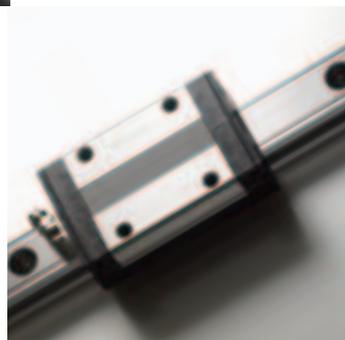


Harmony with the environment

The first commitment period of The Kyoto Protocol has begun. In its fourth report the Intergovernmental Panel on Climate Change noted “the direct involvement of human activity in global warming”. Protecting the environment is a common responsibility for the entire human race. A company’s efforts to address environmental issues are essential to its existence and activities as a corporate citizen.



Environment

Promoting environmental management

Q What efforts has THK made in the area of environmental management?

A THK established its basic environmental policy in 2001. In 2005 THK identified a set of areas and targets for environmental efforts.

Basic environment policy

Since the development of the LM Guide, the THK Group has contributed to both society and the economy through its pioneering role as a manufacturer of linear motion systems and machine components. We believe that it is a company's social responsibility

to leave the global environment in good condition for the next generation, which is why we are undertaking the following initiatives to continually decrease environmental burdens and maintain and improve the natural environment.

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 and preventing global warming | Cut greenhouse gas emissions | ① Energy diagnostics ② Energy conservation ③ Use of clean energy |
| Material conservation and zero emissions | Reduce environmental impact: achieve zero emissions | ① Input controls (materials, parts and by-products) to reduce usage and boost per-unit yields ② Controls on emissions and final waste disposal ③ Material re-use and 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 Caged Ball Product series development ② Extension of service life and maintenance-free periods |

Environmental management system

Q What environmental objectives has THK set for itself?

A THK continually promotes environmental management, focusing on acquisition of ISO 14001 certification, and sets companywide environmental targets.

Environmental management system

THK is actively working to acquire ISO 14001 certification for all its production sites in Japan and overseas. THK WUXI and DALIAN THK were certified in fiscal 2007 and 2008, respectively. THK LIAONING is expected to obtain ISO 14001 certification in 2009. When it does, every THK plant in China will be ISO 14001 certified.

Environmental activities are carried out by all THK Group companies. 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 fiscal 2008 THK met its targets for material conservation and zero emissions and for harmful substance controls (reduced the use of PRTR-designated substances). THK failed to meet its target for energy conservation (reduced CO₂ emissions).

ISO 14001 certified business locations

| Location | Date of certification | Certifying body |
|----------------------------------|-------------------------|-----------------|
| YAMAGATA Plant | Sept. 10, 1999 | J Q A |
| KOFU Plant | Dec. 28, 2000 | J Q A |
| YAMAGUCHI Plant | Feb. 2, 2001 | J Q A |
| RNA (America)* | Jun. 13, 2001 | S Q A |
| RHYTHM, Headquarters/GOKYU Plant | Dec. 20, 2001 | J I A |
| MIE Plant | Sept. 6, 2002 | J Q A |
| Rhythm Kyushu | Dec. 20, 2002 | J I A |
| TMA (America)** | Jul. 14, 2003 | Q M I |
| TME (Europe)*** | Feb. 3, 2004 | AFAQ |
| GIFU Plant | Dec. 24, 2004 | J Q A |
| THK NIIGATA | Oct. 21, 2005 | J Q A |
| Rhythm INASA Plant | Dec. 20, 2006 | J I A |
| THK WUXI (China) | Jan. 7, 2008 | C Q C |
| DALIAN THK (China) | Dec. 18, 2008 | T Ü V |
| THK LIAONING (China) | Fiscal 2009 (projected) | |

* RNA: Rythm North America Corporation
 ** TMA: THK Manufacturing of America, Inc.
 *** TME: THK Manufacturing of Europe S.A.S.

