Toward a Sustainable Society of Eternal Growth

Gaiareport 2006

HORIBA / Social and Environmental Report

HORIBA

Explore the future

Company Outline (As of March 20, 2006)

Corporate Name:
HORIBA, Ltd.

Head Office:
2, Miyanohigashi-cho, Kisshoin, Minami-ku, Kyoto, 601-8510, Japan

Founded:
October 17, 1945

Incorporated:
January 26, 1953

Paid-in Capital:
¥11,569 million

Representative:
Atsushi Horiba, Chairman, President & CEO

Employees:
Consolidated 4,461
Unconsolidated 1,117

Fiscal Closing Date:
March 20

Stock Listings:
Tokyo Stock Exchange (1st Section)
Osaka Securities Exchange (1st Section)

Line of Business:
HORIBA manufactures and sells a wide range of scientific analyzers, engine emission analyzers, environment-monitoring equipment, analyzers and measuring equipment used in the semiconductor industry, and medical analyzers. HORIBA also manufactures and markets peripheral measuring and analysis devices. Moreover, the company equips such facilities as laboratories with measuring and analytical equipment for R&D, production, and other applications.

Editorial Notes

Since 1999, HORIBA has been publishing the Gaiareport, an annual environmental report intended to inform stakeholders of our environmental initiatives.

Beginning with the 2004 edition, we have included in the report a section on our social initiatives. In an effort to further improve the social aspect of this publication, the 2006 edition of our Gaiareport serves as our social and environmental report on HORIBA's initiatives for a sustainable society.

We adhered to the following policies in compiling this, the 2006 edition of the Gaiareport:

- ◆ We ensured the information contained in the document was conveyed as honestly as possible and in a manner clear to all stakeholders.
- ◆ We used the following references in compiling this report:
  - Environmental Report Guidelines (2003) published by the Ministry of the Environment
  - Sustainability Reporting Guidelines (2002) published by the Global Reporting Initiative (GRI)
- ◆ The scope of this report is as follows:
  The head office, head factory, and domestic sales offices of HORIBA; and the domestic service stations of HORIBA Techno Service Co., Ltd. during fiscal 2005 (12 months ended March 20, 2006)
- ◆ Publication date: June 17, 2006
- ◆ Planned publication date of next report: March 2007
- ◆ Please direct all inquiries to the Quality, Environmental & Safety Management Center:
  Tel: +81-75-325-5086 Fax: +81-75-316-0194
- ◆ Relevant websites
  - Environmental protection initiatives
    http://www.jp.horiba.com/about_e/environment/
  - Investor Relations:
    http://www.jp.horiba.com/ir_e/
  - Gaiapress
    http://www.jp.horiba.com/sensorium_e/index.htm

Contents

Toward a Sustainable Society ····· 01
A Message from the President ····· 02
Management Policy of the HORIBA Group ··· 04
Corporate Social Responsibility within the HORIBA Group ····· 06
Fiscal 2005 Financial Report ····· 08
Integrated Management System ····· 10
Environmental Improvement Activities
Environmental Risk Management ····· 16
Environmental Accounting (Integrated Management System) ····· 18
Minimizing Environmental Impact through Products and Technologies ···· 20
Quality Improvement Initiatives ····· 26
Occupational Health and Safety ····· 28
Social Report
Working with Our Customers ····· 29
Working with Our Owners (Shareholders) and Investors ····· 30
Working with Our Suppliers ····· 31
Working with Our Employees ····· 33
Working Together with Society ····· 35
Contributing to Society ····· 37
Opinions of Stakeholders ····· 39
Environmental Data ····· 40

Company Precept

HORIBA Corporate Philosophy

HORIBA's company precept "Joy and Fun"

Originates from the belief that if we take interest and pride in the work that occupies most of the active time in our lives, in the place where we spend the majority of each day, then as a result our satisfaction with life will increase, and we will be able to enjoy our lives even more. Taking interest and pride in our work leads us to "Joy and Fun."

Business Operations

We, at the HORIBA Group, apply of our most-advanced analytical technologies to provide highly original analytical and measuring products and equipment in such fields as engine emissions; scientific analysis; industrial and process control; environment monitoring; semi-conductor process control; medical and health-care; and biotechnology, thereby contributing to the progress of science and technology, improve the quality of development and benefit human health. Group companies engaging in the new businesses for derivative and peripheral products aim to develop scientific technology and improve the life of the community, while at the same time minimizing the impact on the environment.

We strictly abide by all environmental protection laws and regulations in our ordinary business activities. In addition, all group companies are required to attain the highest levels of quality for establishing, developing, and maintaining environmental systems, including implementing internal control standards that minimize the impact that our business activities have on the environment.

We strive to deliver the highest value-added products and services in the shortest possible time to customers all over the world, combining the functions and specialties of development, production, sales, and services from globally located points throughout the world. Furthermore, we aim to be the leader in the global market in the fields and product segments in which we operate, to consistently, meet all customers' needs and to effectively maximize our limited resources through a policy of selective investment.

Customer Responsiveness

We maintain a philosophy of pursuing technology to an ultimate degree in both the fundamental and applied technology fields, supplying products that continuously satisfy customers' requirements. We are committed to offering top-quality, highly reliable products and services with a consistent level of excellence throughout the world. Group companies are obliged to attain the highest standards for establishing, developing, and maintaining quality control systems. To provide products and services to customers in the fastest delivery time possible, we have adopted the slogan "Ultra-Quick Supplier" for all the Company's activities. This slogan encompasses not only production lead times but also development, marketing and sales, service, and control functions.

Responsibility to the shareholders and investors

Our basic policy is to calculate annual dividends on an allocated rate of net income. Important information regarding management and business operations are fully disclosed on a regular basis to shareholders and potentially interested parties. A timely, responsive management control system will be established by group companies to ensure that company objectives are met, profit generated and the information disclosed the truthful representation of the performance of the Company as well as its management.

Employees

We are proud of the entrepreneurial spirit that led to the creation of the HORIBA Group. Each employee is made aware of this heritage, and we actively encourage ideas and innovations from individual employees. HORIBA promotes an open and fair business environment that allows all group employees to achieve their individual goals and maximize their potential. To further employees' personal and professional growth, we encourage employees to think from a global perspective and establish a global personnel development program with a performance evaluation system. We value employees who challenge their personal abilities and recognize their accomplishments.

Code of Ethics

Code of Conduct

HORIBA has drawn the Code of Conduct that encompasses the following eight articles, in compliance with company precept of "Joy & Fun" and our HORIBA Corporate Philosophy. Board members and employees of HORIBA strictly observe them in order to constantly be aware of our mission and role as well as to pursue sustainable development into the future as an international enterprise.

Our board members and employees value this code, take initiative in practicing it and commit to educating and disseminating its content throughout the corporation. Moreover, we will continue to appreciate opinions from both inside and outside the corporation, reflect them to improve efficiency of internal systems and to strengthen our corporate ethics. Should a situation arise that is contrary to the code, we shall promptly disclose accurate information, ensure accountability, carry out an investigation into the cause, and endeavor to prevent a recurrence.

I. We shall comply with all laws, regulations, and social norms.
II. We shall contribute to society by providing excellent products and services.
III. We shall engage in fair, transparent, and free competition. We shall also maintain sound, normal relationships with governments.
IV. We shall respect our employees' individuality and create safe, healthy, and comfortable workplaces.
V. We shall respect the opinions of our stakeholders (interested parties).
VI. We shall make an active social contribution as a good corporate citizen.
VII. We recognize that environmental initiatives are essential to the existence of our company, and we shall voluntarily commit ourselves to them.
VIII. We shall confront antisocial groups and organizations that threaten the social order and the safety of citizens, and we shall absolutely reject any unlawful or unjustified requests.

Behavioral Criteria

We have formulated our Behavioral Criteria as a means of putting our Code of Conduct into effect in our corporate activities. This Code of Conduct sets forth principles that HORIBA's board members and employees are required to follow when conducting corporate business. These detailed Behavioral Criteria address important matters and can be practiced in our day-to-day business activities.

Toward a Sustainable Society

The nurturing of mutually beneficial “win-win” relationships in all aspects of
our operations underpins our philosophy of Corporate Social Responsibility (CSR).
We promote open and fair communication; develop products in a spirit of “Joy & Fun;”
and operate in a manner befitting Kyoto, the starting point of Japanese history and tradition.
In short, we strive to excel in all that we do.
We at HORIBA welcome your comments and remain committed to working together into the future.

Corporate Culture

Involvement in all group business activities

Contributing through business

To constantly broaden our horizons to ensure a prosperous future for all

- Promoting the protection of our earth and coexistence with the natural environment

1) Be responsive to customer needs.
2) Pursue technology to the ultimate degree.
3) Always challenge.
4) Be unique.
5) Promote active communication.

“Open & Fair Spirit”

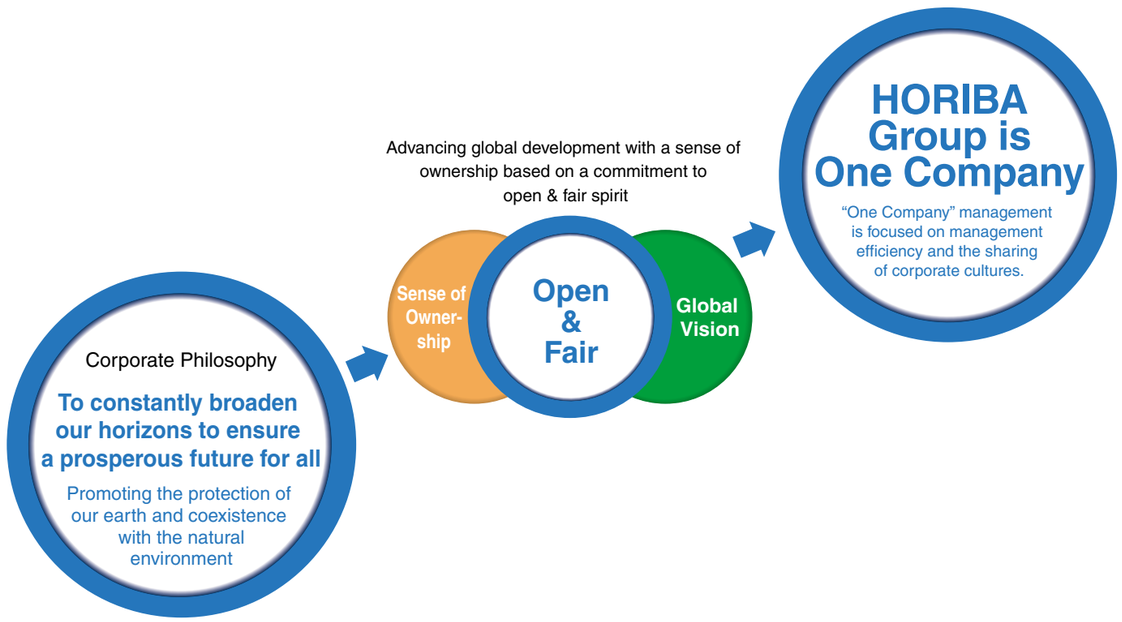
Our behavioral guidelines and corporate philosophy were developed from our business precept of “Joy & Fun.” Based on this approach, we will respond to the expectations and trust of our stakeholders with the “Open & Fair Spirit” that characterize all our business activities.

We contribute to a prosperous future through harmony with nature and society.

Our Mission is to Contribute to the Development of a Sustainable Society and Function in Harmony with Nature.

Atsushi Horiba
Chairman, President & CEO
June 2006

HORIBA operates with a commitment to Open & Fair Spirit and assumes the roles and responsibilities of a global company.



Addressing issues common to humanity by integrating technologies in measurement devices

As a manufacturer of analysis and measurement equipment, HORIBA has excelled, since its foundation, at incorporating its expertise in advanced measurement. We have responded to the needs of society by targeting the development of innovative products for the automotive, environmental, medical, and semiconductor industries. We are confident our business of providing industry with measurement devices will contribute to resolving the global environmental issues that are common to all humankind.

Amid today's dramatically changing social and business environment, we see sustainable social development as the greatest challenge facing humanity in this century. It requires that we conserve the global environment, a task rooted in the need to achieve symbiosis with nature. Notably, the Kyoto Protocol, which holds the key to implementation of countermeasures against global warming, came into force last year, creating a new international agenda.

We have responded to this issue by implementing an internal project to reduce energy consumption. We are reducing the environmental impact of our manufacturing processes and products. Today, our customers are using our products from a comprehensive viewpoint that considers all phases of production including quality, safety, and the environment.

As a company that provides analysis products focused on "measurement," we remain committed to providing eco-friendly products and reducing the environmental impact of future products while helping to resolve environmental problems through our products.

Building win-win relationships with all stakeholders

As the need for corporate social responsibility has increased, HORIBA has long been actively involved in disseminating information to society on various products and technologies. At the same time, we have been publicizing information on HORIBA's business activities, including information on "measurement" technologies and environmental issues. Moreover, we disclose highly reliable and transparent corporate data.

All of our employees display a sense of ownership in contributing to corporate accountability. In so doing, they are preserving the spirit on which our company was founded. Our goal is to become a company that has the trust of society and prospers together with society.

Through repeated practice and effort, all members of our group are taking the initiative in maintaining communication with society and are applying the benefits of this commitment to our business operations. Though this approach, we believe our CSR activities will continue to build win-win relationships with all stakeholders.

Seeking to cultivate global market while demonstrating a commitment to Open & Fair Spirit

HORIBA is actively expanding its global business. We are committed to open & fair spirit and are not interested in merely pursuing economies of scale. We do not impose a company-wide HORIBA culture; instead, we respect the qualities of each individual while we introduce new ideas and apply them diligently. In short, we believe we can manage our group functions efficiently and effectively. These functions include optimal product development, establishment of production systems, and procurement of materials with a global market perspective that transcends borders and cultures thanks to our interwoven concept of values. Twice annually, the executive officers of our worldwide group companies meet to deepen their mutual understanding and achieve consensus to ensure the group functions as one organization. The roots of our corporate culture place a high value on face-to-face communication.

Promoting the ideal of "One Company" management with the goal of contributing to the world's future

Dedicated to the ideal that "The HORIBA Group is One Company," we have addressed the challenge of global management by removing the barriers between our group companies in Japan and other countries. As a result, HORIBA achieved record net sales and operating income in fiscal 2005. We would like to thank all involved for their contribution to this achievement.

In fiscal 2006, we will implement our new Mid-Long Term Management Plan with the goal of achieving consolidated net sales of ¥150 billion and an operating income ratio of at least 10% by fiscal 2010. To achieve this plan, we have adopted the slogan, "to implement One Company management with the goal of becoming a truly global company." We have adopted a corporate culture focused on our Company Precept of "Joy & Fun" with the intention of nurturing and improving on the HORIBA brand. We believe we can contribute to the world's future by developing products that support the societies in which we live.

Gaiareport 2006 summarizes the details of our activities and achievements in fiscal 2005 and features an enhanced section on social activities. We operate in a manner befitting Kyoto, the historical and traditional city in which we are based, with a dedication to authenticity and an uncompromising commitment to technology. We invite you to become informed about our initiatives and our approach to what we can and must do. We look forward to receiving your advice and guidance.

By implementing our “One Company” management approach encompassing a matrix of four business segments and multiple geographical segments, HORIBA is building a balanced business portfolio and efficient management systems.

As a leading manufacturer of analytical instruments, HORIBA is contributing to social priorities such as energy conservation, global environmental protection, human health, and public safety by providing innovative analytical and measurement technologies to four growing markets: Automotive Test Systems; Analytical Instruments & Systems; Medical/Diagnostic Instruments & Systems; and Semiconductor Instruments & Systems.

At the same time, we are promoting operations in our tripolar geographical segments of Europe, the Americas, and Asia including Japan. This balanced approach to our business segments and geographical segments gives us the ability to offset weak performance in one segment or region with good performance in another, thus contributing to a stable business portfolio backed by capable risk management.

Management Policy

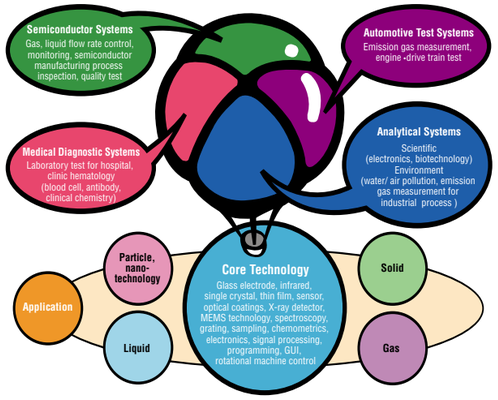
As an international manufacturer of analytical instruments, HORIBA aims to become a “First-class, global company.” Our corporate philosophy is to contribute to several social issues—including environmental preservation; improved public health, safety and convenience; and the development of science and technology—through our business of providing innovative analytical technology to a variety of industries. By utilizing the human and technological resources of all 44 companies in the global HORIBA Group, we are benefiting from our group synergies and achieving sustainable growth for all stakeholders.

Mid-Long Term Management Plan

HORIBA comprises four business segments: Automotive Test Systems; Analytical Instruments & Systems; Medical/Diagnostic Instruments & Systems; and Semiconductor Instruments & Systems. By promoting our businesses across these four markets, we have established a balanced portfolio that highlights the advantages of each segment while providing the reciprocal support to strengthen any weak aspects.

In addition, we have formulated a new management policy that adheres to one integrated principle—“The HORIBA Group is One Company.” Previously, the individual companies undertook our group’s strategic planning and earnings management separately. In the future, however, we will transcend the barriers of national boundaries and organizational divisions in order to accelerate the trend toward intra-group fusion. Our concrete initiatives include recasting the entire company as a virtual organization with four business segments. We believe the strategic and efficient approach of using business segments will enable us to improve the earnings of the entire group while practicing management on a global scale. In so doing, we will enhance our corporate value.

Symbol of New Mid-Long Term Management Plan



Priority Measures

■ Priority Measure 1: Building a Platform for ¥200 Billion in Sales

a) Promoting global business strategies

Through the global segment system under our “One Company” management system introduced in 2003, we will continue to actively promote business operations that extend beyond the artificial barriers of corporate divisions and national boundaries. We will strive to create value through all our group companies.

b) Ensuring effective management on a regional basis

In Europe, Asia, and the Americas, we are introducing a shared management service encompassing accounting, financial and legal affairs; intellectual property management; human resources; and IT systems. We are seeking ways of reducing operating costs and improving management quality.

c) Introducing a new Enterprise Resource Planning (ERP) system

Management personnel require accurate, detailed, and timely information for decision-making. Introducing an integrated task system is essential to increasing management efficiency in each region. Thus, we will proceed with full-scale introduction of our new ERP system.

■ Priority Measure 2: Building a well-balanced business portfolio

In the past, HORIBA secured high earnings by focusing on the Automotive Test System Segment. Later, our aggressive investments in the Semiconductor Instruments & Systems and Medical/Diagnostic Instruments & Systems segments began to bear fruit. Our goal is balanced growth together with a robust Analytical Instruments & Systems segment targeting diverse regions. Specifically, we are committed to expanding our business by investing aggressively in emerging markets in India and South America and in the rapidly growing Chinese market.

■ Priority Measure 3: Increasing “invisible values”

Conventionally, HORIBA has conducted business by emphasizing the “invisible values” that does not appear on a balance sheet, such as corporate culture, brand value, human resources, technology, management expertise, CSR and environmental initiatives. In this way, we have endeavored to improve our corporate value. Going forward, we will build on this “invisible values” as we continue to achieve dramatic improvements in our profitability and investment efficiency.

