

Community Activity

As a community-oriented company, we at Mitsuba are engaged in volunteer activities and hold cultural lectures, plant visits and other events to encourage stakeholders to understand our environmental protection activities. In fiscal 2006, we started forest improvement activities.

Deeply involved with four- and two-wheelers as a part of our business activities, we enthusiastically join the Eco-Run competitions.

●Participation in forest improvement volunteer activities

In response to a request from Gunma Prefecture, we started participating in forest improvement volunteer activities in fiscal 2006, as a countermeasure against global warming. In our first year, the work was carried out in Kiryu and Fujioka districts.



Struggling to use an unfamiliar mower

Eco-Run and EV Eco-Run

In response to the challenge of a new technology, "Team Yoishoto! Mitsuba" continues to participate in various "Eco Run" competitions. The team has achieved excellent results including 1st prize in the EV (electric vehicle) Eco Run competition and fuel-cell electric vehicle competition. Currently, excellent results are being made by vehicles with an in-wheel DD (direct drive) motor manufactured by Mitsuba.

In March 2007, the Mitsuba team participated in the MAXXIS World Eco-Car Grand Prix in Thailand and won 2nd place.



MAXXIS World Eco-Car Grand Prix in Thailand

Mitsuba Outline

(as of June 2007)

Established	March 8, 1946
Capital	9,885 million yen
Sales	138,483 million yen (results for fiscal 2006)
Number of employees	4,126 (Men: 3,259 Women: 867)
Average age	39.3 (Men: 39.3 Women: 39.3)
Operations	Production and sales of auto electrical components

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Contact us at :
Mitsuba Environmental Affairs Department
598, No, Niisato-Cho, Kiryu,
Gunma Pref. Japan 376-0122
TEL : (0277)74-2785 / FAX : (0277)74-2787
URL : <http://www.mitsuba.co.jp/>
E-mail : kankyo@mitsuba.co.jp



Top Commitment

We aim to achieve the world's best motor technology, which is one of our management visions, by providing system module products, based on Mitsuba's Mission Statement that "Mitsuba will provide pleasure and peace of mind to the people of the world by creating technology in harmony with society and the environment." We are also striving to establish Mitsuba as a global brand, which is our second management vision. We will promote the Mitsuba brand worldwide, by developing world-class human resources, increasing our global market share and strengthening our core competence.

Currently, we have more than 50 production plants in 22 countries, delivering our products to more than 80 customer bases around the world. Mitsuba's business has spread globally, currently with over 18,000 employees engaged in development, production and sales.

In April 2006, Mitsuba celebrated its 60th anniversary. In response to this rapidly globalizing environment, Mitsuba established "The Mitsuba Way," the code of conduct that employees worldwide must comply with. We will disseminate this Mitsuba Way throughout the group, and encourage every employee to put it into practice and thus improve our corporate culture.

The Mitsuba Way contains the statement "We will have a broad vision, respect diversity in the world and respond to changes quickly." Having expanded our development, production and sales activities around the world, we are now required to implement an environmental management system that addresses global issues, such as the major problem of global warming, the trend toward eliminating the use of hazardous chemicals in globally distributed products, which started in Europe, and tougher restrictions on the management of chemicals in the supply chain. We will conform to global trends by pursuing product technology development and production activities that impose the least burden on the global environment.

In addition, we established "Mitsuba Eco Vision 2015" and associated action plans governing our activities, in order to implement an environmental management system that will provide pleasure and peace of mind to the people of the world, as stated in Mitsuba's Mission Statement.

Recently, the finiteness of the earth's resources and the impact of economic activities on the earth are becoming all too clear.

Mitsuba will strive to reduce environmental stress, by promoting environmental management activities and developing the necessary systems. We would appreciate your understanding, and we welcome your candid views and valuable advice.