THK's environmental targets

| No. | Field | Fiscal 2009 targets | Midterm targets (by fiscal 2010) |
|-----|---|---|--|
| 1 | Energy conservation and preventing global warming | <p>Reduce CO₂ basic unit emissions to 0.98 kg-CO₂ per ¥1,000 (9% reduction relative to the 2005 level) Fiscal 2008 target was 0.98: 1.24 actual (target not met)</p> <p>Major efforts in fiscal 2009</p> <ol style="list-style-type: none"> Reduction in absolute power consumption (full-scale conservation of electricity) Controlled energy usage (powering machines, air-conditioning, and lighting) Increased equipment efficiency (air-conditioning, lighting, and production machinery) | <p>Reduce CO₂ basic unit emissions by 15% Standard value: 1.08 kg-CO₂ per ¥1,000 (relative to fiscal 2005)</p> <p>■ CO₂ basic unit emissions (kg-CO₂ per ¥1,000)</p> |
| 2 | Material conservation and zero emissions | <p>Reduce emissions rate to less than 1% Fiscal 2008 target was 2%: 1.6% actual (target met)</p> <p>Major efforts in fiscal 2009</p> <ol style="list-style-type: none"> Better waste separation to facilitate recycling Improve yield (for components and materials) Reuse of cutting oil | <p>Achieve zero emissions (less than 0.5% of final waste disposal) Standard value: 4.7% (relative to fiscal 2006)</p> <p>■ Final waste disposal (%)</p> |
| 3 | Harmful substance controls | <p>Reduced the use of PRTR-designated substances to 15,100 kg or less Fiscal 2008 target was 15,600 kg: 14,391 kg actual (target met)</p> <p>Major efforts in fiscal 2009</p> <ol style="list-style-type: none"> Green procurement Cooperation with suppliers Control usage of forklifts | <p>Reduce use of materials subject to PRTR Law (3% per year) Standard value: 16,664 kg (relative to fiscal 2006)</p> <p>■ Materials subject to PRTR Law (kg)</p> |

Environmental measures



Did THK introduce any new environmental measures in fiscal 2008?



THK organized an Environmental Measures Team in its administrative divisions and initiated environmental activities involving all employees at its manufacturing plants.

Environmental Measures Team

In an effort to help reduce CO₂ emissions, THK formed an Environmental Measures Team in October 2008, comprising members from various divisions at THK Headquarters and its Technology Center. The team has promoted measures that can be carried out in employees' immediate surroundings, mainly in the areas of energy conservation (reducing power consumption), reducing waste (cutting back on paper usage, recycling, and producing less refuse), and reducing water usage.

The team began its activities by collecting data on electricity and water usage and waste volume, to ascertain existing conditions. The younger members of the team were encouraged to think freely and and come up with their own ideas. Suggestions were screened to identify ideas that could be acted on immediately, and these were put into practice. After a month, the team collected data again and compared it to the earlier findings. Ideas were once again solicited, the team again enacted those that could be put into practice immediately, and this process was repeated. The team's goal was to reduce paper usage (the number of sheets), power consumption, and the volume of refuse by 5% compared to the corresponding figures for April through September. After launching the plan team members met weekly for three months and monthly thereafter. Meetings were also held with specific departments, to check their progress. As a result of these efforts, the data revealed gradual improvement from month to month. The team's founding principle was to find reasonable, even enjoyable ways to make improvements and elicit the involvement of other employees, and its efforts are steadily paying off.

Targets for reductions in fiscal 2009 will be based on the previous year's performance; monthly progress will be reported to each division in a timely manner. The team will also introduce educational activities for individual employees. The results of the environ-

■ Reductions achieved

| | 2nd-half reduction, relative to 1st-half totals |
|--------------------------------|---|
| Power consumption | 16% |
| Water usage | 12% |
| Refuse generated | 1% |
| Paper usage (number of sheets) | 13% |



▲ The Environmental Measures Team

mental initiatives undertaken at THK Headquarters will be reported to THK sales offices to help promote companywide environmental activities.

Environment-friendly activities

At THK's GIFU Plant there had been a lack of coordination between production activities and environmental activities, with some areas receiving attention only from the environmental side. To improve the situation, in fiscal 2008 the plant introduced "environment-friendly activities" aimed at all employees, including on-site subcontractors and employees working in the company cafeteria.

Three perspectives were emphasized: (1) incorporating environmental activities into production activities, (2) emphasizing indirect effects as well as direct effects, and (3) setting targets that enable all employees to get involved. Each department was asked to propose environmental measures that could be incorporated into routine duties, and suitable activities were determined for each department. A point system was established to reward each activity accomplished, and monthly targets were set for point totals. Common activities include (1) picking up trash (1 point) and (2) attending environmental study sessions (5 points).

