

# Environmental Activities



*THK engages in business activities in an environmentally responsible manner in order to preserve a healthy world for the next generation.*



## Basic Environment Policies

It is no exaggeration to say that environmental responsibility is a necessary precondition for the continued survival of human beings on Earth. This must be understood by every one of us that share this Earth, not only by those that work in industrial occupations.

We at the THK Group are aware that our business activities and personal lives are deeply connected with the Earth's environment. Therefore we are working to effectively reduce the burden we place on that environment.

(1) We are devising appropriate plans to protect the environment based on an analysis and understanding of how it is affected by our products and services.

(2) In addition to a strict observance of environmental laws, we also observe voluntarily established environmental standards. We periodically reevaluate those standards and work to improve their effectiveness.

(3) We strive to selectively reduce and recycle industrial waste, while conserving natural resources and energy.

(4) As members of the THK Group, we support and instruct both affiliated companies and subsidiary companies on environmental issues. Additionally, we enthusiastically cooperate with local communities.

(5) We educate all of our group employees about the environment, aiming to improve their awareness of our Basic Environmental Policies. At the same time, we publicize information about the THK group's environmental conservation activities.

In accordance with the above Basic Environmental Policies, we established the Environmental Management Department in our headquarters in April, 2004 and tasked it with the promotion of our overall environmental conservation activities.

## Environmental Conservation Activities at Our Plants

In addition to the above mentioned group-level activities, our plants have independently undertaken their own environmental conservation activities for many years. All of THK's five domestic plants have obtained environmental certification under the International Organization for Standardization's ISO 14001. It is important to expend resources such as energy,

raw materials and water, so that the output of products and services can be maximized. We actively promote the efficient use of energy and other natural resources at all of our plants.

A cogeneration system is in operation at the Yamaguchi and Yamagata Plants. This enables efficient overall energy consumption, while recovering waste heat. Additionally, each plant optimizes its use of air compressors and has improved building insulation. Last year the following measures were taken.

- Among the 17 air compressors at the Yamagata Plant, 4 are operated continuously on an automatic mode while the remaining 13 are operated manually, as demand dictates.
- The new building at the Gifu Plant, as well as its auxiliary facilities, are featured with advanced energy saving technologies. Specifically, the following measures are being taken there.
  - Using high standard insulation in the roof and walls.
  - Employing the latest version of high-efficiency motors for fans and compressors.

### Reduced and Cleaner Energy Consumption

Reduced-electricity type of lighting fixtures (left)

Liquefied natural gas (LNG) used for air-conditioning



- Employing energy saving lighting fixtures.
- Using liquefied natural gas (LNG) for air-conditioning.

Among all of our “Save Resources” activities, we believe that the Zero Emission program, in place at all of our plants, has a special value. Our production processes create waste materials such as abrasives, coolant oils, metalworking chips and powder, and plastics. The Zero Emission program is aimed to reduce such waste materials as close to zero as possible through recycling and modification for the purpose of other industrial applications. Additionally, with the cooperation

of major customers, each plant is trying to use recyclable cardboard for packaging products to be shipped. Currently, all plants have exceeded 90% in recycling rate. In fact, as a result of the following activities, the Yamaguchi Plant has realized 100% recycling rate and received a Eco-Plant Certification from the Yamaguchi Prefectural Government.

