

**NEW BUSINESS REVIEW**

## ACE Division

### Broad possibilities for THK's seismic isolation technology

ACE stands for Amenity Creation Engineering. Guided by the concept of “developing technology to realize creative living spaces for greater comfort,” the ACE Division has sought to apply THK’s original linear motion technology since its establishment in 2001. The division develops and markets seismic isolation devices that protect human life and property from the threat of earthquakes. In addition, steps are being taken to promote increased use of the division’s products and technologies in home automation-related devices.

Seismic isolation devices help buildings to dampen or absorb the vibrations and shaking caused by an earthquake. THK supplies a broad lineup of such devices, which apply basic technology such as LM guides and ball screws. These products are unique in that they can give adequate earthquake protection to a wide range of structural types, from high-rise buildings and low-rise residences to historical structures such as temples and shrines.

A related area where interest among Japanese companies has grown recently is in the development of business continuity plans (BCPs). Applying THK’s original expertise in seismic isolation technology, the division is selling seismic isolation platforms for protecting operating assets such as PCs and servers from damage caused by earthquakes. Compared with rival products on the market, THK’s high-performance seismic isolation platforms ensure greater stability when an earthquake hits by preventing any damaging twisting or vertical motion.

In fiscal 2009, the ACE Division continued actively conducting a nationwide PR campaign with the aim of further expanding the installed base of seismic isolation devices. This included the use of earthquake simulation vehicles at housing exhibitions. Elsewhere, the division engaged in PR



activities targeting the corporate sector to emphasize the superiority of THK seismic isolation platforms in server protection applications.

These PR campaigns helped to raise awareness of seismic isolation systems based on THK’s original linear motion technology and resulted in a steady increase in the uptake of divisional products.

### Upgrading promotional campaigns and sales activities amid growing demand for BCP-related products

Amid increasing general awareness of the need to implement disaster-related contingency measures, THK expects demand for seismic isolation devices to continue growing over the long term.

To stimulate demand, the ACE Division plans to continue using PR campaigns to promote the benefits of THK’s seismic isolation devices to architectural firms and homebuilders. The division also aims to promote more widespread product uptake by continuing to organize seminars for consumers to help explain to people the importance of installing seismic isolation devices, along with the advantages offered by THK technology and products. The division also plans to make more effective use of earthquake simulation vehicles in marketing activities. In addition, in an environment where corporate demand for BCP-related products continues to increase, the division is focusing on expanding sales of seismic isolation platforms to protect specific pieces of equipment such as servers.



## FAI Division

### Targeting higher earnings from the transportation equipment-related business segment

FAI stands for Future Automotive Industry. THK set up the FAI Division in 1999 to expand usage of the Company's products as automotive parts. THK's link balls, which are the division's mainstay product, employ an integral molding process for the production of aluminum die-casts making each link ball much lighter than their conventional steel equivalent. At the same time, the Company's link balls are highly resistant to corrosion and abrasion. This product is attracting keen interest from major automobile manufacturers both in Japan and overseas as the demand for fuel efficient vehicles continues to rise.

In 2007, RHYTHM CORPORATION, a company that boasts superior forging technologies, was included in THK's scope of consolidation as a subsidiary company. Currently the operations of the FAI Division complement the strengths of RHYTHM. THK is working to develop the transportation equipment-related business as an integrated whole. The THK Group is targeting a global presence as an automotive parts supplier through the pursuit of synergies with RHYTHM to enhance the Group's ability to respond rapidly and precisely to changes in the global automotive market.

### Pursuing synergies with RHYTHM

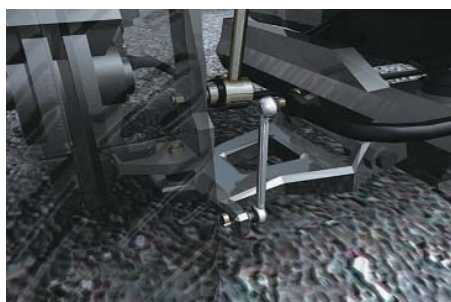
Projected major developments in the transportation equipment-related sector over the medium-to-long term include significant growth in vehicle demand within emerging markets and in the number of major vehicle production regions. Another key change is an ongoing trend to make vehicles lighter and more energy efficient, reflecting greater global interest in environmental protection and hybrid and electric vehicles are expected to gain in popularity in the future. Against this backdrop, THK continues to further develop those synergy effects to accrue from its relationship with RHYTHM. In this manner, the Company is working to expand the use of its products across a wider spectrum of vehicle models.