Business Outline

■ Automotive Test Systems

Our equipment for measuring vehicle exhaust gases is used worldwide in the automobile industry. Our measurement technology flourishes in the field of clean engine development and fuel cells. Today, our products account for 80% of global market share.

■ Analytical Instruments & Systems

We contribute to society through our diverse array of analytical equipment for use in everything from global environmental research to fields requiring compositional analysis with nanometer-level precision. HORIBA provides a safe, healthy, and peaceful life for all through a product line ranging from air pollution monitoring equipment to saliva acid neutralizing capacity analyzers.

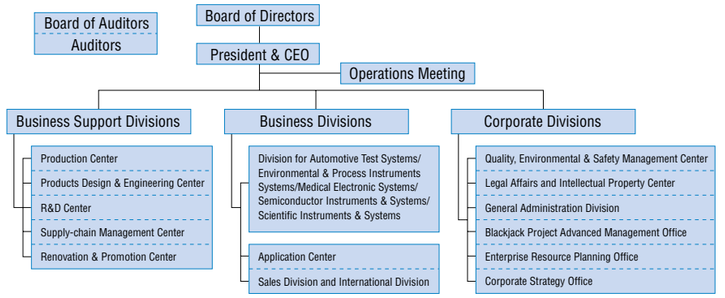
■ Medical Electronic Systems

HORIBA’s analitical technology has important application in the medical industry, a key area affecting human life, with products such as blood cell counters and equipment for measuring immunological responses. We are expanding this global business together with HORIBA ABX SAS (France).

■ Semiconductor Instruments & Systems

HORIBA does its all to increase quality and speed of semiconductor manufacturing equipment to support the advancement of IT. HORIBA STEC Co., Ltd., HORIBA Advanced Techno, Co., Ltd. and HORIBA Jobin Yvon SAS work in unison as providers of total solutions under the HORIBA brand.

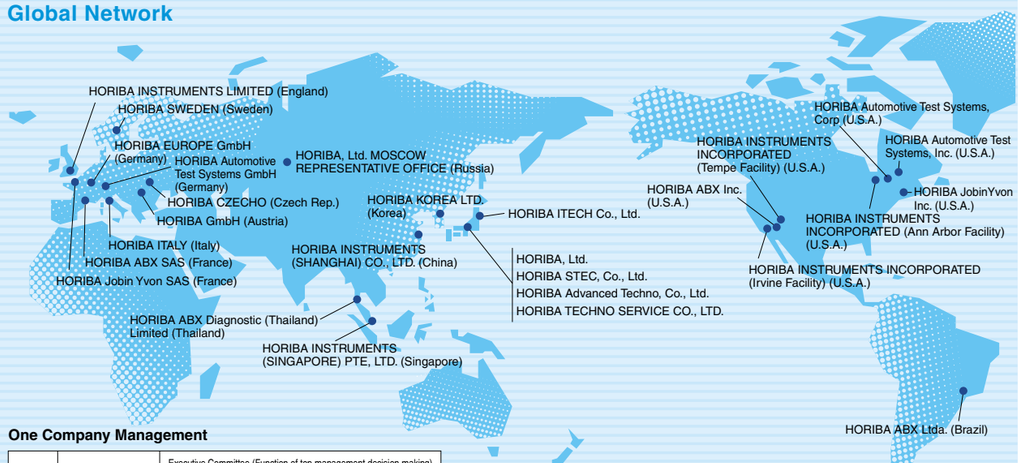
Organizational Chart



Board of Directors (at June 1, 2006)

Chairman, President & CEO: Atsushi Horiba
Executive Vice President: Kozo Ishida
Managing Director: Fumitoshi Sato
Director: Juichi Saito, Managing Director of HORIBA STEC, Co., Ltd.
Director: Shijuro Ogata
Auditors:
- Hiroshi Tajima
- Kanji Ishizumi, Attorney-at-Law, President of Law Office of Chiyoda Kokusai
- Keisuke Ishida, Chairman of the Board, CEO of Shashin Kagaku Co., Ltd.

Global Network



One Company Management

		Executive Committee (Function of top management decision making)			
	Corporate function	Engine	Analytical	Medical	Semiconductor
Asia	Shared service				
Europe	Shared service				
Americas	Shared service				

HORIBA has established the CSR Promotion System and Corporate Governance System with the goal of remaining a company that is both trusted and welcomed by society.

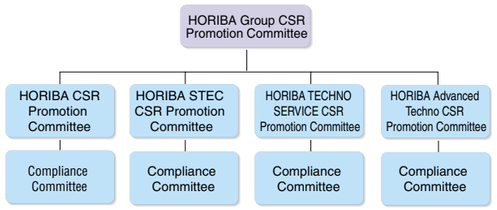
We established the CSR Promotion System in response to the globalization of our business; in April 2004, and we became fully engaged in corporate social responsibility. We have endeavored to ensure continuous improvement of our corporate value by establishing a system of corporate governance that horizontally integrates the functions of the group while increasing the efficiency and transparency of our business.

CSR Promotion System

CSR Policy for Fiscal 2006

With a focus on energy, health, safety, and the environment, we are contributing to a comfortable, contented society.

HORIBA Group CSR Promotion System



Focused on energy, health, safety, and the environment

Building on our “One Company” management principle, HORIBA periodically convenes the HORIBA Group CSR Promotion Committee together with the major domestic group companies. This body discusses and determines the group’s CSR-related policies and objectives.

Through various activities including regional, cultural, educational, academic, and international exchanges, we are making a significant contribution to society. All our products are related to energy, health, safety, and the environment, and our corporate activities target these four key aspects. Providing products of high added value and high-quality products and services is linked to creating a comfortable, contented society, the goal that underpins the drive for CSR.

Corporate Governance

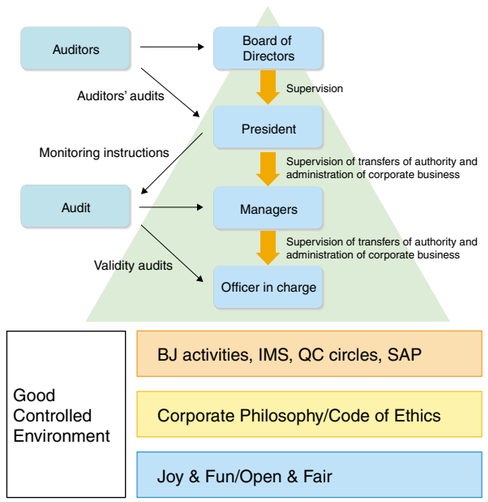
Corporate Governance System

With the goal of implementing transparent business management and maximizing corporate value under a philosophy of “Open & Fair,” HORIBA strives to introduce a system of corporate governance acceptable to people worldwide. We are seeking to establish a good relationship with all stakeholders while creating an organizational system capable of responding quickly to a changing business environment, offering improved monitoring of management, and ensuring a stronger compliance system.

Internal Controls

With our internal controls, we are implementing a “policy for building an internal control system” that ensures the job performance of board members and employees conforms to laws, regulations, and company statutes. We shall also ensure that our work is appropriate and effective. We are seeking to establish corporate governance by improving our compliance, risk management, and other systems. Subsequent to the enacting of a Japanese equivalent to the Sarbanes-Oxley Act of the U.S.A., we are improving our system of internal controls to ensure compliance in financial reporting by constructing a more effective and highly reliable financial reporting system.

Role and Responsibility of Internal Controls



Strengthening compliance with laws, ordinances and corporate ethics and implementing risk management.

As a global company, we are strengthening our efforts to comply with the laws, ordinances, and societal codes of all countries by implementing a risk management regime that identifies and avoids risk. Our risk management effort spans all group companies in our effort to avoid risks and ensure a prompt response to hazardous incidents.

Compliance

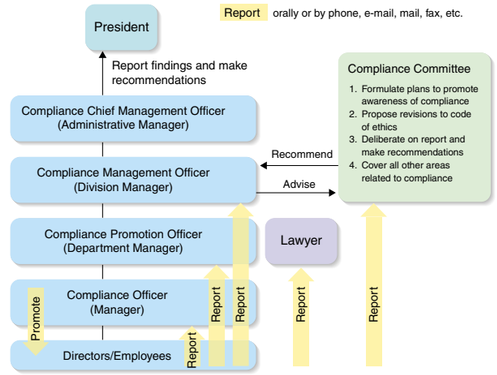
Compliance Promotion System

We established our Compliance Committee under our CSR Promotion Committee to discuss related matters and to enquire about, report on, and make recommendations on whistle-blowing. This committee promotes a better understanding of compliance and thorough risk management.

By properly managing and controlling all business risks, we are promoting an improved risk management system as an aspect of business management as important as the stable execution of business, conservation of management resources, and improvement of corporate value.

In order to enhance systems related to compliance, we have established the HORIBA Corporate Philosophy, our Compliance Management Regulations, and our Code of Ethics. We have also introduced an “internal reporting system” that encompasses prevention, early detection, and correction. We are enhancing in-house awareness and observance of laws and regulations by enabling consultations with external lawyers and by providing an e-mail address exclusively for the use of whistle-blowers.

Compliance System



Risk Management

Our risk management efforts include compliance regulations, a code of ethics and behavioral criteria as the behavioral standard for the board members and employees. We are promoting risk management by establishing the CSR Promotion Committee and the Compliance Committee.

Observance of Laws and Regulations

In order to accommodate the demand for Corporate Social Responsibility, we shall take steps to eliminate and avoid corporate risks by observing all related laws and regulations as well as our own corporate ethics, company regulations, and the like.

Environmental Risk

From the perspective of IMS (Integrated Management System), we shall determine the environmental aspects of our corporate operations and seek to improve the environment, reduce environmental impacts, and provide eco-friendly products.

Chemical Substance Risk

To build on our IMS initiative, we observe all relevant domestic and international laws and regulations and are endeavoring to reduce the toxic substance content of our products. Of particular importance is our need to respond to the European RoHS Directive.

Information Risk

Management decision-making absolutely requires accurate, detailed, and timely information. By introducing our new ERP system and SAP system, we are promoting our “One Company” management.

Intellectual Property Rights

We are making a special effort to observe all laws and regulations and to consider the importance of the Industrial Property Law and the Unfair Competition Prevention Law amid the shift of the industrial structure away from manufacturing and toward intellectual creativity.

Protection of Personal Information

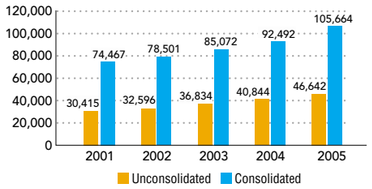
In recognizing the importance of protecting personal information, we are implementing, maintaining, and improving matters related to the proper handling and protection of personal information in conformity with the personal information protection guidelines.

Review of Achievement

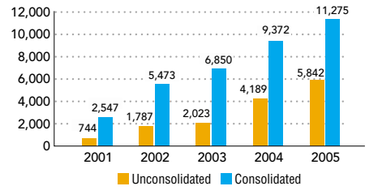
The fiscal year ended March 20, 2006 (Fiscal 2005), marked the final year of our previous Mid-Long Term Management Plan. With record net sales and earnings, HORIBA continued to post excellent overall results. As a result, we have achieved our management target of ¥100 billion in consolidated net sales, an operating income margin of 10 percent, and a return on equity of 8 percent.

Our targets for fiscal 2010 are to achieve ¥150 billion in consolidated net sales, an operating income margin exceeding 10 percent, and a return on equity of exceeding 11 percent.

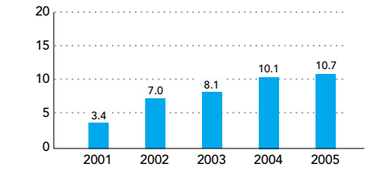
Net Sales (million ¥)



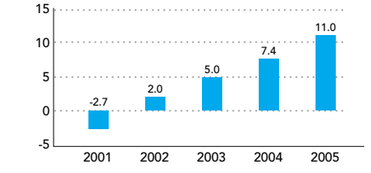
Operating Income (million ¥)



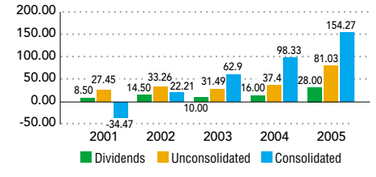
Consolidated Operating Income Margin (%)



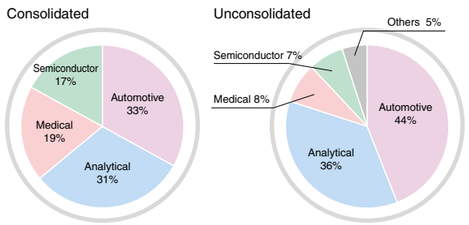
Consolidated Return on Equity (ROE) (%)



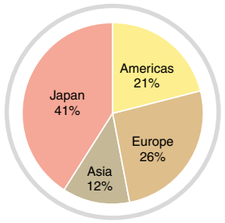
Income per Share/Dividends (Yen)



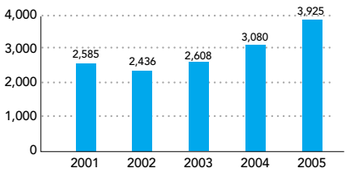
Net Sales Ratio by Segment (%)



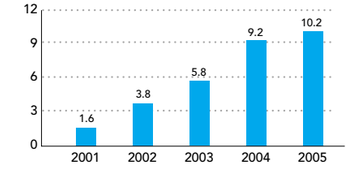
Consolidated Net Sales Ratio by Region (%)



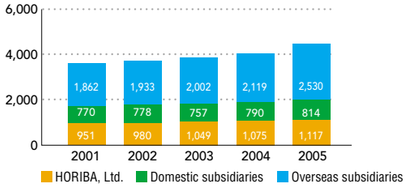
Equipment Investment (million ¥)



Consolidated Return on Assets (ROA) (%)



Number of Employees



Highlights of Fiscal 2005

August 2005 — HORIBA acquires the Automotive Development Test Systems (DTS) business of Carl Schenck AG.

With a contract signed on August 22 between HORIBA and Carl Schenck AG, HORIBA acquired Carl Schenck's DTS (Development Test Systems) business. On September 30, the DTS division of Carl Schenck AG officially joined the HORIBA Group. Located in countries around the world, the seven companies of Carl Schenck AG have annual sales of ¥10 billion and employ 500 personnel.


Carl Schenck AG

September 2005 — New group ERP system introduced.

We have undertaken the full-scale introduction of our ERP system as a key information systems project. It is intended to operate with the same rules and integrate with the same data among all group companies under our "One Company" group management policy. On September 17, we held a signing ceremony when we entered into a licensee contract with SAP Japan Co., Ltd. This project represents a major reform, as it is intended to improve employee awareness across all group companies. Its goal is to enhance competitiveness by accelerating decision-making within the HORIBA Group.

Contract signing ceremony

October 2005 — New expanded Aso Factory is completed as the largest mass production facility in Japan.

In October 2005, we reopened a factory for HORIBA STEC, Co., Ltd., a core semiconductor systems equipment producer located in Aso, Kumamoto prefecture. The newly expanded factory provides three times the floor area (7,340 square meters) of the previous factory. What's more, this eco-friendly facility features the latest clean rooms and mass production capabilities and is equipped with energy-saving facilities.


Aso Factory

November 2005 — HORIBA is awarded the 2005 France-Japan Investment Prize (in technology) for its investments in France.

The Invest in France Agency awards the France-Japan Investment Prize to companies who contribute to economic exchanges and economic development between Japan and France. HORIBA FRANCE SARL, established in 1982, is engaged in sales and service of automotive emissions testing systems and environmental analysis equipment. Two other companies in France—currently named HORIBA ABX SAS and HORIBA Jobin Yvon SAS—joined the HORIBA Group in 1996 and 1997, respectively. These two companies operate in the medical electronic systems and analytical equipment and systems segments. HORIBA was presented with the 2005 award following an evaluation of our French operations of our global core business network.


Award ceremony for the France-Japan Investment Prize

December 2005 — Porter Prize awarded to the Engine Measurement Instruments and Systems Division, HORIBA.

HORIBA's Engine Measurement Instruments and Systems Division was awarded the 2005 Porter Prize for the high profitability of our unique global competition strategy when compared with other companies in the same industry. The Porter Prize, created by the Graduate School of Hitotsubashi University, bestows recognition on Japanese companies that have achieved and maintained unique competitive strategies in a particular industry or division. The award is named after Professor Michael E. Porter of Harvard University, a leading authority on business strategy.


Porter Prize award ceremony

March 2006 — Dr. Masao Horiba receives the Pittcon Heritage Award.

Dr. Masao Horiba, supreme counsel of HORIBA was presented with the Pittcon 2006 Heritage Award by the Chemical Heritage Foundation, an NPO, and the Pittsburgh Conference on Analytical Chemistry and Applied Spectroscopy, Inc. (Pittcon). This highly prestigious award is presented to the enterprise manager who has made the most significant contribution to the scientific measurement instrumentation industry.

Pittcon Heritage Award ceremony

To further promote CSR, HORIBA has introduced an integrated management system of quality, the environment, and safety.

In 2004, HORIBA introduced an integrated management system (IMS) to harmonize the previously independent quality, environmental, and health & safety management systems. The introduction of IMS is intended to contribute a high-value-added, high-efficiency approach to corporate management. It is mainly focused on achieving operational efficiency, reduced management costs, shorter intervals, and a shift from partial to total optimization.

The shift from partial to total optimization

The various phases of discrete quality, environmental, and health & safety systems are not independent. They are, in fact, closely interconnected. For example, an improvement in the rate of defects contributes to an improved yield rate on the quality side, reduced waste on the environmental side, and reduced exposure to sources of risk. In other words, it is possible to make an appropriate judgment by creating close associations between individual activities and adjusting for trade-offs. As a result, we were able to introduce a system that focuses on total, not partial, optimization and establishment of targets.

Increasing operational efficiency and reducing management costs

To improve the acquisition of ISO registration, we have established independent offices for each management system. However, a corporate management system is naturally a unified system within the company operating as one system. This is a common feature that extends across manuals, standards, criteria, process documents, meetings, and internal audits. By operating three systems as one, we can increase our operating efficiency and reduce costs.

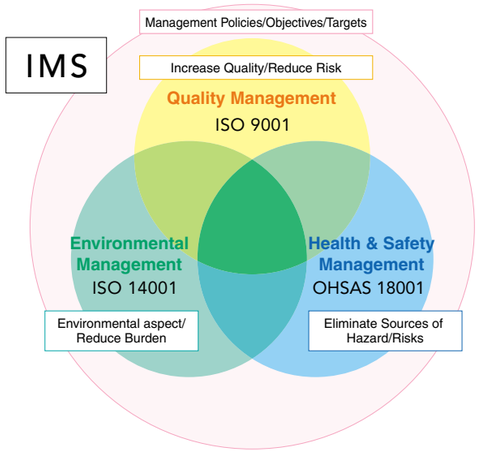
Achieving shorter intervals

Previously, decisions on action plans and meetings of the Council for IMS Promotion and the like were held independently. This cycle took time to integrate the three sides. By introducing IMS, we were able to function under one action plan and in one meeting. Moreover, it became possible to undertake the work in a more frequent quarterly cycle. Thus, we are able to execute management's instructions, identification, and response in a shorter cycle period.