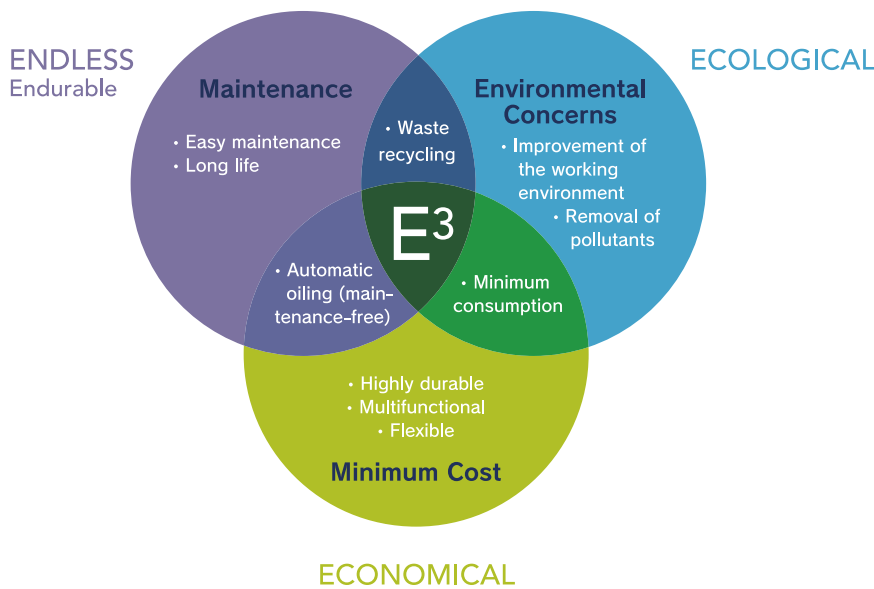
- Converting ferrous wastes into raw materials for the iron and steel industry.
- Converting sludge, including ferrous metals, into raw materials for the cement industry.
- Converting waste oil into a fuel.
- Using waste plastic and oil as reducing agents in iron making.

### Environmental Risk Management System

THK is establishing an Environmental Risk Management System that will sustain its business expansion, that is, consolidated sales of 300,000 million yen by FY 2010. As previously mentioned, each department is working to avert environmental risks at all levels. It is also important to enhance transparency and harmonization of corporate systems. In this respect, it is crucial to strengthen information sharing capabilities within the Group. Presently, as the ISO14001 activities spread out to cover the whole organization, overall goals have been reevaluated. Also a method for evaluating activities, i.e., environmental performance evaluation, is being introduced. We are reinforcing the information infrastructure in order to realize a new industrial model that combines environmental management and business growth.

### Green Procurement

THK takes a holistic approach to the environment, encompassing disparate stages such as supply of raw materials, production and sales, product life and disposal. In the past, we evaluated suppliers based on the traditional criteria of (Q)uality, (C)ost and (D)elivery. Today we add (E)nviro-ment to those items and evaluate supplying com-



### Contingency Training

People are trained periodically to deal with contingencies. The pictures show a fallen oil container and an oil spill.



panies based upon their QCDE scores. If the vendor is a trading company, we also consider the performance of original manufacturers.

Chemical substances that can affect the environment are registered as “Environmentally Hazardous Substances.” Suppliers are required to report whether their parts and materials sold contain such chemical substances, and if so, the concentration per each, as well. Part of the “Environmentally Hazardous Substances” are defined as “Prohibited Substances”. They include those banned in the EU under the ELV and RoHS directive, those specified under the Chemical Substances Control Law and those under the Industrial Safety

and Health Law. In particular, we are in the process of completely eliminating 6 substances listed in the RoHS directive - cadmium, lead, hexavalent chromium, mercury, PBB and PBDE – and are switching to the use of non-harmful substances in our products. All THK Group companies are working together to implement a new procurement system. Delivering green products to the customers and contributing to the conservation of the environment is called “Green Procurement”

### Environmentally Conscious Products

The core of THK’s product development philosophy is the Cubic E, i.e. a concept consisting of the following three ideas:

- (1) Better maintainability, higher reliability and longer life.
- (2) Providing an environmental solutions to users’ manufacturing sites where better work conditions, less pollution and less waste are always a matter of importance.
- (3) Minimizing users’ production costs through the multi-functionality and durability of our products.

Each THK product has been developed following this Cubic E concept. We will continue to provide society with better products and thereby contribute to reducing the environmental load.

### Care for the Environment through the Entire Organization