In fiscal 2008 the target point total for all departments was 42,204; the actual point total was 62,746 points, well above the target. Every department achieved its respective target. These activities helped raise environmental awareness among the employees and left the plant area much cleaner than before. The GIFU Plant will continue to carry out these types of environmental activities in the future.

■ Major activities

| | Point per action |
|---|------------------|
| (1) Picking up trash | 1 |
| (2) Turning off lights | 1 |
| (3) Taking part in community volunteer activities | 5 |
| (4) Offering proposal for in-house environmental improvements | 5 |
| (5) Separating waste materials | 5 |
| (6) Attending environmental education and training sessions | 5 |

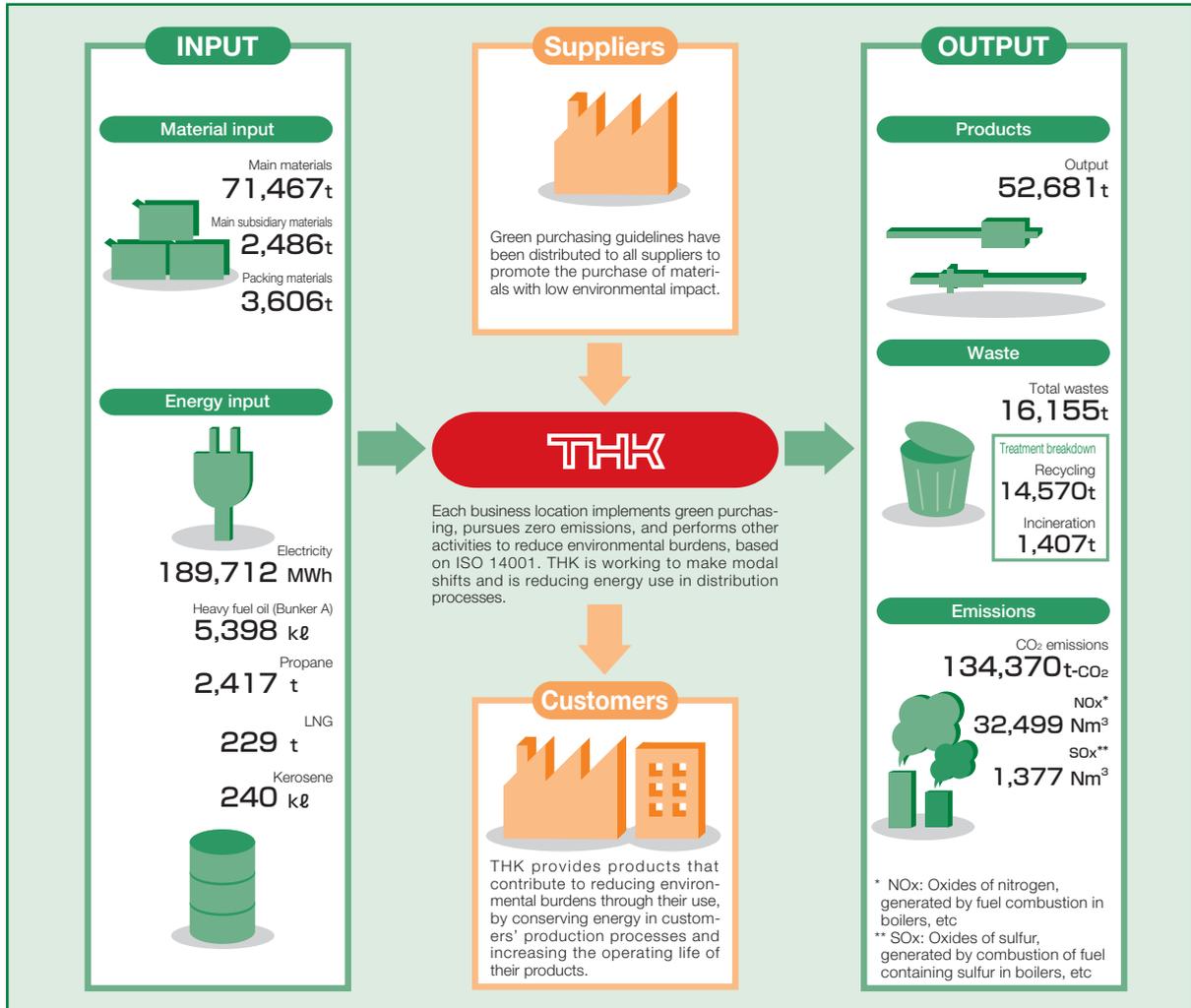


▲ Picking up trash and clearing weeds around Sekigahara Station, near THK's GIFU Plant

Environmental impact: The big picture

Q Please describe THK's management of environmental burdens.