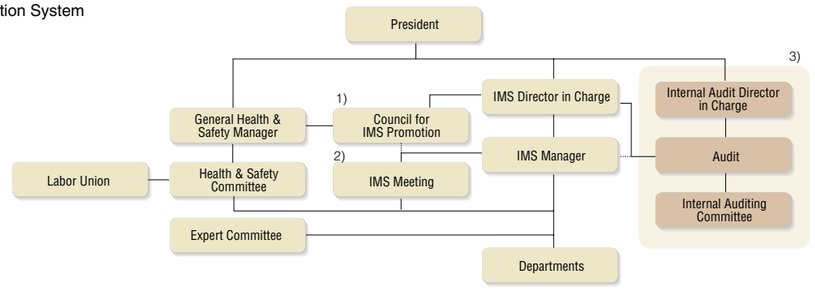
IMS Policy for Fiscal 2006

I. We shall accommodate diverse customer needs by providing products and services through an environmentally friendly production system.
II. We shall comply with all laws, regulations, and social norms; promote mutual prosperity with stakeholders; and actively contribute to society.
III. We shall strive to adopt continuous improvement and implement plans to achieve it by creating enterprise value for our group companies according to our management policy.

Outline of IMS



IMS Promotion System



Notes:
1) Council for IMS Promotion: Top management reviews suitability, adequacy and effectiveness of IMS
2) IMS Meeting: Department managers debate problems and areas for improvement to ensure a smooth-running IMS (monthly meetings)
3) Internal audit: Objective and systematic evaluation of whether IMS is running according to set standards

IMS Initiative

System Improvements Resulting from IMS Operations

Details of system improvements resulting from the influence of fiscal 2004 activities on fiscal 2005 activities

Item	Fiscal 2005	Details & Results of Activities	Challenges
Stance of Council for IMS Promotion	Hold quarterly councils.	Implemented four times in June, September, December, and February. Acceleration initiative implemented. Executives issued comments.	Prompt response is required to the instructions and issues raised by the executives.
Formulate IMS activity plans	Integrate IMS activity plan into business plan.	The same schedule applies to the IMS plan and business plan. The same system applies to activities reports and evaluations.	The operation plan had been reviewed every six months. This interval is too long. Reports and evaluation are required every quarter.
Improving competency of internal auditors	Aggressively recruit new managers.	Nine new managers were recruited and audit was implemented. IMS training was enriched.	Promote remaining new managers to auditors. Enrich training.

The IMS initiative implemented in fiscal 2005 to improve the system mainly reflected the above three points, which reflected the detailed results of the fiscal 2004 activities and results. Consequently, further improvements were proposed regarding the objectives for introducing IMS. Moreover, our medical electronic systems segment has embraced ISO 13485—the international standard for quality management of medical equipment—in its operations and has acquired certification for this standard. Conventionally, acquiring certification in a new type of international standard is very burdensome and requires a significant effort, but we believe we have effectively introduced this system by addressing it as a part of our IMS initiative.

Points of improvement identified in fiscal 2005 are reflected in the descriptions for fiscal 2006 activities below.

Details of system improvements resulting from the influence of fiscal 2005 activities on fiscal 2006 activities

Item	Fiscal 2005	Details of Revisions	Fiscal 2006
Improvement & follow-up of IMS initiative plans	Report and evaluation submitted for the first and second halves (6 month periods), feedback interval.	Plan for quarterly reporting and feedback, and evaluation system.	Implement a cycle of quarterly IMS initiative evaluations.
Improving competency of internal auditors	Assigned and trained new managers.	Make all new managers appointed in 2005 into auditors and train them.	For audits, formulate a training plan, also applicable to existing auditors, and provide training from May to August. Assign auditors after training.
Development of IMS for domestic group companies	HORIBA STEC acquired certification in ISO environmental standards (Already acquired by HORIBA Advanced Techno in 2004).	HORIBA STEC and HORIBA Advanced Techno must prepare for IMS implementation.	In order to ensure operation of IMS in 2008, both companies shall establish IMS (including OHSAS).

In fiscal 2006, the activity period is nine months from April to December. We will take steps to establish, perform, and further enhance the above objectives.

Future Initiatives and Directions

Steps to further promote IMS initiatives

Despite facing challenges, we made improvements and firmly established the operation of the system in fiscal 2005. In late April 2006, the Japan Quality Assurance Organization (JQA) implemented a renewal inspection to determine whether the IMS initiative was implemented without any particular problems and achieved improvements during the two years of the IMS activities. The inspection uncovered a few improvement points, such as the use of individual facilities. But overall, the inspection verified the IMS requirements for the corporate management policy and confirmed that the management plan functioned in better conformity than it had previously. As a result, we were issued an attestation number (JQA-IG0001-02).

The pace of today's ever-changing world is increasing dramatically and in unprecedented ways. It is no exaggeration to say that the importance of corporate social responsibility and compliance is growing daily. We are optimizing various phases with a focus on quality, the environment, and safety to implement corporate management with improved efficiency and balanced activities. We will live up to the honor of being awarded Japan's first IMS certification subsequent to a JQA assessment.

Implementation of IMS in both domestic and international group companies

In April 2006, in keeping with our "The HORIBA Group is One Company" management policy, we announced that we would implement One Company management and aim to become a truly global company. This objective is listed as the core of our new Mid-Long Term Management Plan. Moreover, we are aggressively promoting this management with the goal of becoming an appealing global company.

Under this policy, we have been striving to acquire ISO certification for all group companies as a means of establishing a foundation for implementing IMS in each domestic and international group company. In 2005, HORIBA Advanced Techno, Co., Ltd. (HAT) in Japan acquired ISO certification for its environmental management system, while HORIBA INSTRUMENTS (SHANGHAI) CO., LTD. in China acquired ISO certifications for both its quality assurance and environmental management systems. In February 2006, HORIBA STEC Co., Ltd. (STEC) in Japan acquired ISO certification for its environmental management system. Our staff responsible for promoting ISO standards throughout our group companies gathered at our head office in May 2006 to explain and demonstrate issues related to IMS implementation. Through a variety of such activities, we are continuing to make steady progress in implementing IMS.

Results of Fiscal 2005 IMS Activities

Fiscal 2005 marked the second year of our mid-long term (three-year) plan for IMS implementation. The following table outlines the results of our IMS targets for fiscal 2005. In the table, we used primary factor analysis to identify for improvement those items that fail to attain the target rates.

Item	Objective	FY2005 Targets	FY2005 Results	Self-Evaluation
Create corporate value	Promote the adoption of quality and environmental management systems in all domestic group manufacturing sites.	1. Provide environmental data 2. Compile group quality and environmental data 3. Convene environmental meetings and support the acquisition of certifications for the group	• Group company HORIBA STEC Co., Ltd. acquired ISO 14001 certification. • HORIBA acquired ISO 13485 certification in March 2006.	○
Enhance brand value and customer satisfaction	Ensure rapid delivery.	Over 83%	Production schedule was standardized among the sales, SCM and production divisions. Customer communication was improved.	○
	Respond swiftly to complaints (within 1 month).	Over 70%	• Targets not achieved due to the length of periods such as validation of parts checking and design changes. • Targets will be achieved in future by improving the lengthy processing and by analyzing detailed factors related to the shortfall.	×
	Reduce losses from returned products and levels of defective products.	Under 0.70%	• Implemented task force in scientific products. • Reduction activities achieved through QA meetings.	△
	Reduce unfinished work and work in process.	Two months or more: 0 One month or more: 1/3	No great improvement achieved despite linking duties, strengthening and promotion by relevant departments.	×
	Promote environmental enlightenment in community and enhance communication.	Over six cases	• Issued Social and Environmental Report. • Joy & Fun Club undertook clean-up around the head office. • Commuting route clean-up campaign launched.	○
	Expand environmental conformity design in new products.	Over 65%	Achieved four of the six new product themes.	○
	Promote green procurement and eliminate prohibited substances.	Substances subject to RoHS eliminated.	Eliminated only 60%–80% due to stagnation in collection of supplier information (agreement, nonuse guarantees, etc.) and in-progress studies regarding model cases of harmful chemical substances in products as model cases.	△
Promote creation of safe, high-efficiency clean factories	Improve power consumption factor through energy- and resource-saving activities and reduce CO2 emissions.	Over 3%	Achieved energy conservation target through energy-saving day, effective control of temperature of air conditioning, by operating production facilities at low power consumption, and through other initiatives.	○
	Promote green procurement of office supplies.	Over 50%	Reduced the rate due to purchase of expensive goods such as toner cartridges.	△
	Companywide: Achieve zero emissions. Each department: Reduce quantity of waste emissions.	Companywide: Landfill rate 10% max. Each department: Each sets its own goals.	We are reconstructing our system, including changing our solid waste disposal contractor.	△
	Promote product reuse and recycle.	Over 60%	Achieved target by encouraging sales companies to resell sample products.	○
	Thoroughly manage chemical substances, reduce output, and eliminate use of prohibited toxic substances.	Set plan for each substance.	• Inspection underway for development process of goods subject to reduction targets. • Production departments newly established target substances.	△
	Reduce errors in processes (unusable parts, engine, analytical & medical parts).	Set plan for each product.	With some exceptions, we reduced the failure rate through enforcement of quality patrols at suppliers and assembly sites.	△
	Reduce work hours	Increase sales per number of working hours by 5% YoY.	Surpassed target with upward adjustment of sales. Succeeded in increasing productivity.	○
	Reduce work accidents by half (with zero shutdowns caused by accidents).	Reduced work accidents by half (with zero shutdowns caused by accidents).	Despite undertaking risk assessments and providing training and implementing awareness-raising, six work accidents occurred and the target was not achieved.	△
	Reduce risk through appropriate management.	Eliminate risks V and IV.	As a result of the effort to reduce risks, risks V and IV were eliminated. The 2005 risk assessment was implemented.	○

Note: Self-Evaluation Category: ○= Goal achieved; △= Achieved more than 70% of goal; ×= Achieved less than 70% of goal

■ IMS Results and Challenges for the Preceding Two Years

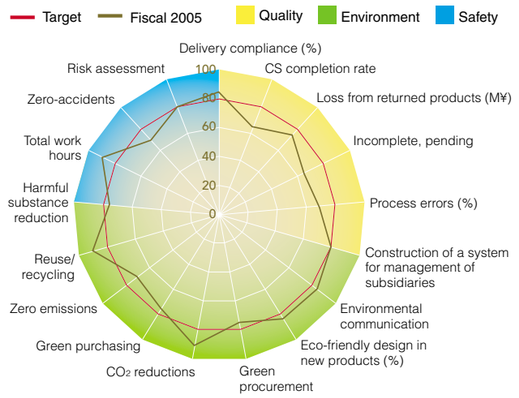
Our respective company departments have formulated and implemented plans aimed at achieving the targets of the 17 items identified under our IMS. Reflecting the views of top management, the IMS Meeting and the Council for IMS Promotion (management review) reported and discussed the progress of these activities and implemented them in the form of a brief three-month PDCA (Plan-Do-Check-Act) cycle.

The activities of various workplaces were evaluated through internal audits, and the outcomes of each target and item were fed back in the system for correction and prevention, thus ensuring continuous improvement.

The IMS Target Achievement Radar Chart shows the status of target value achievement for each of the quality, environmental, health and safety targets for the balance of fiscal 2006.

Going forward, we will promote initiatives to achieve even more balanced results in terms of quality, the environment, and health & safety, thus improving our corporate social responsibility and satisfying our stakeholders.

IMS Target Achievement Radar Chart



New Mid-Long Term IMS Plan and Fiscal 2006 Action Plan

Coincident with HORIBA's new Mid-Long Term Management Plan, the IMS Action Plan represents a five-year initiative. Fiscal 2006 is the first year of this plan. It is adapted to the concept of our new Mid-Long Term Management Plan, and it incorporates feedback on the results and challenges carried over from fiscal 2005. The following table outlines the objectives and targets of our new IMS Mid-Long Term Plan and our fiscal 2006 Action Plan.

Integrated Management System (IMS) Policy	Objectives	Objectives	FY2006 Targets	FY2010 Targets (Relative to FY2005)
	1. Create corporate value Fiscal 2010 group sales ¥150 billion Operating profit ratio 10% minimum 1) Expand IMS group-wide	Promotion of construction and development of IMS to domestic & international group companies.	1. Convey environmental information 2. Collect data on green products and environment 3. Hold group environmental meetings and support certification acquisition	Implementation of IMS for domestic & international group companies
Establish eco-conscious production system and meet customer needs through products and services. Actively contribute to society by complying with laws and regulations and social regulations, and promote harmony with stakeholders.	2. Establishment of the HORIBA Brand (Contribution to increased customer satisfaction) 2) Ensure rapid delivery 3) Respond swiftly to complaints 4) Increase the quality of products and services 5) Conduct business processes quickly and accurately 6) Expand range of eco-friendly products 7) Observe all rules and code of ethics both inside and outside the company	Ensure rapid delivery.	Over 85%	Over 90%
		Reduce loss from returned products and defective products.	Under 0.70%	Under 0.50%
		Reduce the defect rate in new products.	Under 0.70%	Under 0.40%
		Reduce unfinished work and minimize errors.	Over 2 months: 0 Over 1 month: 1/3	Over 2 months: 0 Over 1 month: 1/2
		Expand environmentally compatible design to new products (environmental display system).	Over 70%	100%
		Eliminate harmful substances in products (promote green procurement).	Eliminate all substances specified by RoHS	Totally eliminate
Formulate plans based on our management policy to increase the enterprise value of our group companies and continually work to improve them.	3. Promote creation of safety and high efficiency clean factories 8) Contribute to prevention of global warming 9) Reduce waste 10) Reduce harmful substances 11) Raise production/administrative efficiency 12) Strive for zero-accidents	• Reduce pollutant load per unit of sales through activities to conserve energy and resources. • Reduce CO_2 emissions.	Over 9%	Set separately (in response to Kyoto Protocol)
		Companywide: Achieve zero emissions. Each department: Reduce emissions.	Companywide: Under 10% of final waste at landfill. Each department: Each sets its own goals.	Companywide: Under 1% of final waste at landfill Reduce total volume of waste.
		Reduce errors in processing (unusable parts, engine, analytical & medical parts).	(Set for each department)	(Set for each department)
		Eliminate absenteeism from work accidents.	Reduce accidents by half (zero absenteeism from accidents)	Zero-accidents
		Promote suggestion activities.	More than one suggestion per employee	(Set separately)

Note: The CS completion rate; environmental awareness activities; green purchasing; reuse and recycling of returned products; management of chemical substances; working hours; and risk assessment are managed by each workplace as routine work indicators and indices.

■ Targets of the New Mid-Long Term Plan and Objectives for Fiscal 2006

1. We reviewed IMS policies from the perspective of corporate social responsibility, compliance with laws and regulations, and "One Company" management to ensure they reflected our corporate management policies.
2. The goals established for the objectives and targets of IMS shall accommodate the management policies and enterprise value. The targets for routine work are established as daily management indicators.

The following outlines the environmental, quality, and health & safety objectives for fiscal 2010 under the above IMS Mid-Long Term Plan.

1. Environmental Improvement Activities

1) To reduce the environmental impact of our products and to strengthen our response to domestic and overseas regulations
   a) To expand and enhance new products with design for environment
   b) To eliminate harmful and prohibited chemical substances in products by promoting green procurement

2) To prevent global warming and reduce waste through efforts to conserve energy and resources
   a) To reduce CO_2 emissions per unit of net sales through energy conservation and resource-saving activities
   b) To achieve zero emissions

3) To extend IMS to all group companies inside and outside Japan
To support the introduction of efforts to establish IMS in group companies

2. Quality and Health & Safety Improvement Activities

1) To promote production that enhances customer satisfaction
   a) To increase compliance with delivery requirements
   b) To reduce product defects and swiftly respond to complaints
   c) To reduce defects in new products

2) To promote safe and efficient factory operations
   a) To reduce process errors caused by unusable materials, purchased components, and production processes
   b) To halve work accidents
   c) To improve work efficiency by launching a company-wide suggestion campaign

IMS Audits

IMS Internal Audits for Work Improvement

In fiscal 2005, internal audits were undertaken in 38 departments. The auditors focused on two audit objectives: to determine whether work is being carried out according to ISO standards, in-company regulations, and manuals promoting the management system; and to determine the number of targets and objectives achieved. Beforehand, each department used a self-check sheet to determine its own progress with implementing the management system. As a result, we were able to undertake a very efficient audit. The progress of implementation of the management system is quite improved, and the promotion of our management system is achieving a good result. The number of positive evaluations (of 16 strong points) where work improvements are being achieved in each department also increased. The results of the audit were discussed by the Council for IMS Promotion and linked to reviews to begin from the next fiscal year onward.

The auditors, selected from among new managers, underwent training in how to conduct audits. In the future, the managers will be continuously trained to enhance their skills as internal auditors. This will enable them to implement high-quality internal audits that help to promote the system.

IMS internal audit

Reconsidering the IMS Renewal Examination

The Japan Quality Assurance Organization (JQA) inspected the continued validity of the IMS initiative in the IMS renewal examination implemented from April 24 to 28, 2006.

As a result, the JQA commented, “Clearly, the validity audit considers the details of identified items, because the IMS seeks to employ audits effectively by considering the abilities of the auditors and by changing the audit objectives each time.”

However, as the JQA instructed us, “In some cases, the investigation of the cause was not logically carried out and the true cause was not determined, even when the decision was made to repeat the investigation three times to determine the reason items for improvement were identified.” We will take steps to further improve the IMS initiative by fully taking this advice in order to apply it in our next and subsequent audits.

Debriefing Session on Progress with IMS Initiative in Fiscal 2005

We launched our IMS initiative in April; after the term changeover in November 2005, we examined the progress of the initiative. We held an IMS initiative progress debriefing session involving our corporate officers, department managers, managers and other staff.

The staff presented a status quo report and announced the theme promotion strategy for the future relative to the five most important themes among IMS targets.

After the presentation of the activity report, the corporate officers offered the following instructions:

1) The CS sheet that incorporates defect information from the field is the only highly important data linked to the customer. The data-processing assessment appears in numeric form, but we need definite factor analysis.

2) As for the theme of reducing CO_2 emissions (per unit of net sales), our energy- and resource-conservation initiative, individual companies have complied with and implemented laws and regulations. However, we need to understand and respond to all group companies, including partner companies.

3) We want each department to engage in safe activity, achieving the IMS targets of no accidents while also earning profits.

4) In the final analysis, each corporate activity unit is an individual entity. We ask you to determine through the IMS initiative how each individual plays a role in the company.

We believe that continuing with such debriefing sessions in the future will contribute to achieving IMS targets and will firmly establish this initiative.

Debriefing session on the IMS initiative

IMS Communication

We strive to disclose information through various media such as our website and exhibitions in order to better inform our stakeholders of our environmental protection initiatives.

Our Gaiapress website contains information on phenomena that are considered somewhat of a mystery, making them easy for all to understand. The topics include expeditions to uncover mysteries and the latest information from emerging frontiers as recently revealed by science.

Gaiapress website:
http://www.jp.horiba.com/sensorium_e/index.htm

HORIBA’s Gaiapress Website

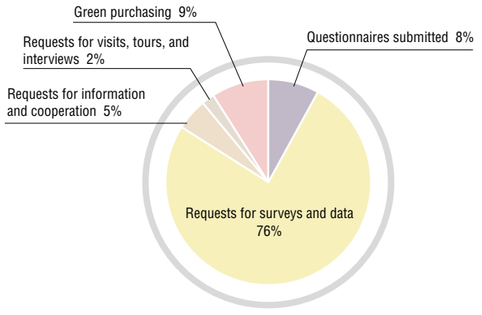
Communication Sheet

HORIBA maintains a “Communication Sheet” that reports inquiries from stakeholders. Inspired by the ISO environmental standard, this sheet is part of our IMS encompassing quality, health & safety. In fiscal 2005, we received 364 inquiries, an increase of 314 percent compared with the preceding fiscal year. Inquiries about the asbestos content of products accounted for 61 percent of the total (classified as health and safety in the chart). As for quality-related inquiries, we were required to submit documents on the validity of product quality and investigations of our quality management system. More recently, there has been a gradual increase in the number of inquiries regarding CSR and the interrelation of quality, the environment, health and safety. We believe that it is important to apply systems such as IMS in an integrated manner.

