

# COMPANY AND PRODUCTS

## Technological Innovation Beneficial to People and the Earth

Takuma's history of achievement and innovation started in the years before World War II when we manufactured boilers for battleships. Since then, we have used our technological capabilities to advance and expand our business. Our boiler technology, which dates back to the company's establishment, has evolved into the leading power-generation technology for waste incineration plants. Also, as a pioneer in the field of environmental control plants and equipment, we have won notable acclaim from various organizations for our untiring efforts.

With the 21st century around the corner, many companies are beginning to realize that unless they make a sincere effort to address environmental concerns, future growth will be impossible. While those companies are finally adopting measures to ensure survival, Takuma knows very well that the environment is our business. We have established an honorable policy to "Value Technology, People, and the Earth." Further, we are concentrating our efforts in indus-

trial machinery, general-purpose machinery, environmental control plants, and water treatment plants.

In the field of industrial machinery, we develop and design total energy systems that are beneficial to local communities, such as power generation plants, industrial waste treatment plants, co-generation systems, and impregnation plants.

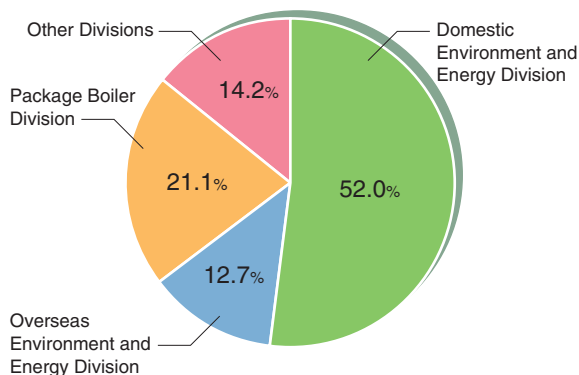
Takuma also develops a variety of general-purpose machinery, including the Vacotine vacuum hot water heater, the Takumax once-through boiler, and an absorption refrigerator. Besides being friendly to the environment, these products are compact and energy-efficient.

We set new standards in environmental control plants by designing and manufacturing incineration plants, bulk waste crusher plants, and recycling plants. In addition to protecting the environment, these plants efficiently remove waste and produce remaining heat which nearby communities can use.

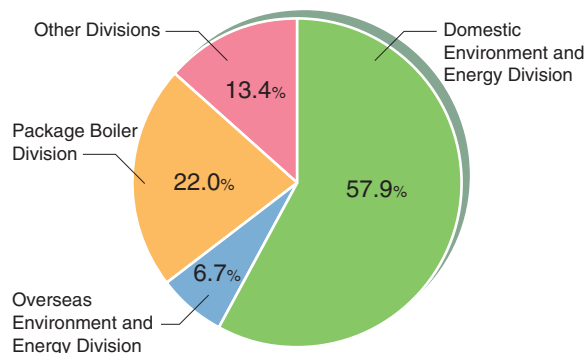
Moreover, Takuma is prominent in the field of water treatment plants, developing sewage treatment plants, waste water treatment plants, raw sewage treatment plants, and water purification plants. We take different approaches in

### Sales Breakdown by Division (On Consolidated Basis)

● Year Ended March 31, 2007



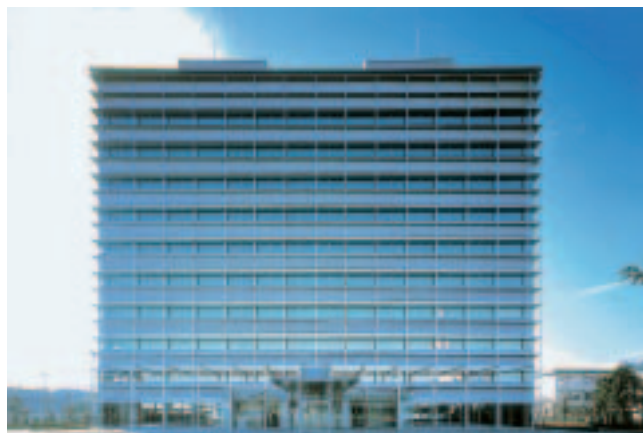
● Year Ended March 31, 2006



\* Real estate project sales for the period ending in March 2006 are not included in the above composition ratio because of the change in the names of divisions concerned effective from the period ending in March 2007.