A Production activities entail consumption of precious resources and energy. In fiscal 2008 THK began collecting data on environmental protection costs at THK Group companies overseas as well as at production facilities in Japan.



Cost of environmental protection

(Units: ¥ million/year)

| Cost classification | Investment | Expenditures | Main measures |
|---------------------------------------|--------------|--------------|---|
| (1) Business areas | | | |
| Pollution control | 29.1 | 35.6 | Installation of waste-water treatment equipment |
| Environmental protection | 40.1 | 19.0 | Introduction of solar panels and battery-driven forklifts |
| Resource recycling | 3.3 | 148.2 | Recycling of waste materials |
| (2) Upstream/downstream cost | 0.0 | 1.9 | |
| (3) Control activities | 0.0 | 142.4 | ISO 14001 registration and maintenance fees |
| (4) R&D (including Development Dept.) | 56.7 | 284.0 | |
| (5) Social activities | 0.0 | 1.2 | |
| (6) Environmental cleanup | 0.0 | 3.4 | |
| Total | 129.2 | 635.7 | |

Note: 1) Figures on overall environmental burdens and other environmental accounting data represent an aggregate based on data from the following production facilities: THK's five Plants in Japan, in YAMAGATA, KOFU, GIFU, MIE, and YAMAGUCHI; other THK Group Plants in Japan; THK NIIGATA, three THK INTECHS Plants, Nippon Slide, RHYTHM CORPORATION, and Rhythm Kyushu; and five overseas THK Plants; TMA (America), TME (France), DALIAN THK (China), THK WUXI (China), THK LIAONING (China)

2) Figures on NOx and SOx emissions are for THK's five Plants in Japan only.

Energy conservation and preventing global warming



What efforts has THK made to reduce CO₂ emissions?



THK is actively introducing energy-saving production equipment, air-conditioning systems and lighting; improving operational efficiency and productivity; and mounting a full-scale campaign to conserve electricity.

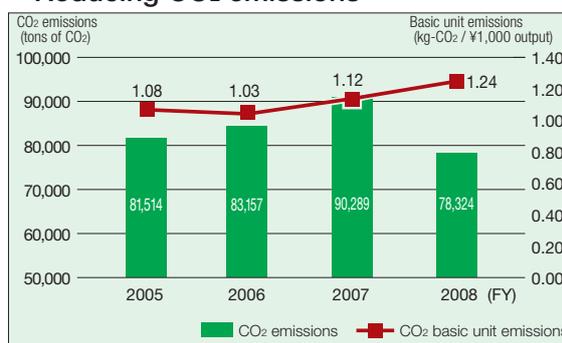
CO₂ emissions in fiscal 2008

THK sets targets for reducing CO₂ emissions, using basic units (CO₂ emissions divided by production volume). In fiscal 2008 the target basic unit was set at 0.98 but the actual result was 1.24, representing a major setback. This reflected a sharp decline in production beginning in the latter half of the previous fiscal year. In absolute terms, CO₂ emissions declined by 11,965 tons for a 13% reduction from the previous year's total, falling from 90,289 tons of CO₂ in fiscal 2007 to 78,324 tons in fiscal 2008.

Energy-saving initiatives undertaken by THK in fiscal 2008 included (1) efficient operation of cogeneration systems, (2) conversion to energy-saving lighting systems, (3) switching off of neon lights in plants and mercury-vapor lamps in parking lots, (4) interior temperature controls (heating activated at 21°C, cooling activated at 28°C), and (5) reduced operation of incidental equipment (coolers, compressors,

air conditioners, etc.) thanks to adjustments in work periods. The effectiveness of these initiatives will be scrutinized in fiscal 2009, and further measures to conserve electricity and reduce CO₂ emissions will be implemented.