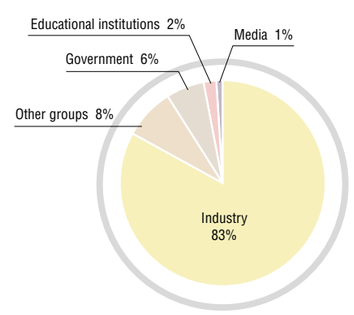
Record of Environmental Inquiries

Number of published issues of our Social and Environmental Report (Japanese- and English-language editions)	5,100
Number of lectures and seminars	13
Requests for environmental information	419
Number of newspaper and magazine advertisements	4
Number of questionnaires returned from our Social and Environmental Report	20
Number of Environmental exhibitions and animated presentations	1
Number of onsite training classes, environmental experiment classes & company open days	9

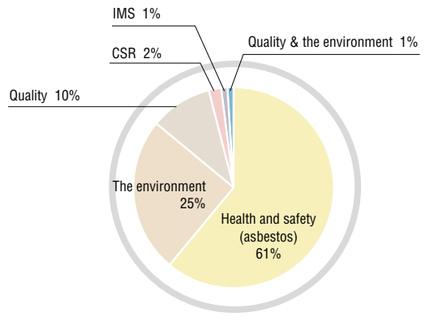
Breakdown of Communication Sheet Submissions



Breakdown of Inquiries by Type of Stakeholder



Breakdown of Inquiries by Type



We have adopted integrated environmental impact reduction as a management foundation and are maintaining a balance between business activities and environmental protection.

We are helping to reduce the environment impact across the entire product life cycle to ensure that people live in harmony with the environment. As a manufacturer of analytical and measurement instruments, we are developing products and technologies in order to leave a healthier environment for future generations while creating a society that is friendly to both people and the Earth.

Environmental Risk Management

Status of Legal Compliance

HORIBA's environmental risk management undertakes measurement and monitoring by harmonizing our unique voluntary management standards with those of the legal system. Our principal monitoring items are as follows:

- Measurement of factory effluent: periodic reporting to the Water Works Bureau, City of Kyoto
- Measurement of noise and vibration at the factory lot line
- Measurement of toxins in the atmosphere (both at factory lot line and point of emission)

Moreover, we undertake occasional measurement of soil and groundwater as necessary. As for management of chemical substances, we count and determine them through annual environmental aspect surveys. Although we have not exceeded the use of any chemical substances subject to obligatory reporting under the PRTR Law, we continue to strive to reduce the quantity used as part of our environmental improvement effort.

Trend in number of environmental complaints

Fiscal 2003	Fiscal 2004	Fiscal 2005
0	0	0

Trend in measurement and monitoring conditions (number of exceedances of legal standards)

	Fiscal 2003	Fiscal 2004	Fiscal 2005
Factory effluent	1 *	0	0
Noise	1 **	0	0
Vibration	0	0	0
Toxic substances in atmosphere	0	0	0

* Although abnormal values of n-hexane extracts (oil content) were detected, the results of an investigation indicated that the source substance was not oil, but a surfactant in a detergent.

** We are addressing this by improving our road maintenance, replacing shutters, and replacing old pushcars and the like.

Emergency Preparedness

Every year, we practice disaster coordination and emergency response drills to prepare for the occurrence of a fire, earthquake, or other disaster. We determine areas for improvement through a post-training review.

Assumed content of training and testing in fiscal 2005
1. Carbon monoxide is released due to a piping leak resulting from an earthquake.
2. Nitric acid is mistakenly poured into a sink during regular work.
3. During checking of a product returned for repair, blood is spilled from a blood-filled test tube.

Trend in frequency of emergency drills

	Fiscal 2003	Fiscal 2004	Fiscal 2005
Environment-related	3	2	2
Industrial safety and health-related	—	2	1

Emergency response drill for carbon monoxide leak

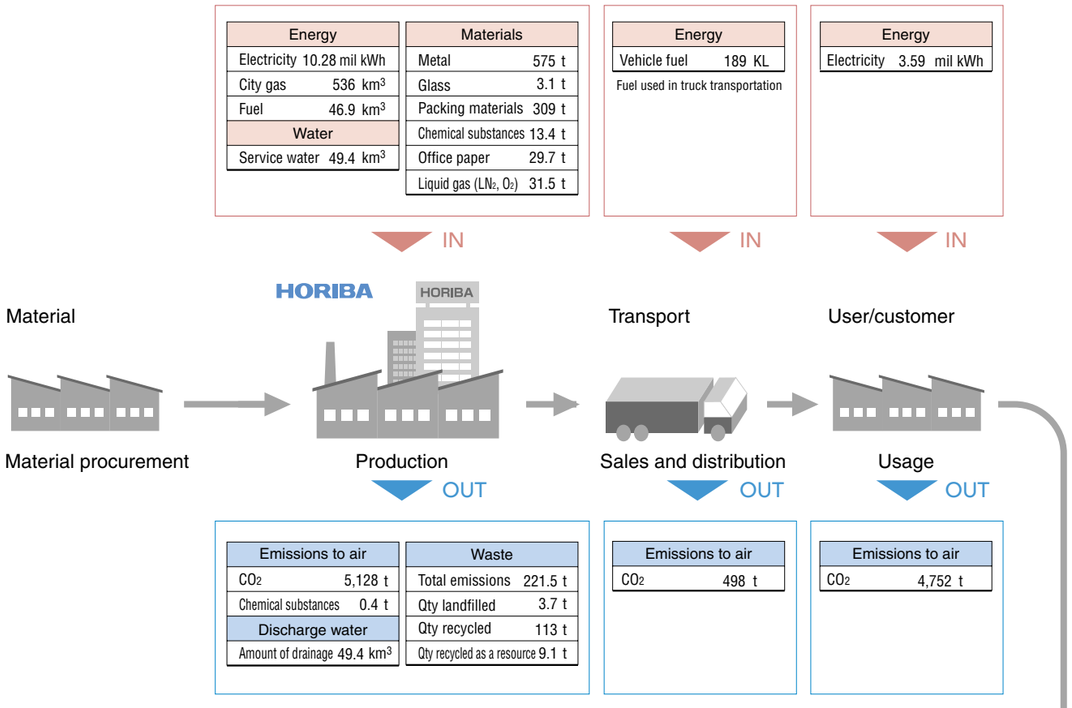
Emergency response drill for nitric acid spill

Balance of Environmental Impacts in Our Business Operations

Although most of the increased environmental impact during fiscal 2005 was due to increased business volume, pollutant load per unit of net sales improved thanks to our promotion of environmental protection activities. Going forward, our important goal will be to address the countermeasures against the increased environmental load by increasing yield.

INPUT

Electricity: From power companies
Gas: City gas as a form of energy
Fuel: Gasoline, diesel, kerosene
Water: Groundwater, city water
Metal: Production material
Chemicals: Chemicals used in manufactured goods or manufacturing processes
Packing materials: Packing and packaging for manufactured goods
Office paper: Copy paper used in factories and offices.



OUTPUT

CO_2: Amount generated during electricity and gas consumption and through waste emissions
Chemicals: Gas for adjusting and checking used in manufacturing processes
Drainage: Wastewater discharged into drains
Waste: Total amount of emissions and waste at final landfill
Recycled: Recyclable paper and wood such as office papers and magazines
Resources recycled: Recyclable resources such as metals and the like used in manufacturing processes

Environmental Accounting (Integrated Management System)

In environmental accounting, we quantify “environmental protection costs” and “environmental effects,” and examine the difference between targets and results so that we can promote effective environmental management.

HORIBA has instituted an Integrated Management System integrating quality, environmental, and health and safety systems. We determine the cost and effect of management system initiatives based on management policies to further improve and add innovations to the system.

In fiscal 2005, in addition to conventional accounting based on Environmental Accounting Guidelines issued by the Ministry of the Environment, we determined the respective costs through accounting related to quality and safety using the same methods. We will continue to achieve concrete results from improvement activities and operational management guidelines through repeated examination of effective methods.

Fiscal 2005 Environmental Accounting
Official form of announcement and table
(based on the Fiscal 2005 edition of the Environmental Accounting Guidelines issued by the Ministry of the Environment)
Scope of accounting: Main Factory, 11 sales offices, 21 service stations
Period: March 21, 2005-March 20, 2006

Environmental Protection Costs (by business activity)

(Millions of yen)

Environmental Protection Costs (by business activity)							Economic effect (internal)	
Category		Key Actions	Amount Invested	Total Cost	Total	Year-on-year comparison (%)	Benefits of Amount	Remarks
(1) Business Area			14.4	75.3	89.7	85.8	110.7	
Details	1. Pollution prevention	Maintained existing exhaust and drainage facilities, promoted measures in pursuit of air and water quality (p.25)	0.9	6.5	7.4	96.7	8.3	Power-saving in facilities, reduction in person-hours of monitoring and operation, etc.
	2. Global environmental	Switch from electricity to city gas in air conditioners, one cycle Promotion of energy-saving activities (p.23)	7.5	15.3	22.8	52.2	24.5	Conversion to energy-efficient facilities, modification of equipment, electricity conservation activities, etc.
	3. Resource circulation	Reduced waste, promoted reuse/recycling (p.25)	6.1	53.5	59.6	111.8	77.8	Promotion of recycling and reduced disposal of solid waste
(2) Upstream/downstream		Promoted green purchasing, and collection and reuse of used products (p.32)	7.0	2.9	9.9	174.4	14.3	Promotion of green purchasing, and reuse of collected used products, etc.
(3) Administration		Improved EMS, environmental disclosure and reporting, and education (p.11–15)	3.9	114.1	118.0	106.1	-12.2	Implementation of optimized management tasks
(4) R&D		Promoted development of environment measurement, design for environment, and lead-free plan (p.20-22)	24.1	601.6	625.7	106.6	1,599.6	Expansion of eco-friendly products, contribution to increased gross profit
(5) Social activities		Supported environmental technology and seminars, enhanced enlightenment activities and communication (p.35 & 36)	0.0	10.9	10.9	30.3	0.0	Support environmental improvement and promote enlightenment initiatives
(6) Environmental remediation		Not applicable	0.0	0.0	0.0	0.0	0.0	Not applicable
Total			49.4	804.9	854.3	101.2	1,712.6	
(7) Management costs of health and safety improvement initiatives		Promotion of health and safety supervision and improvement	0.7	46.5	47.1	–	–	
(8) Management costs of quality improvement initiatives		Promotion of quality improvement & QC initiatives	2.3	9.4	11.7	–	–	
Total cost of IMS initiative			52.4	860.7	913.1	–	–	

Environmental Protection Benefits

Environmental Protection Benefits				
Category	Environmental Performance Indicator	FY2004 (standard)	FY2005 Outside scope	Difference from Standard (Environmental Protection Benefits)
Benefits in terms of resources invested	Total energy input (GJ)	138,546	144,049	5,503
	Power consumption (GJ)	109,309	112,327	3,019
	City gas consumption (GJ)*	19,852	22,038	2,186
	Fuel (diesel, kerosene, gasoline) (GJ)	9,385	9,683	298
	Core production elements input (t) (Iron, SUS, aluminum, glass)**	506.3	578.1	72
	Recycled resource input (t), OA paper, packaging materials (cardboard, wood, polystyrene)	309	347	38
	Water input (km^3)	45.5	49.4	4
	Groundwater input (km^3)	15.7	17.6	2
	City water input (km^3)	29.8	31.8	2
Benefits in terms of environmental burden and waste	Greenhouse gas (total CO_2 emissions t-CO_2)***	5,975	6,104	129
	Greenhouse gas emissions through electric energy consumption (t-CO_2)	4,204	4,319	116
	Greenhouse gas emissions through city gas consumption (t-CO_2)	1,023	1,131	108
	Greenhouse gas emissions through gas consumption (t-CO_2)	628	654	26
	Amount of PRTR-specified substances emitted/transferred (t)	0.10	0.32	0
	Total waste generated (t)	231.6	235.4	4
	Final waste at landfill (t)	5.2	4.2	-1
	Total water drained (km^3)	45.5	49.4	4
	Water quality (BOD/COD) (mg/l)	Outside scope	Outside scope	–
	NOx, Sox emissions (t)	N/A	N/A	–
	Malodor (max. density) (mg/l)	N/A	N/A	–

Environmental Protection Benefits				
Category	Environmental Performance Indicator	FY2004 (standard)	FY2005 Outside scope	Difference from Standard (Environmental Protection Benefits)
Benefits in terms of goods and services generated	Energy consumption during operation (GJ) (Total of eco-friendly energy-saving products)	26,531	35,322	8,791
	CO_2 emissions during operation (t) (Total of eco-friendly energy-saving products)	1,020	1,358	338
	Harmful substances emitted during disposal (t)	18.4	45.4	27
	Amount of used products, containers and packaging recycled (t)	11.1	5.0	-6
	Amount of containers, packaging used (t)	272.1	306.9	35
Other benefits	CO_2 emissions during transportation (t) (Charter service)	489	498	9
	Products, materials transported (thousand km) (Charter service)	1,172	1,190	18
	Soil contamination (m^2)	N/A	N/A	N/A
	Noise (dB) at night	55	53	-2
	Vibration (dB) in evening	30	30	0

Notes:
* Temperature and pressure corrected
** Changed calculation of scope
*** Implemented change in CO_2 emission factor

Economic Benefits from Environmental Protection Activities

(Millions of yen)

Difference from Standard (Environmental Protection Benefits)		
Effect		Amount
Profit	Gain on sale of recycled waste: amount of metals, oils, electric wires and rare metals sold (9,096 kg)	0.17
	Gain on sale of recycled products; 60 units	7.04
Cost reduction	Reduction in energy costs through energy-saving measures (switch from electricity to city gas in air conditioners); increased consumption of electricity = 285 thousand kWh (-¥4.846M) / increase in city gas consumption = 55.0 km^3 (+¥3.555M)	1.29
	Reduction in disposal costs associated with pre-recycling (paper & cardboard): amount recycled 7.18 metric tons = reduced disposal costs + cost control in purchases of cushioning materials = ¥0.677M	0.68
Total		9.17

Environmental Accounting Standards
1) Investment/expenditure classification: based on financial accounting standards
2) Costs: includes personnel, management and R&D expenses (excl. depreciation)
   i) Personnel costs: Average labor costs × no. hrs environmental protection activities
   ii) R&D costs: by product (materials, personnel) + research costs into environmental improvement activities
3) Based on Environmental Accounting Guidelines by the Ministry of the Environment (Fiscal 2005 version)

Analysis of Aggregate Results for Fiscal 2005

The total cost of environmental conservation for fiscal 2005 increased by 1.2 percent compared with the preceding fiscal year; this slight increase resulted from management costs and research & development costs, even though one cycle of capital investment for preventing global warming was completed.

Specifically, global environmental protection costs decreased by 47 percent (−¥20.8 million), while recycling costs by promotion of investigation of zero emissions increased by 11.8 percent. Management costs increased by 6 percent due to an increase in personnel to enhance management activity. Furthermore, research & development costs targeting development of green products increased by 6.6 percent (¥38.9 million) and represented the largest increase in expenditure. However, we can expect a further increase in this ratio in the future because of the need to create green products in the interests of promoting a sustainable society. This is driven by the strong trend in the market to demand products with reduced environmental impact and by our proactive business stance.

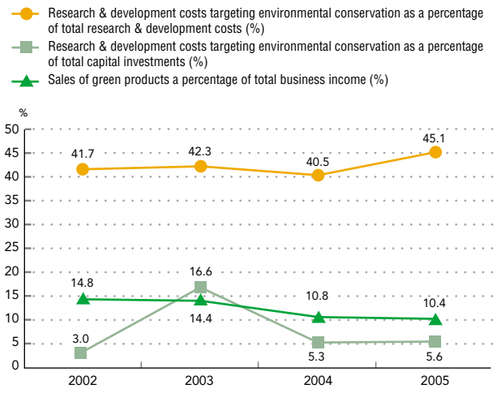
Our environmental performance increased due to our business expansion, and the results contributes to an understanding of the reduced pollutant load per unit of activity (see table of Environmental Protection Benefits).

Analysis of Results of Environmental Management

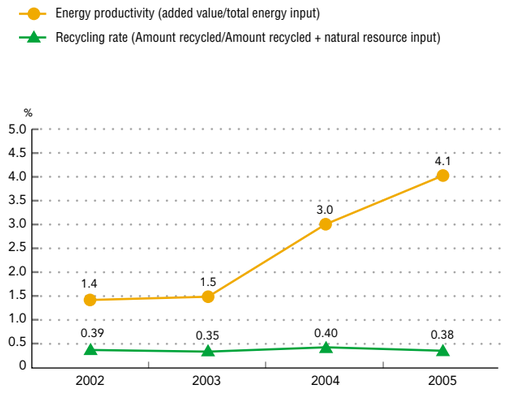
1) Environmental research & development costs represented 45 percent of total research & development costs. Green products—energy conservation products and design for environment products—accounted for 10.4 percent of total sales. Real net sales increased by 9.9 percent compared with the preceding year, although the proportion remained about the same due to increased overall sales volume.

2) While energy productivity increased by 36 percent, the recycling ratio shifted in proportion to greater business volume. Among our resource-saving initiatives, we need to place much greater effort in reducing the use of packing materials and paper used in office machines.

Ratio of Environmental Protection Activities to Business Activities



Energy Productivity & Recycling Rate



Future Initiatives

Regarding quality and health and safety activities, we will continue to consider ways to develop a method for establishing a valid results and management indicator. The results of this accounting summary will be reflected in the management plan for the next fiscal year as part of the fiscal report. We will strive to concretely implement a focused data collection system to reflect management progress and review materials at the quarterly Council for IMS Promotion.

Minimizing Environmental Impact through Products and Technologies

As one of our initiatives to minmize the environmental impact of our products, HORIBA seeks to implement Design for Environment by considering the entire product lifecycle when developing new products. The flow of Design for Environment and the main evaluation categories are shown below.

■ Evaluation Categories of Design for Environment

We begin development by stipulating the target focal points from the evaluation categories for each product theme. Products that have passed the internal criteria for the lowest points and total average points (improvement rate) of each item are considered as green products.

Moreover, for those products certified as green products, we display our own green label in product catalogs and advertising to assist our customers in their product selection.

Green label & logo

Harmoniearth

Evaluation Categories for Design for Environment and Points

Item for Evaluation	Lifecycle Stage	Criteria
Lightness	Material procurement, production, distribution	Lightness, standardization
Longevity	Usage	Durability, ease of maintenance
Ease of recycling	Reuse, distribution	Possibility of recycling, standardize materials
Ease of dismantling	Dismantling	Ease of dismantling and material separation
Ease of processing	Material procurement, production, distribution	Ease of dismantling and processing
Environmental-friendliness	Material procurement, production, distribution, usage, dismantling, disposal	Degree of harmful substances contained, explosiveness
Energy-saving	Production, distribution, usage	Power consumption, low-energy consumable
Information provision	Usage, dismantling	Information on waste disposal

Example of a Product Featuring Design for Environment

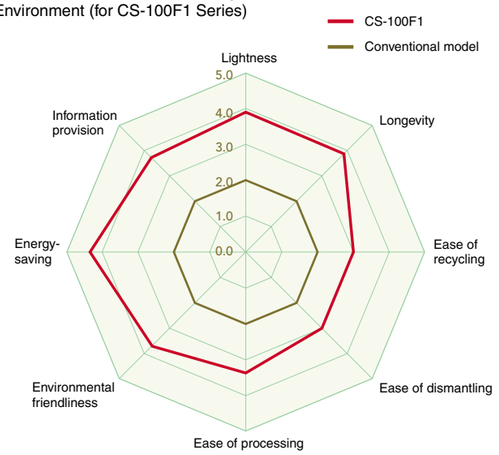
■ CS-100F1 Series Chemical Solution Concentration Monitor

This chemical solution concentration monitor is used in semiconductor fabrication facilities to measure the concentration of chemical solutions. It can be used to boost the washing yield and reduce the consumption of chemicals in cleansing units that consume chemical solutions. Thus, it helps to reduce environmental load.