阿久戸 宗夫

Tsuneo Akuto
President

October 2007

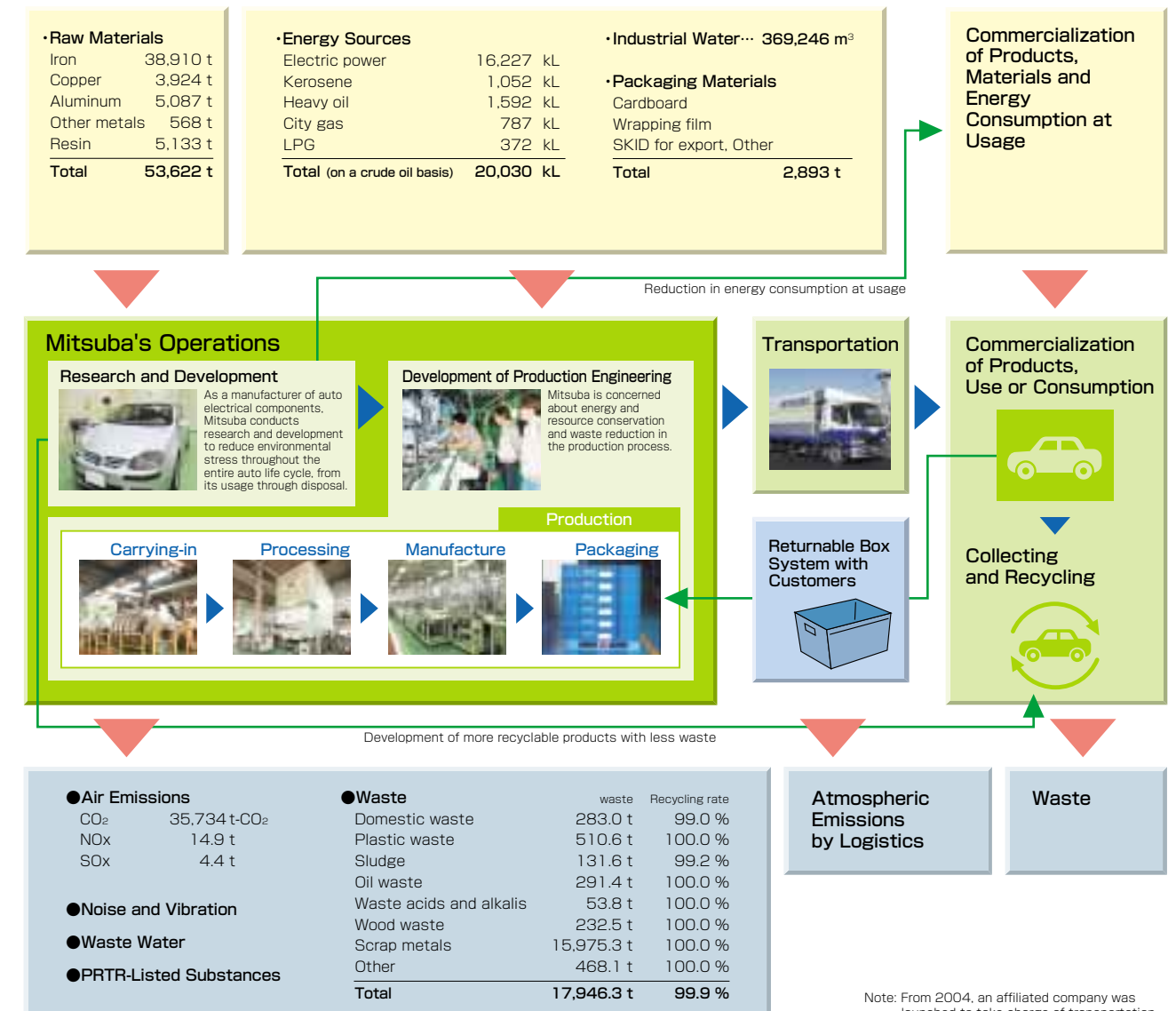
Environmental Declaration

We will work to achieve a continuous harmonization with our natural environment by means of technical developments harmonized with society and the environment. We will work to realize a safe and plentiful environment for us all.

1. Mitsuba will endeavor to save resources and energy in all its corporate activities, including development, production and sales.
2. Mitsuba will endeavor to reduce waste materials and polluting substances as well as achieve correct processing of those materials.
3. Mitsuba will endeavor to achieve harmony with the local environment while also endeavoring to secure a living environment where all can live in peace.

Mitsuba's Operations and Environmental Involvement

The production and sales of automotive electrical components is one of Mitsuba's main operations. Major negative impacts that this area has on the environment include the use of potentially harmful substances in products, energy consumption during manufacturing, and waste production. In addition to striving to reduce these environmental impacts, by continuously developing products with lower energy usage during operation and by designing products that can be recycled after use, Mitsuba is also striving to lower the negative environmental impact even after the product goes to the end user.