Reducing CO₂ emissions



Activities at TMA

TMA, which produces LM Guides and Link Balls, was established in 1997 in the state of Ohio in the U.S.A. ISO 14001 certified since fiscal 2003, TMA has established and implements a wide variety of programs to promote environmental protection. The company's efforts to reduce global warming include continuous improvements in productivity, achieved through the adoption of proposals submitted by employees, and promotion of 5S activities. TMA also carefully monitors energy consumption in its power, air-conditioning, and lighting systems.

TMA's environmental tasks for fiscal 2009 include (1) raising employee awareness and encouraging the switching off of indoor lights, (2) introducing sensor switches for lighting and adjusting lighting in respective work areas, and (3) replacing the filters in the plant's 20 air conditioners and instituting temperature controls. As a result of these efforts, TMA expects to reduce its CO₂ emissions by 1.5 million pounds (1 pound is equal to about 454 grams). In fiscal 2008, the company as a whole emitted about 24 million pounds of carbon dioxide (11,000 tons when calculated using the U.S. emissions coefficient). TMA anticipates a 6% reduction in CO₂ emissions in fiscal 2009, compared to 2008.

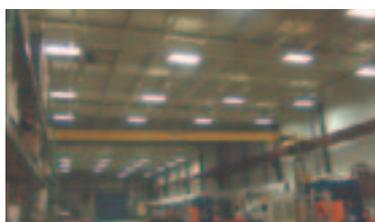
U.S. President Obama's Green New Deal initiative calls for an 80% reduction in greenhouse gas emissions by 2050, compared to the 1990 level. The president's declaration is being taken very seriously in the United States, and new laws and other measures can be expected to be enacted to fulfill his pledge. TMA will have to embrace some major changes in response. Whatever measures the U.S. government may take, TMA will continue to actively work to help prevent global warming.



▲ At left, Andrew Lower, Engineering Department; at right, TMA Vice President Muten Iwamoto



▲ The Link Ball manufacturing plant has switched from incandescent to energy-efficient fluorescent lighting.



▲ A switch-off reminder

Material conservation and zero emissions

Q What efforts is THK making to reduce wasteful use of materials and curtail waste emissions?

A THK decreases stock and improves yield—reducing the generation of waste—by carefully managing its use of materials, and facilitates reuse and recycling by thoroughly separating waste materials before disposal.

Material conservation and zero emissions

The term “zero emissions” refers to efforts to reduce waste to the absolute minimum level by converting waste materials generated in production processes into useful materials.

THK’s business activities inevitably generate waste materials, including scrap metal, oil, coolants, detergents, other fluids, grinding sludge, packing materials, plastic waste, and oil-soaked paper and cloth. By rigorously separating waste materials, THK now recycles almost all its waste.

The total amount of waste generated in fiscal 2008 was 7,632 tons, about 1,000 tons less than in the previous year. The amount of waste for final disposal (burial and incineration) decreased by about 200 tons, to 121 tons.

The zero emissions numerical target (ratio of final waste to total waste generated) for fiscal 2008 was set at under 2%; the actual result was 1.6%, so the target was met. This was due to improved recycling rates for waste materials including grinding sludge and waste oil and other fluids, which are recycled as raw materials for cement. THK has set a zero emissions numerical target of under 1.0% for fiscal 2009 and a midterm numerical target of under 0.5% for fiscal 2010.

Audits of waste disposal contractors

Soil contamination caused by illegal dumping of waste and other forms of environmental damage have become a serious social issue. In addition to internal environmental audits, each THK plant conducts an annual audit of intermediary and final waste disposal contractors. THK’s GIFU Plant, for example, conducted audits of five intermediaries and one final waste disposal contractor in May and June of 2008. Audits focus on areas including (1) proper waste disposal, (2) sufficient processing capacity, and (3) ensuring that no waste oil or other fluids flow into the soil or waterways around the disposal site.

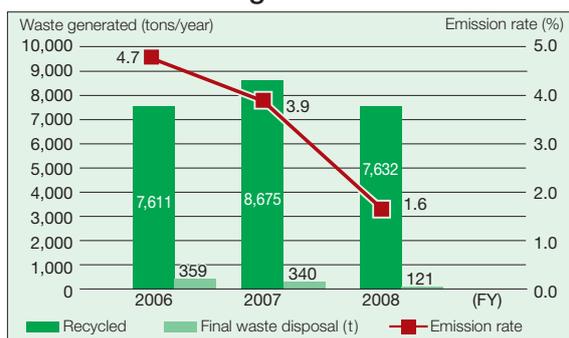
THK will continue to improve its environmental auditing inside and outside the company to reduce environmental burdens on local communities.