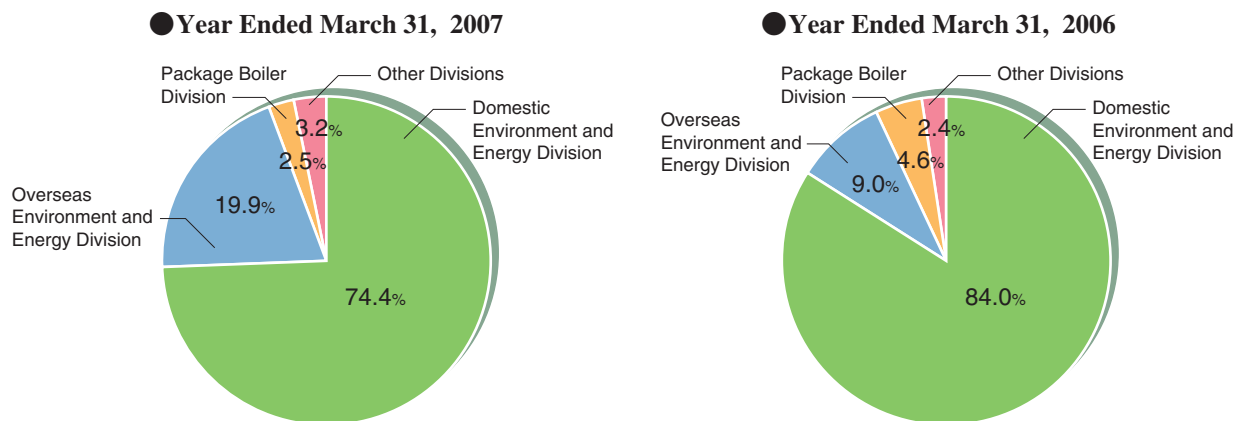
designing these facilities, and we address concerns such as the effective utilization of polluted water and the use of state-of-the-art technologies for developing new materials and antibacterial plastics.

Besides in the domestic market, Takuma is establishing its technological expertise overseas, through the export of products and equipment to various countries, technology export contracts, and technical cooperation with companies in Europe, the United States, and Asia. Exports currently account for approximately 5% of total revenues, and rapidly developing Southeast Asian nations constitute the majority of our foreign clients, ordering primarily boilers and waste incineration plants. While the economic growth is welcomed, the bustling development of various Asian countries is aggravating pollution problems in that region. Takuma understands that it is an issue we cannot ignore, and we believe that our technology will prove invaluable in preserving the environment and ensuring a better future for the people of Asia.



Takuma Building (completed in December 1995)

### Sales Breakdown by Division (On Non-consolidated Basis)



\* Real estate project sales for the period ending in March 2006 are not included in the above composition ratio because of the change in the names of divisions concerned effective from the period ending in March 2007.

## ENVIRONMENTAL CONTROL PLANTS

### Ensuring a Better Future for the World

One of the most pressing problems facing humans in the modern era is the immense build-up of municipal refuse. Takuma manufactures efficient, environmentally friendly refuse incinerators that serve as one solution to this global issue. We also are developing, designing, and manufacturing plants that recycle refuse into useful materials.

Takuma's first venture in this field was in 1963, when we became the first Japanese manufacturer to build a mechanized incinerator plant. We were able to effectively resolve the serious problem of handling enormous amounts of daily refuse. However, we did not limit our scope to incinerators. Since then, we have been successful in developing facilities which effectively treat refuse problems in numerous ways, such as bulky refuse shearers and crushers, incinerator ash melting plants, recycling plants, and facilities to supply local communities with remaining heat from plants.



