Environmental Preservation

As a pioneering global manufacturer of vital machinery components, the THK Group has made a contribution to industrial society via the development of linear motion systems such as LM guides. At the same time, we recognize our corporate social responsibility in terms of contributing to global environmental preservation efforts so that future generations inherit a healthy planet. To this end, we are engaged in various activities, particularly through our manufacturing endeavors, aimed at continuously reducing the impact on the environment as well as trying to protect and improve the natural environment.

The THK Group's Basic Policy Regarding the Environment

- 1. Conservation of the environment is considered a major management concern, and we are striving to accurately grasp the impact on the environment produced by the Group's business activities, products and services. Every division participates by setting relevant environmental goals.
- 2. In addition to following environmental laws, we set self-imposed standards for Group companies and regularly review them to improve the efficiency and effectiveness of our environmental management.
- 3. We will continually promote the development of products that help reduce environmental burdens.
- 4. We will continually promote conservation and recycling of resources, with particular attention to reducing and recycling waste from our manufacturing divisions.
- 5. To promote greater unity in our environmental activities, we will provide guidance and support to our affiliates and business partners, and strive to work in cooperation and harmony with local communities.
- 6. This basic policy regarding the environment shall be disseminated to all divisions in the Group through education, training and activities designed to improve awareness. We will disclose information concerning the environment to parties within and outside the Group in a timely manner.

Environmental Activities and Targets

Area	Objectives and Goals	Main Activities	
Energy conservation, prevention of global warming	Cut greenhouse gas emissions	(1) Energy diagnostics(2) Energy conservation(3) Use of clean energy	
Materials conservation, zero emissions	Reduce environmental impact; achieve zero emissions	(1) Input controls (materials, parts and by-products) to reduce usage and boost per-unit yield(2) Controls on emissions and final waste disposal(3) Material reuse/recycling	
Harmful substance controls	Eliminate and control harmful substances in THK Group production and distribution activities	(1) Substitution of PRTR-designated substances (2) Green procurement and purchasing	
Environment-friendly products and services	Develop products and supply services using LCA (Life Cycle Assessment) methods	(1) Cage-embedded product series development (2) Extension of service life and maintenance-free periods	

Environmental Management System

THK is working to acquire environmental management system ISO 14001 certification at all of its production sites in Japan and overseas. In addition, the Risk Management Division's Environmental Management Department, located at THK Headquarters, coordinates activities carried out by THK's administrative, production and distribution divisions in an effort to promote environmental activities across the entire Group.

In fiscal 2011, the Group carried the weight of energy-saving measures brought about by the Great East Japan Earthquake. At the same time, the Group successfully achieved all of its environmental targets. In specific terms, THK reduced CO₂ basic unit emissions by 1% compared with the previous year in the energy conservation and global warming prevention field, lowered its emissions rate to less than 0.5% in the material conservation and zero emissions field, and curtailed the use of PRTR-designated substances by 3% compared with the previous year in the harmful substance control field.

Business Location	Date of Certification	Examining Authority
YAMAGATA Plant		
KOFU Plant	December 17, 2010	JQA
YAMAGUCHI Plant	(Registration renewal date)	
MIE Plant		
GIFU Plant		
THK RHYTHM NORTH AMERICA CO., LTD. (USA)	June 13, 2001	SQA
THK RHYTHM CO., LTD. Headquarters / GOKYU Plant	December 20, 2001	JIA
THK RHYTHM KYUSHU CO., LTD.	December 20, 2002	JIA
THK Manufacturing of America, Inc. (USA)	July 14, 2003	QMI
THK Manufacturing of Europe S.A.S. (Europe)	February 3, 2004	AFAQ
THK NIIGATA CO., LTD.	October 21, 2005	JQA
THK RHYTHM CO., LTD. INASA Plant	December 20, 2006	JIA
THK MANUFACTURING OF CHINA (WUXI) CO., LTD. (China)	January 7, 2008	CQC
DALIAN THK CO., LTD. (China)	December 18, 2008	TUV
THK MANUFACTURING OF CHINA (LIAONING) CO., LTD. (China)	January 12, 2010	TUV

Operating Activities Targeting Electric Power Savings

Under the impact of the Great East Japan Earthquake, which struck on March 11, 2011, orders to restrict the use of electric power were issued in the service districts of Tokyo Electric Power and Tohoku Electric Power. Upon request from the government and the power companies, the THK Group initiated power-saving operating activities for the air conditioning, lighting and other aspects of its production division, head office, Technology Center, distribution centers and sales bases. Furthermore, in the production sector the restarting of in-house power generators, installation of new diesel power generators and other steps were taken in concerted efforts to reduce maximum power consumption and the sum amounts of electricity used.

As a result, the reduction in power use by the production division in fiscal 2011 was tracked at 6,587,000 kWh, a 6% increase over the savings during fiscal 2010. Of that total, 6,146,000 kWh was reduced in the Tokyo Electric Power and Tohoku Electric Power service districts, an improvement of 13% from the previous year. The power savings achieved by the THK head office, Technology Center, distribution centers and sales bases came to 1,040,000 kWh, a 22% improvement over fiscal 2010.

About 849,000 kWh of that occurred in the Tokyo Electric Power and Tohoku Electric Power service districts—a decline of 34% over the consumption figure the preceding fiscal year. In addition, there was no



Generator introduced at the KOFU Plant

exceeding of the use restriction values during the power use restriction period stipulated in the Electricity Enterprise Law, Article 27. (Note: All numerical values are THK non-consolidated figures.)

<Head Office, Technology Center, Distribution Centers and Sales Base Operating Activities>

- Introduction of demand monitoring systems (Head Office and Technology Center)
- 2. Maximum use of fans and circulators
- 3. Attachment of heat shield film to windows (Head Office and Technology Center)
- 4. Introduction of daylight savings time (East Japan bases)
- 5. Early launch and extended term of "Cool Biz" light summer clothing campaign
- 6. Thinned-out on-site light bulb installation, reduced air conditioner operating time
- 7. Installation of wall "greening" (Nagaoka, Suwa, Shizuoka, Atsugi Branches)
- <Production Division Operating Activities>
- 1. Peak power control
- 2. Work shift changes
- 3. Air conditioning equipment upgrades, thinned-out/intermittent operation
- 4. Lighting equipment upgrades, thinned-out operation
- 5. In-house power generator use
- 6. Reductions in hot-water supply equipment, volume of vending machines
- 7. Installation of wall "greening" (YAMAGATA, KOFU, MIE Plants)

Conversion to LED Lighting

In fiscal 2011, the THK Group engineered conversions to use high power-savings light-emitting diode (LED) lighting at the majority of its business bases.

At the GIFU Plant, for example, the conversion to LED has included a total of 45 mercury lamps in the parking garage. At THK NIIGATA CO., LTD., five mercury lamps in the on-site warehouse and shipment receiving areas; at THK INTECHS CO., LTD., 300 fluorescent lamps in the MISHIMA Plant office wing and 280 at the SENDAI Plant; and at DALIAN THK CO., LTD. in China, a total of 130 sets of mercury and fluorescent lamps have been converted to LED lighting. Furthermore, at THK MANUFACTURING OF CHINA (WUXI) CO., LTD., the switch to LED for the company's production area lighting has been under way since fiscal 2009, with approximately 80% of all the lights in that space having been converted from mercury lamps to LED to date.

On the strength of these operating activities, the energy consumption volume accounted for by lights in areas converted to the LED format has been lowered to about half the previous level.



THK INTECHS MISHIMA Plant office wing