Promoting material and thermal recycling

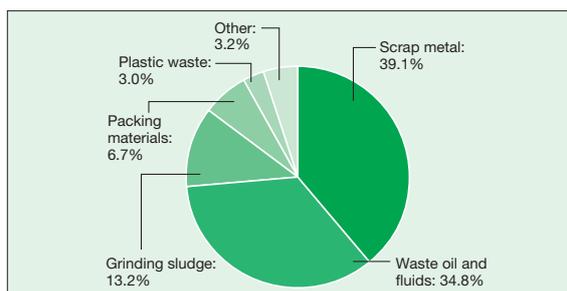
The THK INTECHS Co. MISHIMA Plant, which used to dispose of all its waste paper and plastic waste as industrial waste, has begun doing business with a recycling company that produces refuse paper and plastic fuel (RPF, a solid fuel made from waste paper and plastic). About 80% of the plant’s plastic waste and 100% of its waste paper are now recycled for use in RPF. RPF has a calorific value of 6,000 to 9,000 kilocalories per kilogram, which is equal to coal and coke. It is primarily used in paper and steel-making plants as an alternative to fossil fuels. By separating its plastic waste by type, the MISHIMA Plant is aiming to achieve 100% recycling of plastic waste.

Grinding swarf emitted in machining processes is entrusted to a contractor equipped with machinery that produces “iron plastic briquettes”. The swarf is mixed with finely crushed plastic, heated to reduce the volume, and finally solidified. The resulting product is used as a raw material by a leading iron and steel manufacturer. Formerly disposed of as industrial waste, swarf is now 100% recycled.

Trends in waste generation



Waste

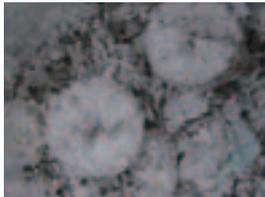


▲ "Iron plastic briquettes" made from grinding swarf

Recycling of confidential documents

At THK's KOFU Plant, discarded confidential documents used to be stored in a locked iron box. When the box was full, it was turned over to a disposal contractor to be destroyed, together with the papers in it.

In June 2008 plant officials installed a new shredder employing a "tear and crush" system that leaves long paper fibers intact, making them easy to recycle. The shredded paper is compacted at high speed, sold to a paper recycler, and eventually processed by a paper manufacturer as backing paper for decorative boxes and the like. Thanks to the acquisition of the new shredder, waste paper formerly disposed of at a cost is now a valuable resource.



▲ Shredded waste paper



▲ Recycled as backing paper for boxes

Reducing waste by improving separation

At THK's MIE Plant, since June 2008 plastic waste has been separated into two types: valuable, recyclable waste and waste for burial or incineration. Designated bins are provided to ensure that all valuable, recyclable plastic waste is collected.

All ordinary trash that can be processed by a shredder is shredded for recycling. Packing materials and filler accompanying incoming goods are actively recycled and reused; the plant is also switching to the use of returnable boxes to further reduce waste.



▲ Separation of plastic waste

Green IT activities at THK GmbH

THK GmbH (the THK Group's European sales company, consisting of a headquarters and 16 branches) has long made efforts to protect the environment. Among these is a program called "Green IT: Reducing resource consumption".

Since fiscal 2005, THK GmbH has been engaged in a task known as server virtualization, in which, through the use of special software, a single server computer is converted into multiple virtual servers. In this way THK GmbH has succeeded in reducing the number of actual servers it uses from about 70 to just 6. Server virtualization has enabled the company to reduce its annual electricity consumption from 650,000 kilowatt hours to about 60,000 kilowatt hours—a mere 9.2% of the former level. This includes the electricity used to run servers as well as networks, power systems, air conditioners, and other infrastructure.

THK GmbH is also working to make its office operations paperless. The company makes effective use of e-mail, fax conversion systems, and scanners. IT systems now facilitate the management of internal memos and attendance and other personnel matters, as well as marketing and distribution activities, enhancing business efficiency and greatly reducing paper usage. In fiscal 2009 THK GmbH expects to use about 40,000 fewer sheets of paper than it did the previous year. Multifunction office equipment has been introduced to enable copying, printing, and other automated tasks to be handled by a single device, providing further savings in energy and resources.