---

## WATER TREATMENT PLANTS

### Protecting All Forms of Life on Earth

The issue of water treatment is not limited only to the prevention of water pollution in oceans, rivers, and lakes, but it also concerns the preservation of the earth's limited water supply.

Takuma has given serious thought to the concept of "a dialogue with water." After thoroughly analyzing water quality and studying evaluation and treatment technology, we were able to design, develop, and manufacture the most efficient, environmentally friendly water treatment systems.

Takuma builds comprehensive water treatment plants to meet a wide variety of social needs, such as sewage water treatment plants, raw sewage treatment plants, waste water treatment plants, and sludge incineration plants. We also concentrate our efforts in plants that use treated water and recycling plants for incinerator ash, in addition to pure water systems for boilers and high-tech industries.

## INDUSTRIAL MACHINERY

### Our Combustion and Thermal Technologies Contribute to a Better Life and Protect the Environment.

From years of designing and manufacturing boilers, we acquired our expertise in combustion and thermal technologies. Today, we are constantly keeping our eyes open for new ideas in producing innovative plants and equipment.

A leader in the boiler industry, Takuma manufactures steam and hot water boilers which are used in all fields of industry throughout the world. In particular, our power-generated boiler plants are not only efficient and economical, but they can use any type of fuel source, including remaining heat. We design our industrial waste treatment plants with complete treatment systems which use thermal energy to safely recycle industrial waste into pollution-free materials, and we equip our impregnation plants with dryer and curing ovens to provide high-quality prepregs for printed circuit boards which use radiant heat. Also, our cost-effective gas turbine co-generation technology has received considerable attention recently as a new energy supply system, proving that, without a doubt, Takuma has succeeded in developing effective total energy systems.



# COMPANY AND PRODUCTS (Public Thermal Energy Division)

---

## GENERAL-PURPOSE MACHINERY

### Using Our Technology to Create Innovative Products

Takuma adheres to the principle of user-friendly design, thorough quality control, and advanced design with an eye towards the future, while promoting the research and development of new thermal technologies.

For instance, we extensively researched vacuum technology to design the Vacotin heater, which has proven to be safe, economical, and sturdy.

In addition, “Hybrid hot-water supply system” combined with CO<sub>2</sub> heat pump contributes to save the running cost.

Other leading products in this field are the EQOS steam generator, a water tube boiler built for both industrial and general use, and the Thermoheater, which can attain high temperatures even under normal pressure because of its high heat-carrying capacity.

The quiet, energy-efficient Smoke Tube RE Boiler emits low amounts of nitrogen oxide and has an excellent response to load fluctuation.

The NPO-C Package Water Tube Boiler also saves energy and is friendly to the environment.

As you can see, Takuma is active in developing a variety of innovative products.



Vacotin heater



EQOS system generator



Thermoheater

# COMPANY AND PRODUCTS

---

## OPERATION AND MAINTENANCE SERVICES

Due to sophisticated component equipment, large-scale environmental plants such as incinerator and sewage treatment plants require high-level expertise and procedures to adequately operate and maintain. In assisting our clients ensure efficient factory operation, Takuma provides them not only with the above types of plants but also a staff of technicians highly trained in operation and maintenance. These able field technicians possessing a comprehensive understanding of the every detail of a plant, operate and maintain the plants to the best of conditions guaranteeing the ultimate in efficiency and prolonging plant service life.

## RESEARCH AND DEVELOPMENT

### **Leading the Way in Research and Development for the Benefit of Humankind and the Earth**

Amidst all the changes taking place in the world today, social change and technological innovation are progressing at a rapid pace. It is essential for companies to read the signs of the times and to respond quickly and appropriately. One way to keep abreast of the latest changes is to conduct research and development, including basic research, product development, and production technologies.

Takuma's constant goals are to produce original ideas and superior technologies and to promote development projects in all their fields.

Since the invention of the Takuma Boiler, our research and development projects have evolved with time, and we have expanded our operations to encompass energy, daily life, and the environment. Takuma has never relinquished its focus on technology, people, and the Earth, and this intent will never change.