The finished product is designed to have a minimal failure rate, as the number of operating parts has been reduced as much as possible thanks to our Design for Environment efforts. In addition, the footprint of the unit, its power consumption, and its weight are all 50 percent less than those of conventional devices. As a result, packing materials are also reduced.

CS-100F1

Example of Assessment for Design for Environment (for CS-100F1 Series)

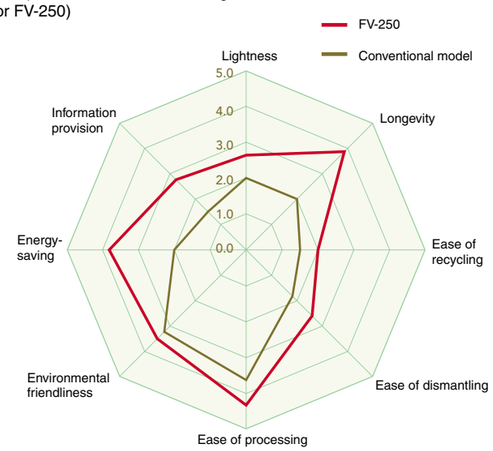


■ FV-250 Portable VOC Monitor

The Portable VOC Monitor incorporates a FID (flame ionization detector) for measuring THC (total hydrocarbons). The monitor integrates functionality, performance, and design in an easily portable measurement unit. What's more, power consumption has been reduced by 90% (450 VA reduction) compared to conventional models. This represents an assumed annual power savings of ¥13,000 (@ ¥15/kWh). Additionally, because this device is designed for component recyclability, it reduces the assumed landfill disposal rate by 75%.

FV-250

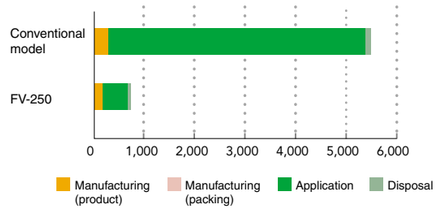
Example of Assessment for Design for Environment (for FV-250)



Final Landfill Volume (kg)

Conventional model	FV-250	Reduction rate
35.1 kg	8.8 kg	24.9%

CO_2 Released into Atmosphere (kg-CO_2)



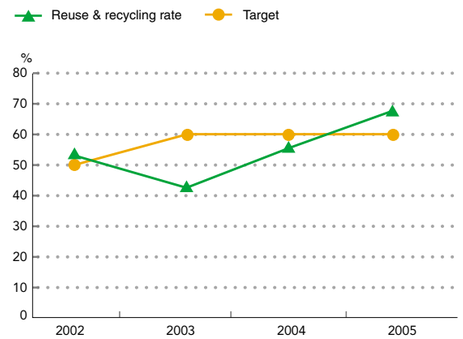
Initiatives Aimed at Product Reuse

Through analysis and measurement, HORIBA's products contribute to global environmental protection. However, those products that have been in use for many years eventually end up as industrial waste and contribute to increased environmental impact.

Nevertheless, in certain conditions, it is possible to reuse some of these products by revitalizing the old functions. In 1999, we established a sales company for recycled products, a joint venture of two local entities, to ensure these used products can be reused.

In fiscal 2002, we adopted concrete targets and began action to achieve them. Determining whether used products are durable enough to be reused can be difficult. Nonetheless, in fiscal 2005, we reused 60 of all 89 units collected (67%), thus partially achieving our targets. Beginning next year, we will promote the reuse of products in keeping with our initial targets.

Reuse and Recycling of Collected Products



Green Factory (eco-friendly manufacturing)

■ Promoting Environmental Initiatives through Suppliers

1) Establishment of EMS (Environmental Management System) at HORIBA Group partner companies

HORIBA and the HORIBA Group companies in Japan have integrated their materials divisions and are pursuing a joint material procurement initiative. Through this approach, we are promoting effective management with our partner companies.

This initiative encourages all partner companies to introduce EMS for green procurement. As a result, we aim to effectively promote its introduction and expand eco-friendly manufacturing and communication.

2) Improvement of transportation for procurement distribution

We have improved transportation between the Aso Factory of HORIBA STEC Co., Ltd. and HORIBA's Main Factory by adopting an integrated logistics system. Moreover, we are promoting improved efficiency by sharing delivery schedules and reusable shipping cartons among the companies. This is also contributing to reduced environmental impact.

a) Consolidated transport: Reusable shipping cartons
b) Charter service: Shared delivery
c) Regular service: Truck transport with packing-free baskets (scheduled for 2006 introduction)

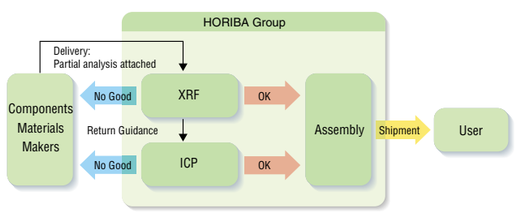
3) Initiatives to reduce packing

HORIBA purchases packing and container packaging materials for its distribution operations. Because we have largely completed our switchover from conventional packing products, these materials comprise mainly eco-friendly and recycled materials. We plan to extend this initiative to our group companies in the future.

a) Packing materials (air mats & packing rubber bands): Switchover has been completed.
b) Packaging boxes: Small packaging boxes have been changed to boxes bearing recycle marks.

■ Reduction of Harmful Substances Contained in Products (Addressing the RoHS Directive of the EU)

The RoHS Directive introduced by the EU finally takes effect in July 2006. In advance of this milestone, domestic electronics makers have taken a leading role in the initiative to eliminate the target substances from their products. In concert with this approach, HORIBA is also working to have its component suppliers ensure their products are free from these target substances. As part of this effort, HORIBA has used a survey tool provided by the Japan Green Procurement Survey Standardization Initiative (JGPSSI) during the past several years.



■ Initiatives Aimed at Eco-Friendly Production

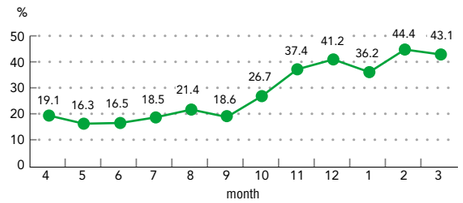
The adoption of lead-free solder and other new materials containing no lead, a controlled substance, is very important for the HORIBA Group's manufacturing of eco-friendly products. Notably, the manufacturing process for printed circuit boards uses automatic soldering equipment, which makes it possible to employ optimal techniques and expertise in the manufacture of quality products containing lead-free solder. However, the quality of finished products soldered manually with lead-free solder varies significantly with the skill and experience of the worker. This is because lead-free solder melts at a higher temperature than lead solder, which makes it difficult to determine the heat required for melting and control the quantity of solder supplied. In the HORIBA Group, we maintain a certification system intended to boost the skills of our employees. Therefore, after enhancing our skill training sessions both inside and outside the company, we were able to switch to lead-free solder in March 2006. In the future, we will address the challenge of creating new products by targeting quality in harmony with the environment.

The Lead-free Solder Plan

Six years ago, we introduced our "lead-free plan." The results of this initiative are gradually becoming apparent.

Our production of printed circuit boards totals between 20,000 and 40,000 units per month. Around 40% of these are manufactured with the lead-free process. We aim to boost this number to 90% in fiscal 2006 with the goal of eliminating lead solder from printed circuit boards during fiscal 2007.

Proportion of Lead-free Printed Circuit Boards (FY05)



Training session on lead-free soldering

Energy Conservation Initiatives

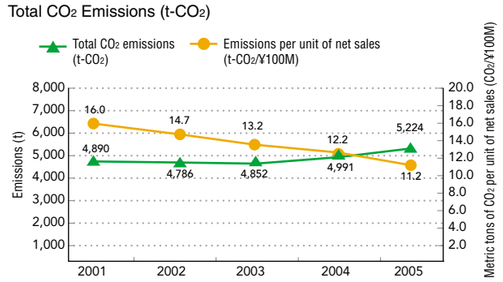
■ Initiatives Aimed at Curbing Global Warming

Efforts to curb global warming have revolved around the effective use of two core energy sources—electricity and city gas. These represent more than 95% of the company's output of CO_2-equivalent greenhouse gas emissions. We have been addressing this issue by focusing on energy conservation.

We initially incorporated energy conservation into our environmental improvement activities in 1996. Since then, we have been promoting energy efficiency and have adopted the best mix of electricity and gas for new construction and various power-saving and gas-saving measures for existing facilities. In an effort to reduce CO_2 emissions, we implemented a full-scale switchover from electricity to gas air conditioning on our manufacturing premises when we updated our air conditioners in fiscal 2003 and 2004.

In fiscal 2005, total CO_2 emissions increased due to expansion of our business operations; however, we succeeded in reducing emissions by 8.2% year-on-year. We will strive to further improve operations by enhancing the energy efficiency of individual pieces of equipment. Moreover, we will continue to place priority on energy efficiency as we introduce new facilities.

Total CO_2 Emissions (t-CO_2)

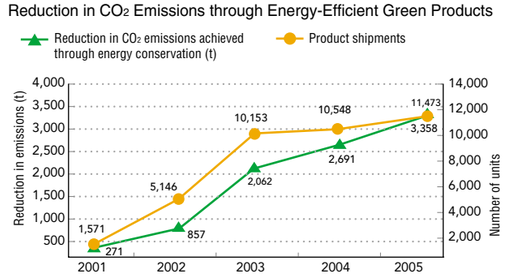


■ Reduction in CO_2 through Green Products

Since 1996, in line with our green policy, we have been engaged in designing our products to be energy efficient when used by the customer. As a result of model changes and new product introductions, our green products totaled 56 models in fiscal 2005, with annual shipment 11,473 units (representing 10.4% of sales). The reduction in total CO_2 emissions is calculated at 3,358 t-CO_2/year in markets where these products are operated at 100% capacity.

As a manufacturer of analyzers and measurement instruments, we aim to contribute to society through our business, and we indirectly respond to calls to prevent global warming through initiatives other than manufacturing.

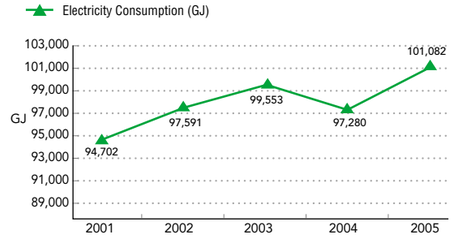
Reduction in CO_2 Emissions through Energy-Efficient Green Products



■ Power Consumption

Our principal energy conservation efforts included replacing the emergency lighting in our manufacturing facilities with energy-efficient fixtures. In addition, we reduced the reserve weld time for the soldering chamber for printed circuit boards by employing an idle-time timer for the day and night shifts. Moreover, we replaced our five vacuum pump coolant units with one integrated unit, resulting in an annual savings of about 150,000 kWh. In spite of this effort, however, our power consumption increased by 1.7% year-on-year as a result of increased consumption arising from an increase in the number of factories.

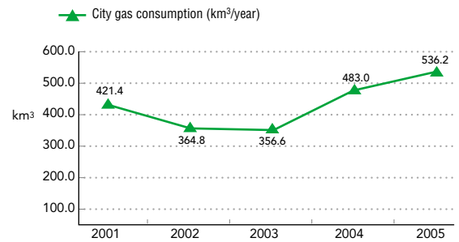
Electricity Consumption



■ City Gas Consumption

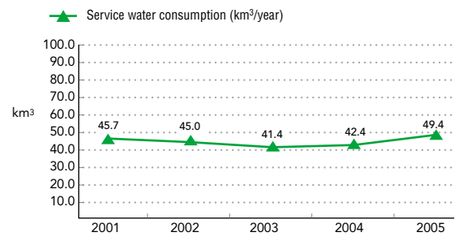
Gas consumption for fiscal 2005 increased by 111% compared with the preceding fiscal year because we shifted to gas-powered air conditioning units in our new production facilities. We will continue to make an effort to properly manage thermal energy by implementing equipment checks and by determining energy efficiency as part of our energy conservation measures, particularly for the gas heat pumps of the air conditioners in our clean room, which operate around-the-clock.

City Gas Consumption



■ Service Water Consumption

Quantity of Service Water Consumed

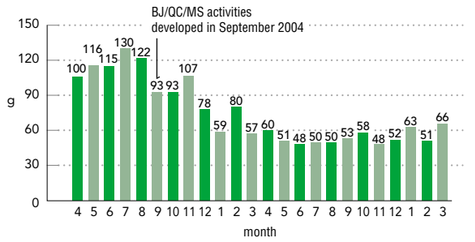


Resource Conservation Initiatives

The Cleaning Working Group of Infrared Components Team is in charge of degreasing machined products. Whenever they are issued a target, the Working Group always considers ways of “Joy & Fun” and creating a cheerful workplace while working toward the target.

First, they decided to utilize the IMS wherever possible. Their activities considered not only increased productivity but also environmental protection and occupational health & safety. As a result, they increased their processing rate per hour by 17%. They also reduced the aggregate amount of waste by 35% (for a reduction of 45% per item). Moreover, they reduced their annual consumption of electricity by 18,654 kW and reduced the amount of overtime work by 25%. In addition, they displayed the complete results of their efforts (by charting the waste reduction achieved and posting photos of their activities) so that other divisions could evaluate the activities and launch their own initiatives that benefited from their results. Consequently, their workplace made an active effort to implement improvement initiatives and each worker adopted a more positive approach. By initiating improvements in this way, they have ensured their improvement activities have taken root in the workplace.

Amount of Waste per Item Cleaned



Reducing Consumption of Chemical Substances

The reduction of harmful substances is an initiative being promoted worldwide as part of the effort to establish a sustainable society.

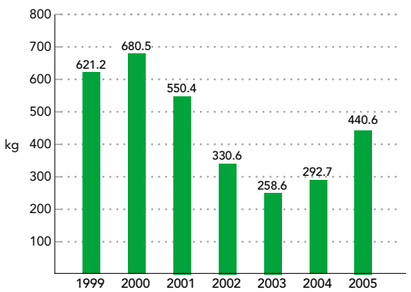
In light of the trends in Japanese and international laws and regulations, HORIBA published the “Guidelines for Control of Chemical Substances” in fiscal 2000. In addition, we instituted four control levels—“prohibited,” “reduced,” “controlled,” and “voluntarily managed”—to ensure that we properly control the use of chemical substances in our products right from the product development stage.

In 1996, we specified reduction activities for harmful chemical substances in line with our environmental improvement activity program. In our production processes we eliminated all ozone-depleting substances such as CFCs, HFCs and chlorine-based organic solvents as of 1999. We intend to continue reducing our use of harmful substances by substituting benign substances and by changing processes to eliminate the use of harmful substances.

Initiatives to Reduce Prohibited Substances

In fiscal 2005, after considering the production processes of the previous fiscal year, we determined which substances could be reduced. In addition, we reduced the use of “hydrofluoric acid and alkyl benzene xylene” (used in semiconductor fabrication) and “xylene primers” (used in the bonding process) at our production sites. The reduced use of these substances should have no effect on our product quality. We will conduct evaluations to ensure quality is maintained. However, since we already took steps to reduce harmful substances in past years, future reductions in harmful substances will be difficult. Nonetheless, we will continue to make efforts to further reduce our use of prohibited substances.

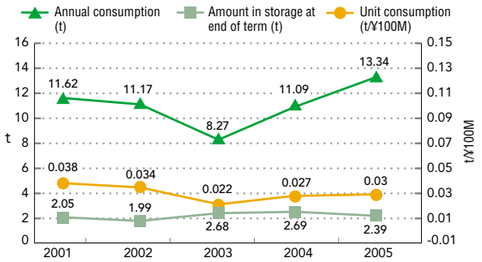
Trend in Total Weights of Prohibited and Reduced Substances Used in Production



Trend in Amounts of Chemical Substances Used in Production

Compared with the preceding year, per-unit consumption remains unchanged; however, the total amount consumed is increasing in line with our increased sales. We must reduce harmful substances that are consumed in large quantities.

Trend In Amount of Chemical Substances Consumed

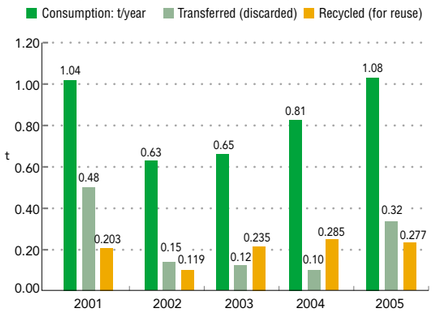


PRTR control

HORIBA controls 354 of the chemical substances specified as Class 1 in the PRTR if our consumption of a specified substance is 1 g/year or more. Since fiscal 2005, we have been reporting our consumption of 53 substances only if our consumption of each substance is 10 kg/year or more. See the detailed data in the accompanying table.

Note: According to laws and ordinances, chemical substances that we handle in quantities of at least 1 metric ton/year are subject to reporting.

Consumption Trend for Substances Specified in the PRTR



Waste Reduction Efforts

Total Waste Generation, Recycling Rate, and Final Waste Landfilled

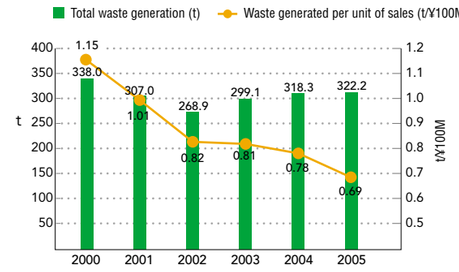
Our waste reduction activities in fiscal 2005 will enable us to establish a “zero emissions system” (a system capable of ensuring a landfilled rate not exceeding 1%) by fiscal 2010. However, when it became necessary to replace our long-term waste disposal contractor, we postponed our plan to the first half of fiscal 2006.

The following table shows the trend in waste generation to fiscal 2005. As indicated, the total waste generation increased slightly as sales increased, but waste generation per unit of sales gradually decreased. We believe this is the result of our steady and persistent waste reduction efforts.

It should be mentioned that HORIBA stores some electric products containing waste PCBs. Therefore, we have reported their disposal to the Japan Environmental Safety Corporation in accordance with Japanese laws and regulations.

Note: In this document, the term “total waste generation” includes waste resources for recycling, recycled materials, and general waste disposed of by each department.

Total Waste Generation and Waste Generation per Unit of Sales



Topics

HORIBA is awarded the “Kyoto Prefecture Environmental Top Runner Prize for 2005”

In June 2005, HORIBA was awarded the “Kyoto Prefecture Environmental Top Runner Prize for 2005.”

We have successfully implemented a variety of environmental protection initiatives and promoted green procurement while fully applying our knowledge and expertise. We have been an environmental pioneer in our industry and have helped the citizens of Kyoto prefecture establish Kyoto as an environmentally progressive area. We were awarded this prize for these efforts.

When we implemented our IMS initiative, we began promoting green procurement and made efforts to attain our environmental targets such as an increased environmental compatibility rate.

Testimonial for the Kyoto Prefecture Environmental Top Runner Prize for 2005

Efforts Aimed at Preventing Environmental Contamination

Monitoring of Factory Effluent

Under the guidance of the Kyoto City Waterworks Bureau we initiated continuous or periodic measurement of all required monitoring points such as 24-hour monitoring of the pH value. We report these measurements to the Waterworks Bureau. All values we obtained in 2005 were within the specified ranges. Detailed data is shown in the accompanying table.

