporation joined the THK Group. The new "transport equipment parts" business segment comprises the operations of Rhythm plus those of the FAI Division. The aim in fiscal 2007 is to expand this business further. To achieve this goal, the FAI Division is working together with Rhythm (as detailed on p. 21) while at the same time trying to expand the number of vehicle models and automakers using link balls supplied by THK. The division continues to build on past commercial successes by developing smaller and lighter components of higher quality.

As well as seeking to increase the number of models that use link balls supplied by THK, the division is also working to expand usage as automotive components of other products such as LM guides, ball screws and actuators.

As a trusted supplier to automakers, the FAI Division is focused on achieving balanced growth across all business activities, from sales and purchasing to production and quality control. The future aim is to continue introducing products while achieving consistently high quality throughout the world.

Pursuing synergies with Rhythm

—Targeting first-tier supplier status through distinctively world-class products offering unrivaled quality, zero-defect/delivery guarantees and novel technological possibilities

The complementary strengths of Rhythm and THK

Rhythm and THK both manufacture automotive parts that are mainly used in the undercarriage sections of vehicles. The two companies have numerous mutually complementary strengths in this field. Rhythm has developed forging technologies and superior quality control systems to facilitate the supply of components to extremely strict dimensional and strength tolerances. Many of Japan's automakers source critical safety components for vehicle undercarriages from Rhythm, and the company has a high share of the Japanese market for suspension joints and related products. Besides Japan, Rhythm also has a number of bases in overseas markets such as North America and China. In contrast, THK's strengths are in casting technology for aluminum die-cast production of lightweight automotive parts in complex shapes. THK has a global production and sales network, and has already established a track record with numerous automakers around the world.

Exploiting an advantageous position within a changing business environment

Amid major transformation of the automobile industry business environment, THK aims to respond rapidly and precisely to ongoing changes by fusing the strengths of both companies, thereby boosting the global presence of the THK Group as an automotive parts supplier.

The first change involves rising vehicle demand coupled with an expansion in the number of major regions of production. While North America, Western Europe and Japan are still critical markets, recently vehicle demand has been growing rapidly in emerging regions such as South America, Eastern Europe and China. Production by leading automakers in these dynamic regions is expected to increase further going forward. Against this backdrop, THK plans to leverage its expanded global production and sales systems to develop proposal-based sales activities aggressively across world markets. By supplying highly competitive products, THK aims to expand both the number of automotive sector clients and the range of vehicle models in which THK products are used.

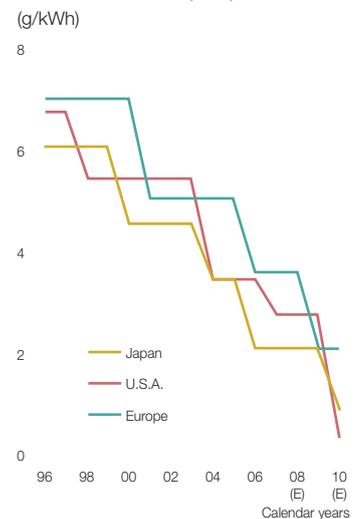
The second key change involves stricter environmental regulations and the increased interest of consumers in environment-friendly vehicle performance. These trends promise to stimulate efforts by automakers to reduce the weight of automobiles and to increase fuel efficiency. THK has developed link balls made using an integral aluminum die-cast process that are substantially lighter than conventional steel parts. THK products can therefore play a part in boosting fuel efficiency.

By collaborating with Rhythm, the future aim is to combine THK's aluminum die-casting technology with the forging technology of Rhythm to develop modularized products that will come to define the industry's benchmarks.

Automakers also expect ever-increasing levels of safety and reliability from parts suppliers as automotive components continue to reach new heights in terms of performance and multi-functionality. THK is working to upgrade its quality assurance systems worldwide in response to automakers' demands through mutual sharing of QC and technical support systems for critical safety components developed by Rhythm over many years with THK's comprehensive capabilities.

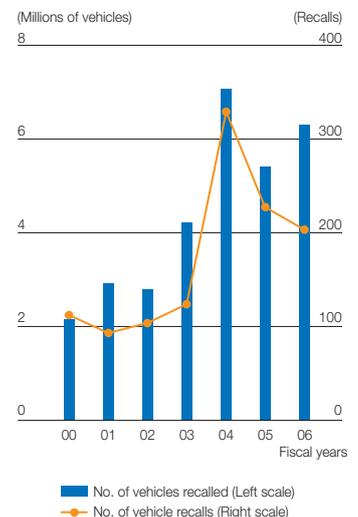
In the transport equipment parts business segment, THK is targeting first-tier supplier status through these kinds of initiatives. The major focus is on the development of products that provide the de facto standard within the industry based on guarantees of zero defects and zero delivery problems along with highly original benefits deriving from the innovative combination of advanced THK and Rhythm technologies.

Trends in automobile exhaust emission controls (NOx)



Vehicle recalls and recalled vehicle units (domestically produced models)

Source: Statistics published by the Japanese Ministry of Land, Infrastructure and Transport



ACE Division



THK focuses on the manufacture and sale of seismic isolation devices that protect people and property from the threat of earthquakes.

Rotary technology applied to dampen and absorb seismic vibration

ACE stands for Amenity Creation Engineering. The ACE Division was created in 2001 based on the concept of “developing technology to realize creative living spaces for greater comfort.” Applying the original THK technology that lies at the heart of LM guides, the ACE Division markets seismic isolation devices that protect human life and property from the threat of earthquakes.