Note: From 2004, an affiliated company was launched to take charge of transportation.

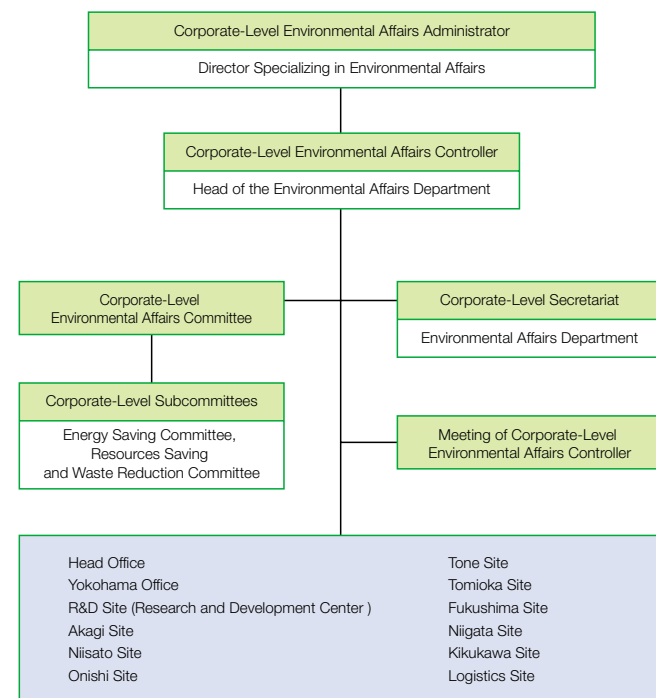
Environmental Management

We have acquired ISO14001 certification for three plants newly acquired as a result of the merger with the former Jidosha Denki Kogyo Co., Ltd.

We have acquired ISO14001 certification for all domestic sites acquired through the merger, but different management systems are implemented in practice. Therefore, in fiscal 2007, we will expand the scope of ISO14001 certification towards the management system integration of our domestic sites.

For overseas sites, too, we are developing an environmental management system towards acquiring ISO14001 certification.

●Environmental Management Organization



●ISO14001 Certification

In April 2007, we launched new environmental activities after the merger with Jidosha Denki Kogyo Co., Ltd.

By January 2007, Mitsuba had acquired ISO14001 certification for all of its divisions in Japan. However, due to the merger, there are currently three different systems within the company. Therefore, from fiscal 2007, we aim to acquire ISO14001 for the integrated management system.

In fiscal 2006, we newly acquired certification for four overseas sites and three domestic sites of a Mitsuba Group company (three plants of the former Jidosha Denki Kogyo Co., Ltd.).

We will continue to acquire certification for our sites, including affiliated companies and overseas sites.

■ISO14001 Certification List

1998.	7	Kiryu Site
1999.	6	Tone Site
	7	Kikukawa Site (old Jidosya Denki Kogyo Co., Ltd.)
	11	Onishi Site
2000.	7	Nisato Site
	12	Akagi Site, KGD Indonesia (currently PT.Mitsuba Indonesia, Indonesia)
2001.	5	Thai Summit Mitsuba Electric Manufacturing Co., Ltd. (Thailand)
	9	Reorganizing our Kiryu Site into the Nisato Plant, the Kiryu site was reorganized into the RD site., Mitsuba-Walbro, Inc.
2002.	2	Head Office Site (Head office), Higashinihon Diecasting Industry Co., Ltd.
	4	CME Corporation (U.S.A.) (currently PT.CME.L.L.C)
	6	Environmental management systems of six plants and offices were integrated.
	12	Logistics site certification was finished.
2003.	9	Toyo Electric Manufacturing Co., Ltd.
	10	Mitsuba Automotive Systems of Europe Kft. (Hungary)
2004.	1	All of Mitsuba sales and branch offices acquired the certification.
	7	Ochiai Manufacturing Co., Ltd.
	9	Mitsuba Sical India, Ltd. (India)
	12	Sun-You Corporation, Tatsumi Corporation, Momimo Manufacturing Co., Ltd. Ryomo Systems Co., Ltd.
2005.	5	Oshima Electric Works Co., Ltd. Mitsuba M-Tech Vietnam Co., Ltd. (Vietnam), M-Tech Co., Ltd.
	11	Head office (old Jidosya Denki Kogyo Co., Ltd.)
2006.	5	Mitsuba Philippines Corporation (Philippines)
	9	Mitsuba Manufacturing Batangas Corporation (Philippines)
	11	Mitsuba Bardstown, Inc. (America)
	12	Tomioka/Fukushima/Niigata site (old Jidosya Denki Kogyo Co., Ltd.), Mitsuba do Brasil Ltda. (Brasil)
2007.	4	Guangzhou Mitsuba Electric Co., Ltd. (China)
	8	Mitsuba Manufacturing Philippines Corporation (Philippines)