In fiscal 2006, we will install 24-hour pH meters on sink drains. This system will be in conformance with the laws and regulations.

Monitoring of Air Pollution

Every six months, we voluntarily test for emissions of harmful substances specified in the laws and regulations at the border of our premises and at exhaust vents. This initiative revealed that all values obtained in 2005 were within the specified ranges. Detailed data appear in the accompanying table.

Monitoring of Noise and Vibration

Some of our plants adjoin residential areas. Therefore, we voluntarily monitor noise and vibration at the border of our premises every year. This effort has revealed that all values obtained in 2005 were within the specified ranges.

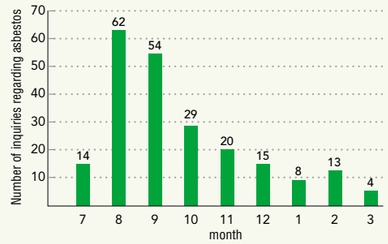
Measures against Asbestos

In 2005, asbestos attracted considerable public attention in Japan as a major social issue. Therefore, we opened a customer center for asbestos in July and took prompt action for our customers’ benefit. Since 1988, we have been replacing parts containing asbestos with asbestos-free parts. However, insulators in products we manufactured before 1988 contained asbestos (chrysotile, or white asbestos). However, as the asbestos in these insulators is solidified, there is almost no possibility that the asbestos could become airborne. Therefore, we have determined that that the asbestos in our products would have no adverse health effects.

It was also revealed that parts of our factory and office buildings contained asbestos. We responded by taking measures to protect our workers from this asbestos.

We will continue our efforts to provide our customers with safe, high-quality products.

Number of Customers Who Contacted Us Regarding Asbestos in 2005



Adopting Environmentally Green Logistics

Efficient, Eco-friendly Transportation Systems

We have been working to introduce an efficient product transportation system, but finding ways of reducing the number of transport trucks has been difficult. Because we deliver products directly from Kyoto, adjusting the delivery date, destination, and other variables has been challenging.

In response to this issue, we established a physical distribution center in the Kanto region and adopted an intensive transportation system between Kyoto and Tokyo to reduce the number of transport trucks required. In addition, we implemented a modal shift from road transport to railway between Kyoto and Tokyo. Improving our transportation system in this way has enabled us to increase the efficiency of our transportation system.

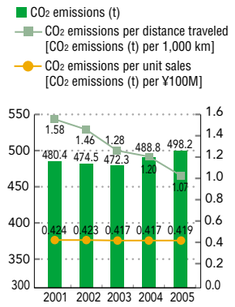
In addition, we are enlarging the Aso Plant of HORIBA STEC Co., Ltd. to allow the production of drugs and reagents. We have decided to transport these medical products by rail container.

Rail container

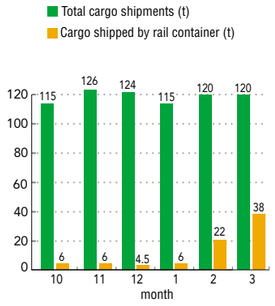
Taking Action to Protect the Environment

We have shifted our physical distribution system to rail transport in order to reduce CO_2 emissions. In addition, we are encouraging our main charter shipping companies to introduce hybrid vehicles. These represent some of the efforts we are making to protect the environment.

Trend in Fuel Consumption by Chartered Trucks



Comparison of Cargo Shipped by Rail Container and Total Cargo Shipped



Quality Improvement Initiatives

Product Development & Our Quality Assurance System

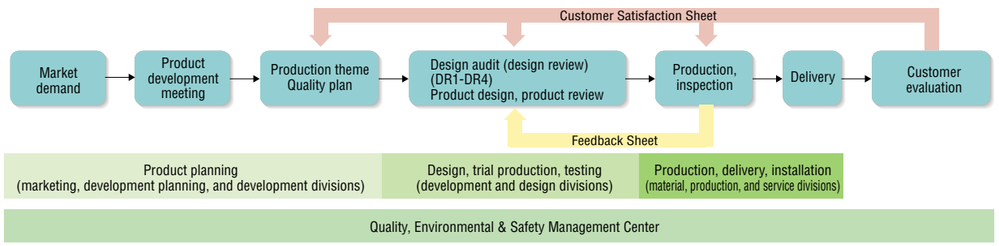
Before starting development of a new product, we research the market, determine customer demand, propose a production plan in the product development meeting, and register the approved plan as the production theme.

When we register a production theme, we consider the product specifications, relevant laws and regulations, safety, energy efficiency, reduction of waste, etc., so that we can design an environmentally friendly product. We also consider the durability, sales potential, etc., so that we can prepare a total quality plan. During the design review stage, all divisions concerned-including the marketing, product design, production planning, purchasing, manufacturing, and service divisions-attend the meeting to discuss problems and propose solutions.

During the production stage, we use a Feedback Sheet to provide notification of any design problems detected during the production process to the development and design divisions so that we can solve any problems that arise before delivery. If we receive a customer complaint after delivery, our marketing division or service division passes along the customer complaint to all divisions concerned using the Customer Satisfaction Sheet to immediately solve the problem.

The Quality, Environmental & Safety Management Center is in charge of quality assurance. It takes an active role in resolving quality problems common to the entire organization comprising various divisions, including marketing, development, manufacturing, physical distribution, and service.

Flowchart of the Product Development and Quality Assurance System



Certification of Registration with ISO 13485, the International Standard for Medical Equipment

ISO 13485, prepared in accordance with the ISO 9001 quality assurance standard, is a sector standard specifying requirements for the medical industry. To ensure international consistency, a number of countries have established regulations for medical equipment. (Japan established the Pharmaceutical Affairs Law.) These regulations require all companies in the industry to establish an ISO 13485-compliant quality system.

HORIBA's quality management system has been in place for more than 10 years. In addition, we have developed our own IMS quality management system that allows easy introduction of various management systems. Thanks to our IMS, we were able to introduce the ISO 13485 system in a short time and readily obtain ISO 13485 certification. As a result, we can smoothly and efficiently seek new international markets for our medical products.

Certificate of ISO 13485 Registration

Lectures on QC Circle Activities by Visiting Experts

Today's business environment requires that all divisions engage in QC activities and that all our employees fully understand the importance of QC activities. Toward this end, we invited outside experts to give lectures on QC circle activities. The theme of these lectures was "Recommendations for IMS and QC Circle Activities"; the lectures included "TQM* and Seven QC Senses," "Why We Need QC Circle Activities," "How QC Circles Contribute to Business Management," and "Counseling Corner for QC Circle Activities." In the latter presentation, the lecturer provided concrete examples of QC activities in a manner that enabled those in the audience to improve their future IMS/QC circle activities.

* Total Quality Management

Lecture on QC Circle Activities

QA Meeting

After a full year of QC activities, those QC circles that have achieved good results attend a competition at our annual QA meeting held in November, the quality month.

Our conventional QA meetings are held under the theme of "quality," but our 2005 meeting adopted the additional themes of "environmental protection and safety." All our divisions, including the marketing division, attended the meeting. In 2005, eight teams from partner companies and members of the HORIBA Group competed at the QA meeting. A total of 190 persons participated in this QA meeting, including individuals from outside the company. At this QA meeting, our vice president awarded a special prize to three teams that had obtained astounding results after implementing ongoing improvements on the specific theme.

QA Meeting

Quality Catchphrase Contest

During quality month, we invited all employees of the HORIBA Group to enter our Quality Catchphrase Contest. Six winning entries were selected from the 240 submissions.

The selected submissions were printed on posters that were displayed in each group company to highlight the importance of quality activities among all employees.

Poster displaying one of the six winning Quality Catchphrases
"Quality results from daily effort and a professional attitude"

Occupational Health and Safety

Occupational Health and Safety Control System

The annual slogan for fiscal 2005 was “Let’s attain our three targets: zero disasters, good health, and a comfortable workplace.”

In keeping with this slogan, we established the following three annual targets:

1. Ensure zero disasters leading to suspension of operations.
2. Maintain good health.
3. Reduce risks by undertaking risk assessments.

To attain these targets, we identified the following tasks:

1. Adopt a monthly inspection theme for your workplace.
2. Patrol your workplace.
3. Train all workers in health and safety.
4. Provide medical examinations.
5. Collect data on your work environment and carry out periodic voluntary inspections.

For National Safety Week in July and National Industrial Health Week in October, the President, General Health and Safety Manager, Safety Manager, Health Manager, and industrial doctors carry out special patrols.

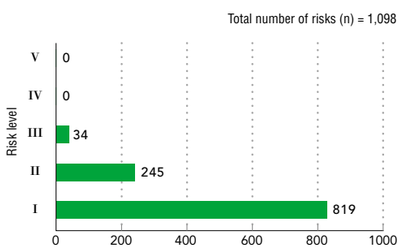
Risk Assessment

In 2003, we introduced our risk assessment method in order to minimize risks. We use this method to inspect our workplace and minimize any risks that might be present. We determine the rate of accident occurrence, frequency of exposure to risk, accident severity, and estimated number of potential victims in order to assign a risk level on a scale between level I (low) and level V (high).

In fiscal 2004, we determined level V and level IV risks; in fiscal 2005, however, we managed to reduce our level V and level IV risks to zero as a result of our risk reduction activities. Consequently, our risk assessment method uncovered 1,098 level III risks in fiscal 2005.

In fiscal 2006, we will make efforts to reduce level I-III risks after considering the costs and importance of the risk reduction effort.

Results of Risk Assessment for Fiscal 2005



Reducing Work-Related Accidents

Executive Safety Patrols
On July 1, President Horiba and the General Health and Safety Manager undertook safety patrols of the company’s workplaces. Under the president’s policy to “make our workplace a showroom,” we are promoting “5S activities” and have established a Clean Day to support the creation of a safe and comfortable workplace.

Fire Prevention and Disaster Response

On November 1, we held a disaster response drill involving about 500 employees at our Main Factory, HORIBA TECHNO SERVICE CO., LTD., and HORIBA Advanced Techno Co., Ltd.

The drill simulated a response to an earthquake measuring “6 lower” on the Japanese seismic intensity scale occurring in southern Kyoto prefecture. Participants were trained in how to stage an evacuation, extinguish fires, and rescue victims.

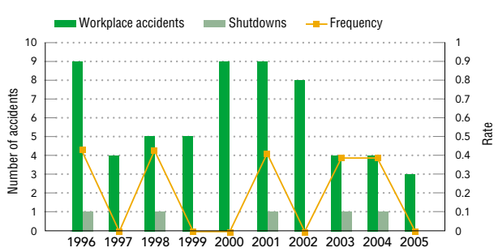
Comprehensive fire drill

Creating a Comfortable Work Environment

Compiling Data on the Work Environment and Periodic Voluntary Inspections

According to the terms of the Industrial Safety and Health Law, we compile data every six months for workplaces that use organic solvents and special chemical substances and the like. We have contracted a third-party organization to compile this environmental data. To date, the results of all these measurements have been good. In addition, we contract a third-party organization to carry out our own voluntary annual inspections of hood fan ducts. The results of all such inspections have been good. Upon receiving the results, our health managers discuss the results and pass on their conclusions to the work leaders of the relevant workplaces.

Circumstances, Number, and Rate of Accidents



Frequency: The accident occurrence rate is calculated from the number of accidents requiring a shutdown and the total number of lost work hours.

Working with Our Customers.

To provide products that satisfy our customers, we remain committed to the ongoing development of both basic and production technologies. In this effort, we will continue to implement our quality assurance initiative and further improve our customer support system. We are confident this approach will continue to enhance the quality of our products and services and earn the trust of customers worldwide.

Developing Our Quality Assurance Initiative

Promoting A-design

The A-design 21 Project of the R&D Center is now developing designs that consider customer usability; some designs are being developed in cooperation with a university. One of the user-friendly designs we are now developing is the “informative package”; this approach acknowledges that the product package is the first thing the customer sees. We intend to provide a package that informs a potential customer of the important aspects, such as cautions regarding installation, so that the customer is aware of important items before unpacking the product or reading the instruction manual. In addition, in light of the importance of environment protection, we are promoting use of recycled paper and solvent-free ink for our product packages and A-design 21 Annual Report.

Product package featuring A-design

Successful ISO 17025 Recertification Audit (for Laboratory Approval)

We originally received certification for the ISO 17025 standard for general requirements for the competence of testing and calibration laboratories on June 11, 2001. More recently, we successfully passed our first recertification audit. During this audit, which occurs at four-year intervals, two auditors from JAB (Japan Accreditation Board for Conformity Assessment) tested our analysis skills. Following this difficult test, we succeeded in passing the recertification audit.

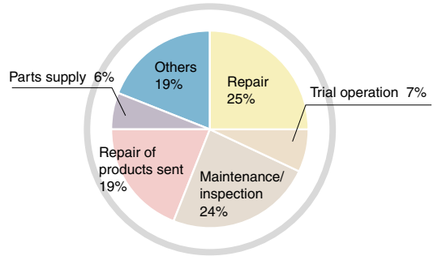
Our Application Center is the first laboratory in the Japanese analytical system manufacturing industry to obtain certification of ISO 17025 registration. This certification reflects the confidence our customers have placed in us. Going forward, we will continue to seek ISO certification in other fields as we further develop our analysis technologies.

Certificate of ISO 17025 registration

Our Service System

HORIBA TECHNO SERVICE Co., Ltd. (HTS) provides support covering all products of the HORIBA Group. For example, HORIBA TECHNO SERVICE examines our 21 customer service stations throughout Japan to improve our services. HTS also provides maintenance and repair services for our analyzers. In 2005, we responded to 27,000 maintenance requests (a 9% increase compared with the preceding year). HTS can provide a variety of customer demands, including periodic inspection, overhaul, repair, and maintenance services as well as test runs, parts supply, worker training, and dispatch of technicians.

Type of Maintenance/Service



Customer Support

Our Customer Support Center

Our Customer Support Center provides a variety of services to our customers, who include general consumers, sales shop owners, and dealers. We provide explanations to customers who ask for information on how to operate our products and make measurements. We also recommend the ideal analyzers to those customers seeking advice on a good analyzer.

In recent years, customers from all over the world have used the Internet to access our Customer Support Center. In 2005, we received more than 30,000 inquiries.

Members of our Customer Support Center

Working with Our Owners (Shareholders) and Investors.

We will return our profits to our owners (shareholders) and investors and will disclose material information on our business or management without delay to ensure management transparency.

Maintaining a Dialog with the Public

In order to reflect our true enterprise value in our market value (share price), we provide information to our owners and investors in keeping with our mottoes of “accuracy,” “promptness (timely disclosure),” and “fairness.”

For private investors, we provide information through our company website. In addition, we hold our annual general meeting of shareholders on a Saturday and participate in various events that enable private investors to view exhibits about our company. In this way, we are making a real effort to meet our owners and investors directly.

For institutional investors, our president and executives hold financial meetings twice annually, visit individual investors, and provide investor relations (IR) information to international investors.

They, as well as our IR division, participated in more than 250 interviews with investors during the year and provided detailed information that included our management philosophy, business strategies, and business performance.

* Because we like to encourage investors to make mid-long term investments in our company, we use the expression “owner” in place of “shareholder.” While the term “shareholder” simply means a holder of our stock, the term “owner” emphasizes the actual ownership of our company.

Active Information Disclosure

■ Explanatory Business Meetings

1. For Institutional Investors in Japan
- Meeting on term-end financial statement (May 13, 2005, in Tokyo)
- Meeting on midterm financial statement (November 9, 2005, in Tokyo)
- Explanatory meeting for new midi-long term management plan (March 28, 2006, in Tokyo)
- Interviews with each institutional owner by the president, executives in charge, and other persons in charge (250 interviews or more annually)

2. For International Investors
- Interview with private investors (September 26, 2005, in Paris)
- Forum for international investors sponsored by a securities firm (February 6-10, 2006, in Tokyo)

3. For Private Investors
- Annual General Meeting of Shareholders (June 18, 2005: Social gathering with executives held after the Annual General Meeting of Shareholders at our head office in Kyoto)
- IR explanatory meeting for private investors (August 28 and December 8, 2005, in Kyoto)
- Exhibition of our business at the “Asset Control Fair” held by a securities firm (February 17-18, 2006, at Osaka Dome)

Social gathering with executives held after the Annual General Meeting of Shareholders

“Asset Control Fair” for private investors

■ Timely Disclosure of Investor Information

In 2005, we were selected as one of the 195 companies with the best IR Websites. In 2006, we were selected one of the 255 companies with the best IR Websites.

Companies with the Best IR Websites in 2006

■ Changes to Minimum Block Trades

On January 4, 2006, we changed the minimum number of shares for a block trade in our shares on the Tokyo Stock Exchange and Osaka Securities Exchange from 1,000 to 100.

Working with Our Suppliers.

Ensuring fair transactions with our suppliers is one of our most important priorities. We always strive to be cooperative and win the confidence of our suppliers.

As part of this effort, we have introduced a supply chain management system that has enabled us to enhance our relationships with our suppliers both inside and outside Japan.

We are confident that maintaining close communication with our suppliers will result in business growth for both HORIBA and our suppliers.

Supply Chain Management

Our supply chain management system promotes good two-way communication throughout our production operations. With this system, we ensure the efficient procurement of parts and units from suppliers and efficient production processes at our partner companies. We are also promoting a modal shift in transportation as well as the “5Rs” to promote green logistics. This effort to optimize our delivery system meets customer demands for high quality, low cost, and prompt delivery. In this way, we are continuing to supply excellent products that satisfy our customers.

Company Policy for 2006

HORIBA Group is One Company.
We are working to promote the HORIBA brand.

Action Policies of the Supply Chain Management Center

- We shall pursue management efficiency and customer satisfaction.
- We shall promote lean and more accurate production planning.
- We shall develop green logistics and shall integrate the physical distribution functions of our group.
- We shall promote the One Company Project (IT).

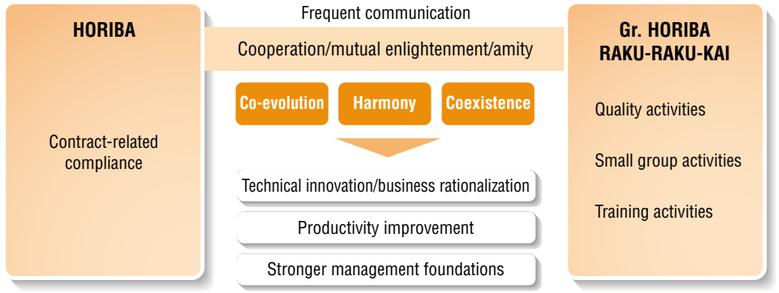
Mental Approach

Two-way communication

■ Purchasing Policies

To promote the production initiatives of the HORIBA Group, we will purchase necessary amounts of high-quality materials and parts after giving full consideration to the global environment and the needs of regional communities.

1. We shall reduce the number of suppliers and consider economies of scale.
2. We shall purchase parts and materials at the optimum location and promote competition among suppliers.
3. We shall standardize regular tasks and implement horizontal management.
4. We shall share information and promote training to improve the skills of buyers.



■ Promoting Global Procurement

In implementing our management policy of “The HORIBA Group is One Company,” we initiated global procurement in 2005 together with our group companies outside Japan. For example, in November, we held a global purchasing meeting to concentrate the purchasing power of the HORIBA Group and organize a global purchasing team. This global purchasing meeting was attended by some two dozen purchasing managers from companies both inside and outside Japan. Our next step is to organize working groups for each theme and develop a more powerful network.