Among a host of specific benefits to accrue to date, THK has witnessed increased efficiency in the handling of



orders. From a management perspective, a fewer number of people are attending to a larger volume of orders. This has been achieved by consolidating the corporate function at RHYTHM's head office, and has further helped in building a structure that increases the speed of product use. From the standpoint of sales, proposals with respect to RHYTHM's products were implemented using THK's sales channels as well as its established trading relationships with domestic and overseas manufacturers of finished vehicles. These efforts have resulted in an upswing in inquiries laying the foundation for future order growth. Moreover, steps have been taken to consolidate overseas branches and to bolster collaboration among staff. Turning to production, the manufacture of THK's link balls began at RHYTHM's head office factory in Hamamatsu and China factory in Guangzhou. By leveraging THK's outstanding production technologies accumulated as a leading manufacturer of LM guides together with the production management techniques of RHYTHM, a manufacturer of auto parts, successful efforts have been made to secure highly cost competitive production. On the technology front, subcommittees were established to better promote the interaction and exchange of the technological expertise of both RHYTHM and THK. As one example, RHYTHM's forging technologies are being applied to the manufacture of LM guides, a core THK product. On this basis, the Group is implementing activities aimed at expanding use in consumer product areas and enhancing the cost competitiveness of LM guides.

In this manner, the Group is working diligently to draw out synergies between RHYTHM and THK at each of the management, sales, production and technology levels. In an effort to complement the aforementioned initiatives and to further boost collaboration, RHYTHM changes in its corporate name to THK RHYTHM CO., LTD. in June 2010. Looking ahead, by accelerating initiatives aimed at identifying and developing synergies, the Group plans to increase profitability in the transportation equipment sector while at the same time expanding the use of LM guides.



## **IMT Division**

### **Advancing boldly into the components business**

The Innovation Mechatronics Technology (IMT) Division was established in June 2009 with the aim of expanding the Group's unit products and electric actuator businesses, areas which are projected to experience future market growth. Based at the Company's Technology Center located in Ota Ward, Tokyo, the heart of THK's technology development activities, the IMT Division has actively commenced the collation and consolidation of data encompassing product planning, sales and marketing support, technology service, design as well as other related information.

In recent years, calls for a higher degree of precision and shorter delivery times with respect to such industrial machinery as semiconductor and LCD production equipment have steadily increased. As a result, the market is witnessing a shift from the supply of individual components toward hybrid units particularly in the area of vital machinery components. At the same time, extending beyond industrial machinery, momentum is projected to gather toward electric-powered production lines across all areas.

### **Toward increased application of electric actuators and hybrid units**

Against the backdrop of this operating environment, the IMT Division is leveraging THK's original concepts and innovative technologies to cultivate existing and new markets. As an initial step, the Division will work to expand the application of electric actuators and hybrid units in industrial machinery. Furthermore, steps will be taken to aggressively boost sales of electric actuators, which facilitate outstanding improvements in energy efficiency as well as greater control flexibility across production lines. Turning to community and general living environment areas, THK is confident that latent demand exists throughout a variety of areas including fitness and nursing care. Looking ahead, the IMT Division will increasingly bring this demand to the surface in efforts to contribute directly toward earnings growth. In this context, the Division will proactively develop electric actuators that address varied and diverse applications while at the same time nurturing the market.

Moreover, THK will adopt a long-term perspective as it strives to build another robust pillar of future earnings growth. Over the next five to 10 years, the Company will accordingly pursue development activities in such fields as humanoid robotics.

### **Electric Actuators Series**



Economy series



Compact series



Universal series



Super FA series



Clean series



Linear motor series