Research and Development

As a manufacturer of auto electrical components, Mitsuba is striving to reduce environmental stress throughout the entire auto life cycle, from its usage through its disposal. We are also taking aggressive steps to improve the production process with the aim of alleviating negative impact on the environment while promoting corporate activities.

Digital engineering that imposes less environmental stress

Through the introduction of digital engineering, we are reducing environmental stress imposed by research and development activities.

●3D-CAD & CAE analysis

We managed to reduce resource consumption by introducing digital processing for design, analysis and evaluation instead of the conventional prototype molds.



Image of 3D-CAD & CAE analysis

●FDM Rapid Prototyping System

We use a FDM rapid prototyping system for making prototypes of resin products. This "3-D printer" can easily make samples of resin products, just like printing out from CAD data. The method does not require trimming of resin blocks and so no shavings are produced, thus reducing waste and conserving resources.



A prototype made with the prototyping system

Reduction and control of hazardous chemicals

●Elimination of prohibited substances

By 2002, we had completely eliminated the use of lead, mercury and cadmium, and in 2006, we completely eliminated hexavalent chromium, replacing it with an alternative substance.

We control and monitor the use of prohibited substances by establishing a guarantee system in the supply chain and installing analysis devices in major production sites.

●Environmental data management

We introduced a new information management system for environmentally hazardous substances, which enables the smooth provision of accurate data. It also enables us to respond quickly and thoroughly to new legal restrictions on chemical substances.



Power sliding door controller containing lead-free solder

Environmental Performance

Eco-friendly product development: case study

In addition to reducing hazardous chemicals in the products that have already been marketed or those under development, we also strive in developing eco-friendly products to achieve better efficiency and smaller products for energy/resource conservation.

Furthermore, the following efforts are underway in response to the End-of-life Vehicle Recycling Law in Japan which went into effect in January 2005.

- ① Creation of a system that complies with End-of-life Vehicle Recycling laws
- ② Promotion of eco-friendly design adoption
- ③ Announcement of green purchasing guidelines (Mitsuba's chemical regulation list)

Following the introduction of the Kyoto Protocol, since fiscal 2004 we have been using CO₂ emissions as an energy indicator instead of electric power consumption. We aim to simultaneously curb greenhouse gas emissions and promote energy conservation to achieve the same objective.


In fiscal 2006, we started developing an energy conservation promotion system and collecting data, in preparation for the merger with Jidosha Denki Kogyo Co., Ltd. in fiscal 2007.

In fiscal 2006 before the merger was completed, we reduced CO₂ emissions by 1.1% per unit of production value compared to the previous fiscal year, thus exceeding the reduction goal of 1%.

As for waste materials, we have maintained zero emissions achieved in fiscal 2002, and we will strive to achieve zero landfill waste in the future.

Products (research department)
EV cart conversion kit


The EV cart conversion kit can be used to easily convert the store-bought engine-driven cart into an electric vehicle (EV) cart. Providing a comfortable run with less noise and zero exhaust, its robust and long-life motor frees you from daily maintenance.



Products (development department)
FP-18 (Fuel pump)

Mitsuba's FP-18 is a motor-driven pump that supplies fuel from the vehicle's fuel tank to the engine. In response to the usual request for smaller, lighter, and more energy-efficient automotive parts, the FP-18 is 32% lighter and 25% more efficient than previous models.