Global purchase meeting

Promoting Green Procurement

Green Procurement

The HORIBA Group has organized the “WEEE & RoHS Compliance Project” in 2003 to eliminate harmful chemical substances from the raw materials and parts used in our products. As a result, we are now promoting design for environment, elimination of harmful substances, lead-free and green procurement initiatives, and other environmental measures. Of these, we are particularly focused on green procurement as an aspect of our PLM (product lifecycle management) initiative. For example, when we prohibit use of a part or research a harmful substance used in a part, we link our actions to various improvement activities at our suppliers, such as standardization of the part and classification of parts information. We do this because we believe that linking our actions to suppliers’ improvement activities will result in synergies that contribute to improved PLM.

Regarding the EU’s RoHS Directive to be enforced in July 2006, the HORIBA Group is taking steps to ensure our products conform to the requirements of the directive. This represents our commitment to green procurement and to meeting customer demand for greater accommodation of CSR.

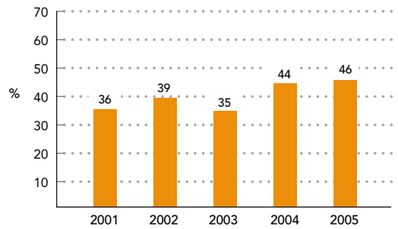
Goals of Green Procurement

1. To ensure the products of the HORIBA Group conform to the requirements of environmental laws and regulations, such as the European RoHS Directive
2. To improve our overall environmental performance together with suppliers to our group
3. To protect workers from chemical exposure in disassembly work and further improve our recycling ability by identifying the chemical substances used in materials and parts and specifying the location of the chemical substance in our products

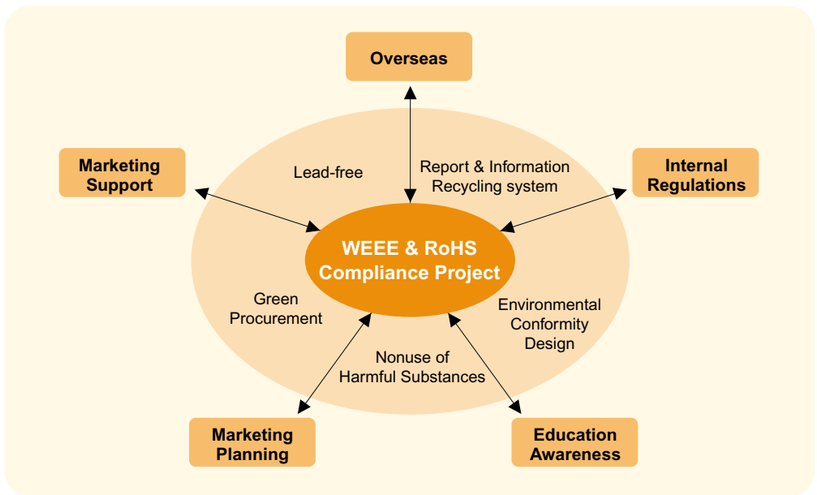
Promoting Green Purchasing

The IMS target established for our entire company in fiscal 2004 was the promotion of green purchasing for stationery. Since then, we have been promoting green procurement of copy paper and other stationery. We have been raising awareness of those in charge of stationery purchases in all divisions and have been requesting our employees cooperate with the persons in charge of stationery purchases to attain the target. In addition, we have informed the entire company of the status of green purchasing in each division and have been promoting the purchase of environmentally friendly products to attain the target green purchasing rate of 50% (on a cost basis) in fiscal 2005; however, the green purchasing rate that year was 46%, which represented an increase from the 44% green purchasing rate attained in fiscal 2004. In fiscal 2006, we intend to raise the target green purchasing rate to a minimum of 60% (on a cost basis) and will continuously promote green purchasing of stationery as a company-wide IMS target.

Green Purchasing Rate (cost basis)



System to Promote the Green Procurement Project



Working with Our Employees.

To ensure that all employees can maximize their abilities in our company, we prohibit discrimination on the basis of sex, age, and race at all our workplaces. We support employee skill development, evaluate our employees fairly, and provide a safe and comfortable work environment so that each employee can apply his or her full energy to his or her work.

Making HORIBA More Attractive Through Our “One Company” Management Policy

In fiscal 2004, we adopted a management policy—“The HORIBA Group is One Company”—with the intention of further strengthening our corporation.

According to this policy, all employees are encouraged to perform their work from a global perspective. In addition, we are also taking steps to ensure that all our employees are able to work with an attitude of “Joy & Fun.”

Policy of Our Personnel System

To allow our employees to work with “Joy & Fun,” our personnel system has adopted three policies and is working to create a comfortable work environment that encourages our employees to take on challenges with a venturesome spirit.

Open & Fair

We believe that necessary information and personnel regulations should always be open to everyone so that the communication process remains free and open between management and employees, between manager chiefs and their subordinates, and among employees. We also believe in fairness, that all should be afforded equal opportunity, and that all should be rewarded for their achievements.

Positive Evaluaation System

When one strives continually to succeed, failures may sometimes occur. We understand that unless we take on challenges, we cannot score points. The simple act of taking on a challenge earns an employee points. Extra points are awarded when a challenge is successful. When we evaluate an employee for taking on a challenge, we also determine how well the employee has addressed that challenge.

Two-Way Communication

Information should be not only transmitted but also shared. When a superior transmits information to his or her subordinates (one-way communication), the subordinates should then pass along their opinions or proposals to their superior (two-way communication). We are establishing a work environment that always supports two-way communications.

A Personnel System Adaptable to Various Working Styles

An Innovative Personnel System

Our conventional personnel system comprises two groups: specialists and general workers. In June 2005, however, we reorganized our personnel system to allow our employees to adopt various working styles that give them the freedom to maximize their abilities.

In principle, this new system comprises four groups: the *meister* career group, professional group, expert group, and general career group (for new employees and young employees). With this innovative system, we can assign our employees to the optimum division for their skills and ambitions, thus ensuring that all workers can perform their duties to the fullest.

Extending Employment

Subsequent to the revision of employment laws in April 2006, we will update our reemployment system for retired persons to accommodate the rapid change in social conditions. The new system specifies that, as a rule, we should employ all retired persons who wish to be rehired. With this new system, we can establish a work environment in which those who are eager to work can do so with enthusiasm. In addition, to support better work-life balance, we have increased the number of daily and weekly shift patterns from three to seven. We are confident that the adoption of varied work patterns will support varied work styles.

In the future, we will hold life planning seminars for our employees to offer detailed information and support for our employees’ lifestyles.

Eliminating Barriers to Persons with Disabilities

HORIBA employs persons with disabilities and assigns them to various divisions and workplaces to ensure they work with “Joy & Fun” alongside their coworkers. On September 13, 2005, the 1st Commendation Ceremony for Long-Serving Employees with Disabilities was held in Kyoto. This event was sponsored by the Kyoto-pre. Association for Employment of Persons with Disabilities. At the ceremony, Tamiko Mononobe, an employee in our Purchasing Department, was commended for her 38 years of service. Introduced during the past year, this commendation system will recognize outstanding workers with disabilities who have served with the company for 25 years or more.

Commendation awarded to an employee with disabilities for her long service

Creating a Comfortable Work Environment

We provide our employees with positive support for a comfortable work environment in which both men and women can enjoy an energetic life with adequate balance between their work and private lives.

The Child-Rearing Working Group

In November 2005, we organized the “Child-Rearing Working Group.” This group is now working to establish a work environment in which they can manage to care for their very young children while working. This approach also makes possible a backup system where employees from various divisions and of various ages can cooperate and enjoy each other’s child-rearing guidance.

In addition, the group launched the “Joy & Fun Kids Club” on the company intranet so that employees could exchange information on child-rearing. This club addresses themes, such as preparation for childbirth and child-rearing, and provides information on internal and external nurseries, recycling of items used in child-rearing, and a counseling corner for employees. This club has spurred a lively exchange of opinions.

The Joy & Fun Kids Club

Introduction of a Gift for a Child Entering School and a Child-Rearing Allowance

As part of our child-rearing support system, we recognized the need for a “Gift for Children Entering School” and a “Child-rearing Allowance.” The Gift for a Child Entering School is presented to any employee who has a child entering elementary school, junior high school, or senior high school. In addition, the conventional family allowance was renamed the Child-Rearing Allowance and the amount of the allowance was increased.

Gift for a Child Entering School	We present ¥50,000 when a child of an employee (who has served with the company for a minimum of three years) enters elementary school, junior high school, or senior high school.
Child-Rearing Allowance	Family allowance (¥6,000) → Child-Rearing Allowance (¥10,000) (monthly allowance for each child under 18 who is recognized as an employee’s dependent)

Gift for a Child Entering School

Health Maintenance and Recovery

Medical Examinations

According to the terms of the Industrial Safety and Health Law, we provide periodic regular and special medical examinations for our employees. In addition, we provide preventive medical examinations for lifestyle diseases in cooperation with the Health Insurance Association. This approach enables us to provide comprehensive support for the health of our employees.

Following each medical examination, we send a notice to the corresponding division so that employees requiring follow-up are so informed. For those employees at risk of stroke or heart disease, careful examinations and health guidance are provided.

Counseling Provided Through the Employee Assistance Program (EAP)

To support the physical and mental health of our employees, we contracted external health counselors to provide our employees with counseling services. This service was launched in fiscal 2004. In addition, we held mental health seminars for administrators and employees. In this way, we care for each employee’s health and maintain close communication with industrial doctors.

Mental Health

Self-care
- Stress self-checks by each employee and stress relief measures
- Coping with stress (Employee training on how to eliminate stress)

Care on each assembly line
- Work environment improved by the supervisor/Counseling for each employee
- Stress management (Training provided to line workers by the supervisor of each assembly line on how to eliminate stress)

Care by staff, etc.
- Counseling by industrial doctors and health counselors
- Counseling by the general manager in charge of personnel affairs and general manager in charge of health and safety
- Training and support for employees and line workers

Off-site care
- Introduction to medical specialists by industrial doctors
- Counseling provided to each employee by medical specialists and the like
- Provision of medical services by an outside agency (EAP)

Working Together with Society.

We actively contribute to society so that we can continue to thrive in harmony with local and international communities in peace and prosperity.

We undertake environmental conservation initiatives and support art, culture, and sports while maintaining a dialogue with local communities. In this way, we contribute to the betterment of society.

Contributing to Society Through Business Initiatives

Science & Technology

June 2005

Commendation presented by the Minister of Education, Culture, Sports, Science and Technology.

The Ministry of Education, Culture, Sports, Science and Technology presents the “Prize for Science and Technology in the Development Category (The Commendation for Science and Technology by the Minister of Education, Culture, Sports, Science and Technology)” to individuals and groups for outstanding research, development or innovation that has made a significant contribution to the development of Japanese society and the economy or the lives of the Japanese people. In 2005, this prize was awarded to two of our researchers, Yasuo Yamao and Narihiro Oku, for their inventing “An Immunoassay Method for Use with Whole Blood Sample”. In 2004, they had already been presented with the National Commendation for Invention of the Prize of the President of the Japan Patent Attorneys Association for their development of this method. Thus, this represented their second award in as many years.

Award by the Minister of Education, Culture, Sports, Science and Technology

September 2005

Subsidy from the Ministry of Economy, Trade and Industry Targets Technological Development for New Regional Industries.

Using a subsidy provided by the Ministry of Economy, Trade and Industry, we launched the “Technological Development Works for Regional Industrial Development.” This led to the development of the high-performance micro-radioactivity measurement technology in 2004-2005. Using this technology, we succeeded in developing a clearance monitor capable of determining the clearance level for slightly radioactive scrap from remodeled or demolished buildings from nuclear power plants. This technology is now attracting considerable attention as an important technology for future energy planning.

High-performance Micro-Radioactivity Monitor (“clearance monitor”)

October 2005

Commendation Ceremony held for the 2nd Annual Dr. Masao Horiba Award.

On October 17, 2005, a Seminar and Ceremony were held for presentation of the 2nd Annual Dr. Masao Horiba Award at Kyoto University’s Shiran Kaikan. The theme for the ceremony was “infrared measurement technology.” The following three researchers were selected as award winners from the many researchers who applied: Dr. Harumi Sato, research associate at the School of Science & Technology, Kwansei Gakuin University; Dr. Takeshi Hasegawa, associate professor at the Department of Chemistry, Faculty of Science, Tokyo Institute of Technology; and Dr. Yasushi Inouye, associate professor at the Graduate School of Frontier Biosciences, Osaka University. The special prize was awarded to Dr. Michael William George, professor at the School of Chemistry, University of Nottingham.

Symbol for prize

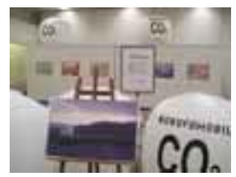
Award Ceremony for Dr. Masao Horiba Award

Art & Culture

August 2005

HORIBA participates in the “Wonderful! 100 Eco-items in 2005!—Eco-Life Starts with ‘Don’t be wasteful!’” exhibition.

On August 10 to 16, 2005, an environmental event titled “Wonderful! 100 Eco-items in 2005!,” a joint project involving industry, academia, government, and citizens, was held at the Takashimaya department store in Kyoto. We participated in this event as a member of the executive committee and exhibited several unique items. One of our exhibits compared the energy we consume daily with our daily caloric intake. This exhibit was meant to portray the environmental load we each produce daily (referred to as the “unit environmental load” and introduced on our website in 1997). Another exhibit showed carbon dioxide (CO_2), a dispersed and invisible substance, contained in balloons to raise awareness of its existence. Under this theme, we exhibited “CO_2 Cubes” as an eco-art exhibit in cooperation with the artist Osamu Kokufu. Our exhibits attracted considerable attention at this event.



CO_2 Cubes Exhibit

■ Sports

August 2005 **Yoko Bamba represents Japan in orienteering competition.**

Yoko Bamba, a member of HORIBA's Automatic Test Systems Division, is one of Japan's top athletes. The winner of Japan Orienteering Championships in 2004 and 2005, she set an all-time record for a Japanese participant when she competed in the World Orienteering Championships 2005. In May of this year, she entered the World Cup, and in July she will represent Japan at the World Orienteering Championships in Denmark. We wish her the best of luck in her events.

Yoko Bamba

February 2006 **HORIBA team wins the 9th big stairway climbing championship at JR Kyoto Station Building.**

In 2006, the "HORIBA Joy & Fun Team" won the 9th Big Stairway Climbing Championship at JR Kyoto Station. We had participated seven times previously, never finishing higher than second. This year, however, our team had the best time of the 72 teams competing and finally captured the championship.

Big Stairway Climbing Championship

■ Contributing to Regional Activities

August 2005 **HORIBA personnel teach children the importance of environmental conservation at schools.**

HORIBA, as a manufacturer of environmental measuring devices, has assigned personnel to elementary schools and junior high schools in Kyoto to teach children the importance of environment conservation. In 2005, we assigned personnel to schools on seven occasions.

HORIBA Personnel Teaching at School

November 2005 **Open house for local elementary school pupils and their families.**

To promote communication with local residents of Kyoto, we invited 20 elementary school pupils and their families—50 people in total—to our company for an event. The event's slogan was "Study at HORIBA! Join our environmental experiment class and tour our company."

Experiment performed at Open House

December 2005 **Voluntary employee activities: trash collection along commuting routes.**

During holiday periods, some of our employees undertook a trash clean-up of their commuting routes. After the clean-up, which extended from the nearest train station to our company premises, the volunteers checked the quantity and type of trash and determined they had gathered 3,006 cigarette butts and 357 pieces of paper.

Our volunteers have undertaken this clean-up campaign since 2002. Some of them also participate in the "International Cleaning Campaign in Suma" every year.

Clearing trash from commuting routes

February 2006 **Automatic external defibrillators installed followed by AED training meeting.**

A rescue team from the Southern Kyoto Fire Station held an AED training meeting for HORIBA employees. The meeting was attended by 30 employees from various divisions, including the internal fire-fighting team, receptionists, door attendants and others. The meeting followed the installation of three AEDs (automatic external defibrillators) in our company at the beginning of March. Two AEDs were installed in our head office, while one was installed in our Tokyo branch office to help protect our employees, visitors, and neighboring residents.

AED Training Meeting

Contributing to Society.

In the interests of safety and environmental conservation, we remain committed to developing the products and technologies needed for the society.

In addition, we are protecting the global environment as we carry out our business activities, which include the provision of analysis and environmental measuring technologies.

Our Products & Technologies

■ VOC Control

On April 1, 2006, new regulations for the control of volatile organic compounds (VOCs) took effect in Japan.

In response, we have developed the FV-250 Portable VOC Monitor (with FID method) and the model NV-370 Portable VOC Monitor (with catalytic oxidation and NDIR method). These products are ideal for customers who are required to observe the above regulations and customers who voluntarily control their VOC emissions. According to research undertaken in 2000, 1.85 million metric tons of VOCs are emitted into the atmosphere annually in Japan. Photochemical and physical reactions can cause these VOCs to generate secondary compounds, such as photochemical oxidants and suspended particulate matter (SPM). Recently, the frequency of photochemical oxidants alerts has rebounded to levels not seen since the late 1970s.

To reduce photochemical oxidants and attain the target VOC reduction level of 30% in 2010 as specified in the regulations, we now provide a variety of measuring devices under the slogan "meeting the needs of both plants and laboratories with a single measuring device."

FV-250

MEXA-6000FT

■ Exhaust Gas Measurement Technology

In recent years, the automobile industry has been addressing the challenge of developing environmentally friendly vehicles and engines. We contribute to their efforts by providing various analyzers and measurement systems.

Bio-fuels—fuels blended with ethanol or methanol used as substitutes for oil or as a means of reducing greenhouse gas emissions—are now attracting considerable attention. In response to this situation, we will introduce the model MEXA-6000FT, an FTIR-based multi-ingredient analyzer for engine exhaust gas. This device is capable of measuring the exhaust gases emitted by engines powered by bio-fuels.

Furthermore, the MEXA-6000FT simultaneously measures nitrogen compounds—such as NOx, NO_2, N_2O, and NH_3—emitted by diesel engines and the like, which makes possible a behavioral analysis of these compounds on the catalyst.

■ Promoting Safe Driving and Preventing Accidents

The Doraneko ("alley cat") is an automobile data recorder. Should you be involved in an accident, this device will maintain a record of the accident data such as a view of the scene in front of your car and your vehicle's speed and position, among other things. Analysis of the accident data can reveal the cause of the accident and can help prevent a recurrence. In addition, data analysis can also indicate close calls and near misses. HORIBA's Doraneko is used for driver training and as an accident prevention tool in the taxi industry. Moreover, the use of a data recorder such as the Doraneko or a digital tachograph can contribute to economical vehicle operation. As a result, it can help lower fuel costs while reducing CO_2 emissions.

The Doraneko has already been installed in some vehicles operated by the HORIBA Group. We intend to install this innovative device in all our vehicles in the future.

The Doraneko

■ The SPEX SkinSkan Optical Fiber Fluorescent Spectrophotometer

When light is radiated on a sample, molecules in the sample are excited. When the molecules return to stability, the sample emits fluorescent light. Likewise, radiating light on the skin causes the tryptophan and collagen contained in the skin to emit fluorescent light. The waveform and intensity of this fluorescent light can reveal the condition of the skin.

The SPEX SkinSkan can be used to evaluate the effectiveness of sunscreens at blocking UV radiation. It can also be used to determine the extent of hair damage. The SPEX SkinSkan is used exclusively in the development of everyday products.