▲ IT Department employees



Karsten Fallnich
Manager Information Technologies Europe

Harmful substance controls

Q How does THK manage chemical substances that impose high environmental burdens?

A THK practices green purchasing throughout its entire supply chain and is working more closely with suppliers to create a mutually beneficial environmental quality system.

Compliance with the REACH regulation

REACH (**R**egistration, **E**valuation, **A**uthorization, and **R**estriction of **C**hemicals) is a European Union regulation that came into effect on June 1, 2007. A synthesis of more than 40 regulations related to chemical substances that had previously been enacted in individual EU countries, REACH has been described as the most complex piece of legislation in the Union's history.

To ensure compliance with REACH requirements, THK established a REACH project in June 2008. The project team is working to obtain an accurate understanding of the regulation, collect the latest information, identify the responsibilities of relevant departments, and develop a scheme for future activities, possibly incorporating an IT system. The REACH regulation applies not only to chemical substances but also to articles containing certain substances, making it absolutely necessary to cooperate with upstream and downstream manufacturers in the supply chain to ensure that essential information gets communicated. THK is striving to create more advanced mechanisms for this purpose, based on its cooperative relationships with the customers, cooperating companies, and partner businesses THK has cultivated through its green purchasing practices.

■ Main points of the REACH regulation

The REACH regulation applies to (1) chemical substances themselves, (2) preparations (compounds or solutions containing two or more substances), and (3) articles (objects that acquire a specific shape, surface, or design during production). Each of these categories is subject to specific controls.

| | |
|--------------------|--|
| Substance | Registration required (1 ton or more of substance per year per company) |
| Preparation | Registration required (1 ton or more of substance in preparation per year per company) |
| Article | Registration required (1 ton or more of intended release of substances per year per company) |
| | Notification required (SVHC* concentration 0.1% or above: 1 ton or more per year per company) Information must be provided to customers and details must be provided to interested parties upon request. (SVHC concentration 0.1% or above) |

* SVHC: Substances of Very High Concern (as defined by the REACH Regulation)

Reducing PRTR-designated substances

RHYTHM CORPORATION's GOKYU Plant, located in the city of Hamamatsu, has an integrated production system encompassing everything from design to manufacturing, and deals with a wide variety of chemical substances. The plant's environmental policy is aimed at reducing the use of hazardous substances, and two targets have been established with respect to chemicals subject to the PRTR Law.* The first is to end the use of the chlorinated organic solvent dichloromethane by fiscal 2010; the second

is to reduce the use of other PRTR-designated substances by 5%, compared to the fiscal 2007 level, by fiscal 2012. To meet the first target, the plant is switching to the use of hydrocarbon cleaners and expects to achieve the stated goal in fiscal 2010 (the fiscal 2008 total was 2,750 kg less than that for the previous year). To meet the second target, the plant's 15 forklifts are gradually being converted to run on LPG fuel instead of gasoline. The fiscal 2008 totals for toluene and xylene were 785 kg and 654 kg lower, respectively, than those for the previous year.

* PRTR Law: A law promoting better management and understanding of environmental emissions of designated chemical substances

■ Substances subject to the PRTR Law (kg)

| Type | Amount handled | Amount emitted into the atmosphere |
|---------------|----------------|------------------------------------|
| Xylene | 5,210 | 39 |
| Toluene | 4,846 | 115 |
| Ethyl benzene | 810 | 20 |
| Benzene | 334 | 42 |

Note: The above data represent cumulative totals for THK's five plants in Japan, THK NIIGATA, and three THK INTECHS CO. plants.



▲ An LPG-fueled forklift

Emergency drills: oil spills

Great care is taken at every THK Plant to ensure that there is no outflow of lubricants, waste oil, or machining oil from the plant premises that might contaminate waterways or harm the local ecology or agriculture. To be prepared for every imaginable scenario, however, all THK plants conduct oil spill emergency drills.

At the THK GIFU Plant, for example, all the rain that falls on plant grounds is directed into six oil-water separator tanks. In keeping with a plant slogan, not a single drop of oil is allowed to escape the grounds. In a drill held in August 2008 employees sprayed lubricant on roadways on the plant grounds to verify that all oil gets directed into the separator tanks, as intended. The employees later practiced recovering the lubricant from the tank using absorbent mats.