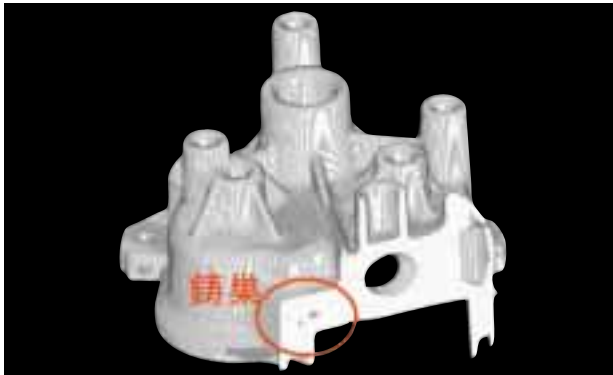
A 50cc vehicle equipped with the FP-18 received the Director General Prize from the Agency of Natural Resources and Energy.



Reduction of environmental stress in the field of production technology

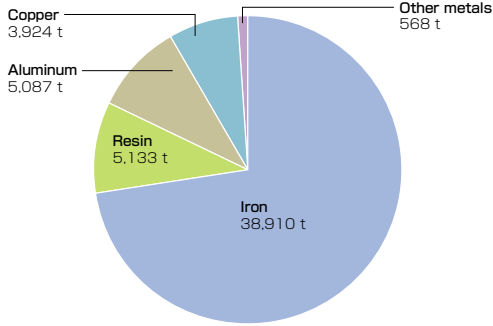
●Resource conservation [thinner die casting]

To avoid wasting limited resources, we develop technologies that reduce the use of raw materials. To create thinner and more precise die castings, we have developed a more reliable analysis method, by using CT scanning devices to produce clear 3D images of the location and shape of hidden voids (air holes) within parts, and matching them with the result of preliminary CAE analysis.

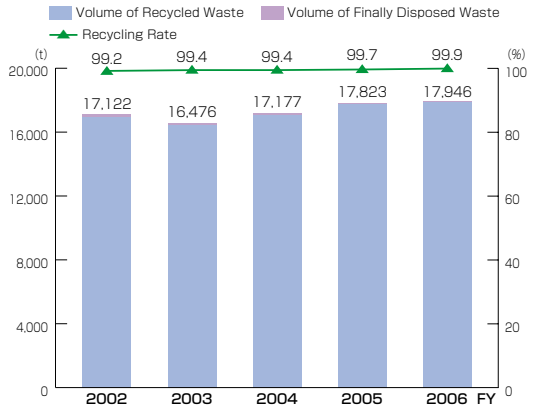


A CT scan of a windshield wiper frame (internal section can be displayed nondestructively)

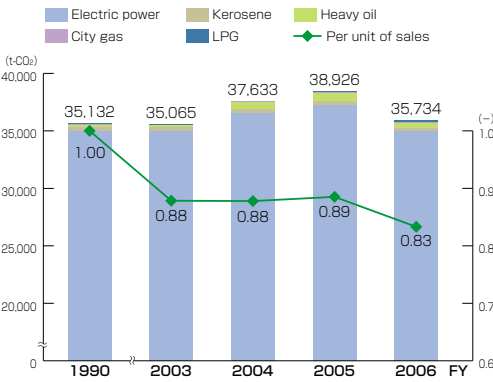
■Natural Resources Used in Fiscal



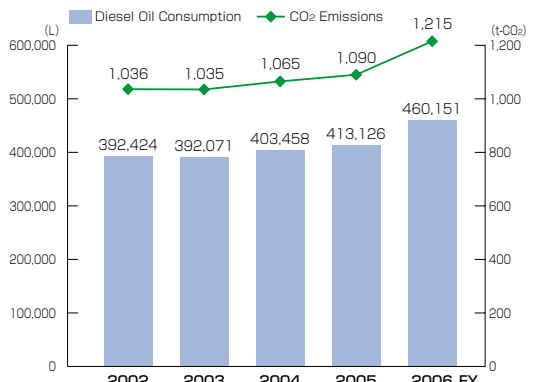
■Volume of Generated Waste and Recycling Rate



■CO₂ Emissions



■CO₂ Emissions from Logistics



Rooftop greening

In May 2007, we greened the rooftop of the Onishi Plant in order to reduce CO₂ emissions.

By covering the concrete rooftop with turf, the building's surface temperature is cooler and therefore less power is required for air-conditioning. Sensors are installed on the turf as well as concrete so that the temperatures of both parts can be compared and monitored in real time. Records have revealed a difference of about 20°C during the heat of the day, and at night the turf is about 7°C warmer, so less power will be required for heating in winter.



Sprinklers are also effective for temperature control