Seismic isolation devices can help structures dampen or absorb the vibrations and shaking caused by an earthquake. THK’s products are unique in that they can be deployed in a wide range of structural types, from high-rise buildings to low-rise detached residences. Recently, alongside commercial buildings and residential housing, there has also been an increased use of such devices in historical structures such as temples and shrines.

Besides actively promoting sales of these devices to construction companies, homebuilders and architectural firms, the ACE Division also offers technical installation support, product development, design and other services. The division’s annual sales are approximately ¥1.0 billion. The number of buildings with such devices installed continues to rise steadily.

Continuing and upgrading PR campaigns to encourage uptake

The sales target for fiscal 2007 is ¥2.0 billion. To achieve this figure, the ACE Division plans to continue using PR campaigns to promote the benefits of THK’s seismic isolation devices to corporate clients such as construction companies, homebuilders and architectural firms. In addition, among other activities, the division aims to promote more widespread product uptake by holding seminars aimed at consumers to explain to people the importance of installing seismic isolation devices, along with the advantages offered by THK technology and products.

A related area where interest among Japanese companies has recently grown is in the development of business continuity plans. From fiscal 2007, the ACE Division plans to focus greater sales efforts on marketing products that are tailored to such needs. One specific objective is to generate sales of seismic isolation devices for protecting operating assets such as PCs and servers from damage caused by earthquakes. THK has applied expertise in this field to develop products that are ideally suited for this purpose. Compared to products currently on the market, THK’s high-performance seismic isolation devices reduce the vibrations caused by an earthquake to a much greater extent.

Elsewhere, to promote increased uptake of seismic isolation devices, the ACE Division continues to review fabrication methods with the objective of lowering base production costs further.

CAP Project



THK is developing new markets for products with consumer-related applications.

Developing the core concept of “electric-powered living”

THK established the CAP (Consumer Application Products) Project in 2002 with the aim of developing applications for THK products in end-use consumer applications and of cultivating new markets. Based on the core concept of “electric-powered living,” THK is working to create business opportunities in a wide range of fields, principally consumer lifestyle-related goods, robots and universal design equipment. Efforts are focused in part on developing new applications for THK products to meet electric-powered motion-related market needs with existing consumer appliances. Another core focus is the development of future-oriented products to stimulate the growth of entirely new markets for THK.

THK has developed numerous original products that are finding applications in aspects of daily life. Examples include lens-shift units for commercial LCD projectors; a special rod actuator (CRES type) enabling the vehicle rooftop cargo carrier with an electric opening and closing mechanism; self-closing rails designed to fit refrigerators and electric induction hobs; a self-raising flap for use with coin-operated parking meters to prevent vehicles from moving while parked; and parts for amusement machines. Sales were approximately ¥0.7 billion in fiscal 2006.

Development of various applications to expand sales

The business environment for the CAP Project harbors significant growth potential. THK sees considerable scope for using specialist linear motion technology in automation-related applications for consumer appliances and related areas. The growing market for robots also offers many opportunities. Based on this potential, the CAP Project sales target for fiscal 2007 is ¥1.2 billion. To achieve this figure, THK is developing the lineup of CAP Project products listed in its catalog and developing various applications to try to generate further sales of products that have already been a hit with customers.

Furthermore, the CAP Project is progressing with the development of groups of electronically controlled high-value-added products. At the same time, by upgrading the provision of engineering services from the planning to mass-production phases, THK is seeking to add value from the customer's point of view by, for example, helping to reduce the number of technical issues that must be addressed within product development programs. In addition, THK is devoting resources to develop products to meet specific regional needs in certain markets outside Japan.

MRC Center



Development of cutting-edge technology in areas such as surgical assistance robots

Creating future sources of profit

THK set up the MRC Center in 2000 with the aim of creating future pillars of earnings growth through the development of highly original products. As suggested by its name, the facility is engaged in creating new technology that spans the fields of mechatronics, robotics and computing. Currently the center is focused on development of surgical assistance robots and other advanced technology, including humanoid robots. The future market potential in these areas is large. The MRC Center is working to exploit the advantages provided by THK's technologies.

One product that has emerged from ongoing development programs is a software package called "Mister C Motion Designer." This product enables robots to move smoothly and precisely along gentle curves. In technical terms this involves simultaneously controlling the trajectory of movement based on clothoid curve modeling, along with acceleration and time. This success adds a new base technology for smooth, precise robot movement to the specialist technical expertise in linear motion solutions that THK has amassed.

During fiscal 2006, as part of a joint research project with a university, the MRC Center made substantial progress in the commercialization of one type of surgical assistance robot. The mechatronics developed for this robot enable considerably more complex and precise movements than achieved previously. Elsewhere, the center is also involved in a collaborative project involving groups from industry, academia and the public sector to develop humanoid robots for applications in cell-based production methods.

A greater focus on commercialization

In medicine, the trend toward advanced technology and the need to control medical spending as society ages both point toward greater use of robots in the future. Increased introduction of robots is also widely expected in industry, reflecting demand for further efficiency gains within production systems. THK is focusing development efforts in both these areas.

Full-scale commercialization of surgical assistance robots is now under way. The major issues are ensuring conformity with the legal safety requirements in Japan, reduction in weight, and the development of materials that are compatible with the widespread use of X-rays and magnetic fields in medical settings. With humanoid robots, among other issues, efforts are now focusing on improving motive functions and on the development of more advanced adaptive control functions.

In fiscal 2007, by addressing these issues, THK aims to accelerate progress toward early commercialization. This not only means speeding up internal development processes, but also involves strengthening cooperative links with other groups, including companies and external research institutions.