Green distribution

Q

Does THK take any special environmental measures when it distributes and transports its products?

A

THK not only incorporates environmental measures into its product development and production processes, it is also working to reduce energy consumption and CO₂ emissions in its distribution activities.

Green distribution

Shipments from THK's YAMAGATA Plant to some customers travel some 1,800 kilometers. Formerly carried by truck, these shipments now travel by rail, a modal shift* that has reduced energy consumption from 19,700 to 4,380 megajoules and lowered CO₂ emissions from 1.35 to 0.22 tons. THK is working to expand this shift in cooperation with its customers.

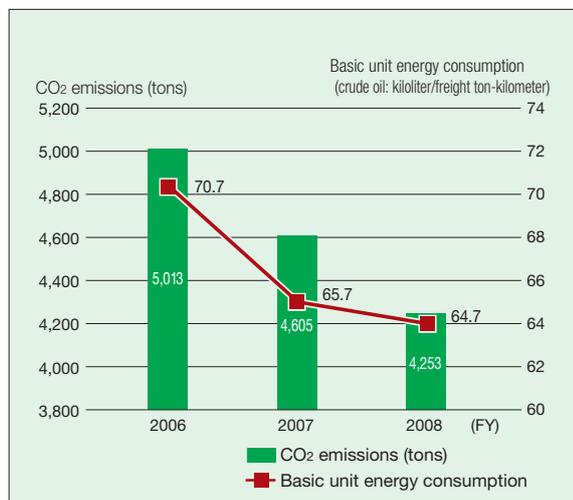
THK has also improved load ratios through the use of post pallets,** revised transport routes between its plants and Distribution Centers, and begun routing all freight through its CHUBU Distribution Center. These efforts have enabled THK to send one fewer truck to the Kinki region and two fewer to Narita Airport each week, compared with the previous year. As a result, basic unit energy consumption (kiloliters of crude oil divided by ton-kilometers of freight) in fiscal 2008 improved 1% in comparison to fiscal 2007, and CO₂ emissions declined by 352 tons, or about 7.6%.

At THK's Distribution Centers, packing materials are conserved to reduce waste, and power usage has been reduced through improvements in facility air-conditioning and lighting systems. THK is working to perfect its green distribution practices, to reduce environmental burdens in every area affected by its distribution activities.

* Modal shift: A transition from transport by truck to transport by sea and rail, to permit shipping in bulk and reduce CO₂ emissions

** Post pallet: A stackable pallet fitted with posts between the decks or beneath the top deck to prevent load collapse

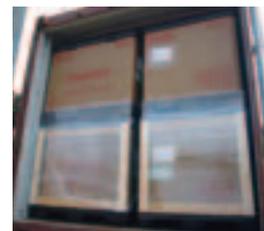
■ Trends in transport-related CO₂ emissions and specific energy consumption for THK alone



Returnable boxes for overseas shipments

Returnable boxes have been used for overseas shipments of auto parts and materials to TMA for the past three years and to TME since November 2008. Returnable boxes are used whenever there is sufficient freight to fill a shipping container. The advantages of returnable boxes over conventional wooden crates are (1) reduction of waste materials (wooden pallets are no longer discarded at the shipping destination), and (2) the ability to double-stack cargo, which reduces the number of trucks required by half, decreasing the environmental burden imposed by CO₂ emissions.

THK intends to study further use of returnable boxes for seaborne shipments to its overseas plants and sales companies.



▲ Returnable boxes make double-stacking possible.

Using Eco Bands

At the suggestion of SANKO SEISAKUSHO Co., one of THK's production contractors, THK's FAI* Division started using a product called the Eco Band in August 2008, to help eliminate waste and meet targets for reducing shipping costs. Previously, shipments were placed on a pallet and wrapped in industrial film to prevent load collapse; after only one use, the film was discarded as waste when the shipment reached its destination. Eco Bands can be attached in half the time required to wrap a shipment in film, and uncrating is easier because Eco Bands don't adhere the way film does. The result has been a large-scale reduction in film purchasing costs.

When THK began using Eco Bands, there was concern that they might come loose during shipping, but no such incidents have occurred. THK now uses Eco Bands for 50% to 60% of its shipments and plans to gradually shift to using Eco Bands for the rest, in consultation with its customers.



▲ A shipment secured with an Eco Band

* FAI: Future Automotive Industry