SPEX SkinSkan

Medical Products

Our health is one of our most important assets, and HORIBA's medical products are contributing to improved clinical care. For example, our Model LC-178 CRP Automated Blood Cell counter with CRP Measurement System simultaneously counts blood cells and analyzes C-Reactive Protein concentration (which increases in the presence of inflammation). Because this product provides an immediate determination of the seriousness of a disease and whether a patient is infected by a bacterium or virus, it is used extensively in doctor's offices and medical clinics. Since the LC-178 CRP can contribute to an immediate and accurate diagnosis at a local medical clinic, it contributes to lower medical expenses. In addition, it helps to prevent overprescribing of antibiotics.

LC-178 CRP

The Ministry of Land, Infrastructure and Transport Detects Illegal Light Oil with HORIBA Measuring Instruments.

Illegal light oil is a mixture of light and heavy oils. When burned as an automobile fuel, this fuel emits exhaust gas containing large quantities of harmful substances and damages the vehicle engine. Illegal light oil clearly endangers both public safety and the environment. In 2005, the Ministry of Land, Infrastructure and Transport conducted an inspection to uncover the use of illegal light oil on the streets. Ministry officials chose our sulfur density measuring instruments for this inspection because of their portability.

First public inspection of use of illegal light oil (at a tollgate on the Metropolitan Expressway)

SEPA Certification No. 1 Awarded for COD monitor by UV method

HORIBA has received SEPA certification No. 1 from the State Environmental Protection Administration of China for the OPSA-150 COD monitor by UV method. Our years of experience with measurement & analysis technology have enabled us to expand our market presence in China. We are committed to contributing to water quality preservation worldwide.

OPSA-150

Detecting Asbestos by Shape

Several methods exist for analyzing asbestos. Now, the EMAX Energy X-Ray Micro Analyzer introduces an innovative analysis method. Asbestos is a fibrous mineral, but not every fibrous mineral is asbestos. For this reason, we must carefully check the shape as well as the composition of a mineral before we can determine whether it is asbestos. With the EMAX Energy X-Ray Micro Analyzer, the electron microscope shows the shape of the mineral while the spectrum produced by the EMAX shows its composition. As a result, one can readily judge whether a mineral is asbestos.

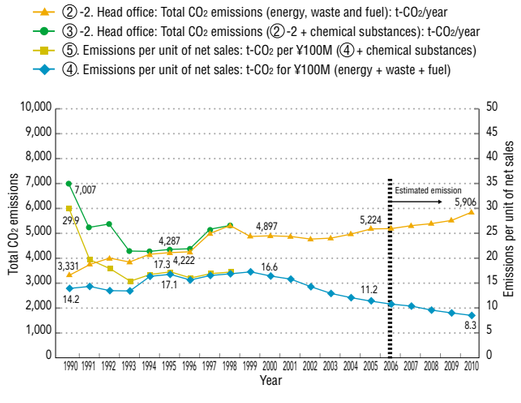
EMAX ENERGY

Responding to the Kyoto Protocol by Reducing Greenhouse Gas Emissions

The Kyoto Protocol was signed in Kyoto City, Kyoto Prefecture. These two governments requested that companies in the prefecture submit a three-year plan for greenhouse gas reduction and implement greenhouse gas reduction activities according to the protocol. Because HORIBA consumes a large amount of energy, we formulated our "CO_2 Reduction Project to Prevent Global Warming" and prepared a CO_2 reduction plan. We are now implementing our CO_2 reduction initiative.

We are committed to installing energy-efficient equipment and avoid using electric power unless absolutely necessary. In this way, we are making efforts to reduce CO_2 emissions and thus prevent global warming. However, according to our new mid-to long-term plan scheduled to end in 2010, we intend to increase our 2010 sales by 1.5 times our 2005 sales. Therefore, we expect to increase our CO_2 emissions this year. However, we expect to make a much greater effort to increase the introduction of new green products (one of our IMS targets) and provide the market with new eco-friendly products. We will continue to promote our primary corporate initiatives as a manufacturer of environmental analysis products.

Trend in CO_2 emissions, total emissions per unit of net sales, and estimated future emission



Toshie Ishizu, PhD in Business Administration, Assistant Professor, School of Business Administration, Meiji University

My visit to your company taught me that "measuring makes the invisible visible." I was able to see the actual work of your employees as they took the initiative to study and address environmental issues that, over time, gradually take a visible form. I specifically came to understand that HORIBA is doing work that truly provides solutions to the root causes of various environmental concerns. HORIBA employees are increasingly demonstrating their social responsibility by carrying out their work by combining wisdom, dedication, technology, and an enterprising spirit in the effort to eliminate regulated pollutants. They are even addressing some pollutants not covered under the RoHS Directive of the EU (which takes effect in July 2006) and are providing maintenance services for the benefit of their customers and their products.

I would like to extend my warmest support to the employees at HORIBA so that they can maintain their enthusiastic approach and continue to achieve success.

Tomoo Machiba, CSR Advisor, Head of ecoistic!

If we are to resolve the various problems affecting the world, it is essential that we be able to perform "measurements" that reveal the reality of the situation. As the demand for health, safety, and environmental conservation increases, the expectations for HORIBA's proprietary analysis and measurement technology will continue to grow. HORIBA's introduction of the Integrated Management System, which reflects the characteristics of the company, is leading to positive results in the gathering of data regarding quality, health, safety, and the environment within the group.

For future issues, may I suggest that you illustrate the company's developments from the point of view of how HORIBA's technology can be applied to solving urgent issues affecting the community and the world?

I look forward to finding out how HORIBA contributes to regional promotion and the culture of Kyoto; environmental protection; and poverty reduction in developing countries through cooperation with NGOs and UN agencies. I trust this will lead to the discovery of new opportunities for discovering solutions.

Ikuko Kakemizu, Educator, Kyoto Municipal Fujimori Junior High School

During my training period at HORIBA, I was shocked by the gap between the situation of my school and that of the company where concerns related to IMS are seen everywhere. Interestingly, these advanced initiatives were not intended to serve as a PR initiative for the public; instead, they are firmly taking root among company employees. While the refuse sorting effort is exemplary in itself, the employees are still trying to achieve even greater reductions in their daily activities. I was familiar with issues such as the occurrence of potentially serious mishaps and was able to see how this was an effective link to improved quality. HORIBA sells environmental products, makes a significant effort in the area of green purchasing, and serves to raise awareness regarding environmental issues through a number of means, including its website and publications. HORIBA is a company that is absolutely necessary to our planet. In the future, I hope you can continue to contribute to society by accepting trainees and by raising awareness outside the company.

Masami Iwamatsu, Kino-kankyo (a not-for-profit organization)

I truly felt that HORIBA's Integrated Management System targeting quality, safety, and the environment functions very well by making use of its respective advantages. I was surprised to learn about the great power of the employees who support this system, particularly the employees' highly developed communication skills and ability to thoroughly undertake various operations. I understood that this was the fruit of wide-ranging environmental safety training efforts that included skill training and classes in green procurement. Furthermore, I anticipate HORIBA will meet its various duties as a leading company in the area of social and environmental activities. In the future, I expect this leadership to extend outside the HORIBA Group to include suppliers and other companies.

Comment on the Opinions of Third Parties

I believe that our company can continue to develop through two-way communication with the support of our stakeholders and that we can benefit from the information they provide. I would like to thank all those who submitted their frank opinions from different perspectives on this occasion. We have confirmed that the IMS environmental initiatives we have initiated are the proper course for our corporate activities. In response to the suggestions and proposals of third parties, we will continue to meet our social responsibilities while ensuring the overall HORIBA Group reflects these varied activities.

We look forward to receiving your continued guidance and encouragement in the future.

Yoshihiro Wakiyama
General Manager
Quality, Environmental & Safety Management Center

Environmental Impact of Non-business Related Locations (sales Offices and Service Stations)

	Number of locations		Sales Offices (11 locations)			Service Stations (21 locations)		
	Item/Year		2003	2004	2005	2003	2004	2005
INPUT	Electricity consumption	MW·h	742	883	750	350	341	394
	Water consumption	km³	1.1	2.2	2.2	1.0	1.0	1.0
	Fuel consumption	kL	49.0	50.4	48.1	153.9	169.6	184.5
	Quantity of chemicals consumed	t	0.1	0.1	0.2	0.0	0.0	0.0
	Office paper	t	6.6	5.7	5.8	1.8	1.7	2.7
	Packing materials	t	2.2	1.6	2.0	0.0	0.0	0.0
OUTPUT	CO_2 emissions	t	397.1	453.1	398.7	498.7	532.1	585.4
	Wastewater discharge	t	1.1	2.2	2.2	1.0	1.0	1.0
	Amount of waste produced	t	13.2	12.8	11.5	11.8	10.5	10.6
	Waste emissions	t	7.0	5.2	5.3	9.8	8.5	8.6
	Quantity of landfilled waste	t	0.4	0.3	0.3	0.5	0.4	0.2

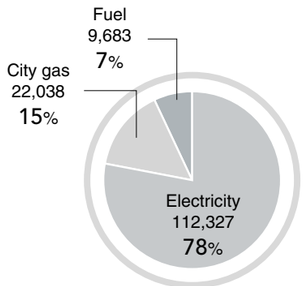
Actual Environmental Impact of Group Production Companies

	Item/Region		U.S.A.			Europe					Asia			
	Abbreviated Company Name		HII (Irvine)	HII (Ann Arbor)	HII (Tempe)	HE	HIL	HDHQ (ABX SAS)	HADE	HJY	STEC	HAT	HKL	HSC
INPUT	Electricity consumption	MW·h	428	1,111	1,300	453	341	2,254	1,140	4,249	5,208	284	71	124
	City gas consumption	km³	-	55.3	0	124.3	9.6	0	-	90.6	251.8	0	0	0
	Water consumption	km³	8.9	7.8	1.7	0.4	1.7	12.1	2.4	18.1	19.1	2.6	0.0	0.2
	Consumption of fuel oil & fuel for vehicles	kL	-	-	0.3	163	4	-	3,001	429	47	16	5	0
	Quantity of chemicals consumed	t	-	-	0.0	3.5	-	22.2	5.0	0.9	1.1	0.4	0.3	0.1
	Office paper	t	0.3	3.0	0.1	2.2	1.0	36.0	5.0	10.7	7.3	3.8	2.0	0.6
	Packing materials	t	-	2.5	0.1	4.8	-	-	-	15.2	12.4	-	2.0	-
OUTPUT	CO_2 emissions	t-CO_2	253	772	767	865	183	113	7,415	1,381	2,590	145	37	61
	Wastewater discharge	t	-	0.9	1.7	1.7	-	-	-	-	-	2.6	-	0.2
	Waste emissions	t	-	-	5	16	16	430	110	80	26	5	0.2	6
	No. of employees		112	116	7	125	75	565	300	496	361	126	19	45

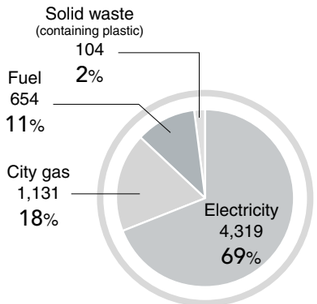
Ratio of Energy by Type and CO_2 Emissions

Ratio of energy consumed

Qty of energy consumed (GJ, %)



Qty (t) and ratio (%) of CO_2 emitted



ISO Certification at Domestic and International Group Companies

Company Name	Quality (ISO9001)	Environment (ISO14001)
HII (U.S.A.)	○1998.1	○2002.2
HE (Germany)	○1996.12	○2003.6
HIL (England)	○1994.8	○2003.2
HDHQ (France)	○1999.4	—
HADE (Germany)	○2006.2	○2005.8
HJY (France)	○1998.10	—
STEC (Japan)	○1999.2	○2006.2
HAT (Japan)	○1999.12	○2005.2
HKL (Korea)	○1999.9	○2004.6
HSC (China)	○2005.1	○2005.5

○ : Already acquired — : Not acquired

Locations and Group Manufacturing Companies

Sales Offices (11 locations): Tokyo, Sendai, Utsunomiya, Tsukuba, Yokohama, Nagoya, Toyota, Hamamatsu, Osaka, Hiroshima, Fukuoka
Service Stations (21 locations): Sapporo, Sendai, Utsunomiya, Ichihara, Kashima, Tsukuba, Kawaguchi, Tokyo, Yokohama, Fuji, Hamamatsu, Toyota, Nagoya, Toyama, Yokkaichi, Osaka, Himeji, Kurashiki, Hiroshima, Fukuoka, Oita

Group Manufacturing Companies

Company Name	Abbreviation	Location
HORIBA INSTRUMENTS INCORPORATED (Irvine Facility)	HII	California, U.S.A.
HORIBA INSTRUMENTS INCORPORATED (Ann Arbor Facility)	HII	Michigan, U.S.A.
HORIBA INSTRUMENTS INCORPORATED (Tempe Facility)	HII	Arizona, U.S.A.
HORIBA EUROPE GmbH	HE	Oberursel, Germany
HORIBA INSTRUMENTS LIMITED	HIL	Northampton, England
HORIBA ABX SAS	HDHQ	Montpellier, France
HORIBA AUTOMOTIVE TEST SYSTEMS GmbH	HADE	Darmstadht, Germany
HORIBA Jobin Yvon SAS	HJY	Longjumeau Cedex, France
HORIBA STEC, Co., Ltd.	STEC	Kyoto
HORIBA Advanced Techno, Co., Ltd.	HAT	Kyoto
HORIBA KOREA LTD.	HKL	Pucheon Facility, South Korea
HORIBA INSTRUMENTS (SHANGHAI) Co., Ltd.	HSC	Shanghai, China

Monitoring of Water Quality & Trend in Data Measurement

Scope: Main Factory
Wastewater Measurement Categories and Measured Values

(Unit: mg/L) except pH
＊Under detection limit so omitted

	Measurement Category	Kyoto City Regulations	HORIBA Standards	Measured Result (maximum)			Non-detectable
				FY2003	FY2004	FY2005	
Items Concerning Home Environment	pH	5-9	-	6.3-8.3	6.2-8.0	6.1-7.9	
	n-Hexane extract	5	3.5	41.7	2.2	1.0	0.2
	Phenol	1	0.3	＊	＊	＊	0.002
	Copper	3	0.9	0.13	0.14	0.19	0.01
	Zinc	5	1.5	0.334	0.319	0.286	0.005
	Iron (soluble)	10	3.0	0.113	0.241	0.110	0.01
	Manganese (soluble)	10	3.0	＊	＊	＊	0.02
	Fluorine and its compounds	8	4.5	0.78	0.92	1.02	0.02
	Nickel	2	0.6	＊	＊	0.05	0.02
	Boron and its compounds	10	3	0.12	0.13	0.15	0.02
Items Concerning Human Health	Cadmium and its compounds	0.1	0.03	＊	＊	＊	0.001
	Cyanide	1	0.3	＊	＊	＊	0.1
	Lead and its compounds	0.1	0.07	0.006	＊	＊	0.005
	6-Chromium	0.5	0.15	＊	＊	＊	0.04
	Arsenic and its compounds	0.1	0.03	＊	＊	0.007	0.005
	Mercury and its compounds	0.005	0.0015	＊	＊	＊	0.0005
	Trichloroethylene	0.3	0.09	0.0010	＊	＊	0.002
	Dichloromethane	0.2	0.14	＊	＊	＊	0.002
	Carbon tetrachloride	0.02	0.014	＊	＊	＊	0.0002
	1,1,1-Trichloroethane	3	0.9	0.0010	0.0009	0.0006	0.0005

Note: Regulation figures are from Kyoto City sewage and drainage standards.

Atmospheric Measurements

Scope: Main Factory
Atmospheric Measurement Categories and Measured Values (at vents and site perimeters)

＊Under detection limit so omitted

	Measurement Category	Unit	Kyoto City Regulations	HORIBA Standards	Measured Result (maximum)			Non-detectable
					FY2003	FY2004	FY2005	
At vent	Dichloromethane	Vol ppm	200	180	Abolished	Abolished	Abolished	
	Xylene	Vol ppm	300	28	＜2	＜2	＜2	
	Ammonia	Vol ppm	100	28	＜0.5	＜0.5	2.6	
	Fluorine compounds	mg/m³N	5	3.5	＜0.70	＜0.70	＜0.70	
	Hydrogen chloride	Vol ppm	20	6	＜1	＜1	＜1	
	Nitrogen oxides (NOx)	Vol ppm	100	30	＜10	＜10	＜10	
At site perimeters	Dichloromethane	Vol ppm	2	-	Abolished	Abolished	Abolished	0.5 under
	Xylene	Vol ppm	3	-	＜0.3	＜0.3	＜0.3	
	Ammonia	Vol ppm	1	-	0.4	0.3	＜0.1	
	Fluorine compounds	mg/m³N	0.05	-	0.01	＜0.01	＜0.01	
	Hydrogen chloride	Vol ppm	0.2	-	＜0.02	0.04	＜0.02	
	Nitrogen oxides (NOx)	Vol ppm	1	-	0.028	0.064	0.086	

Note: Regulation figures are based on ordinances in place to protect Kyoto City environment.

Main Chemical Substances Handled

Scope: Main Factory

Unit: kg

CAS No.	IUPAC	Annual Amount Handled			Amount Transferred			Amount Recycled			Main Application
		FY2003	FY2004	FY2005	FY2003	FY2004	FY2005	FY2003	FY2004	FY2005	
67-63-0	Isopropyl alcohol	841	728	480	112	1	110	80	80	0	Clean printed circuit boards
64-17-5	Ethanol; over 99.5%	551	532	416	418	376	221	42	42	0	Clean components
67-64-1	Acetone (Dimethyl ketone)	307	283	454	148	200	448	158	82	1	Cleaning
124-18-5	n-Decane (petroleum hydrocarbon type cleaning agent)	289	630	847	148	0	212	158	0	0	Clean metals
7664-38-2	Phosphoric acid	230	280	377	230	191	376	0	0	0	Product addition
7439-92-1	Lead solder (Pb 37%, Sn 63%)	208	383	371	3	0	0	77	127	132	Printed circuit boards
60-00-4	Ethylenediaminetetraacetic acid	128	111	125	0	0	0	0	0	0	Product addition
302-01-27	Hydrazine monohydrate	104	103	142	0	0	0	103	103	142	Product inspection
1330-20-7	Xylene	61	67	135	57	63	135	4	4	0	Clean semiconductors/components

PRTR Substances

Scope: Main Factory Target treatment quantity: 10 kg/yr minimum

Unit: kg

No.	CAS No.	IUPAC	Annual Amount Handled	Consumption in Production	Added to Product	Amount Removed	Amount Emitted			Amount Transferred	Amount Recycled	Main Application
			Annual Amount Handled	Interim	Shipment	Compounds neutralized/ decomposed	Air	Water	Soil	Industrial Waste	Transferred Outside	
230	7439-92-1	Lead amalgam (lead solder, etc.)	402	135	267	0	0	0	0	0	135	Printed circuit boards
63	1330-20-7	Xylene and its compounds	167	167	0	0	0	0	0	167	0	Clean components
253	302-01-27	Hydrazine monohydrate	142	142	0	0	0	0	0	0	142	For semiconductors
47	60-00-4	Ethylenediaminetetraacetic acid	125	0	125	0	0	0	0	0	0	Product addition
24	22155-30-0	Alkyl benzene sulfonate and its compounds	90	90	0	0	0	0	0	90	0	For semiconductors
283	7681-49-4	Sodium fluoride	48	0	48	0	0	0	0	0	0	For semiconductors
283	1341-49-7	Ammonium hydrogen fluoride	26	26	0	0	0	0	0	26	0	For semiconductors
113	123-91-1	1,4 Dioxane	22	22	0	0	0	0	0	22	0	Product addition
304	1330-43-4	Sodium tetraborate: borax	21	0	21	0	0	0	0	0	0	Product addition
25	7440-36-0	Antimony	19	0	19	0	0	0	0	0	0	Product addition
283	7664-39-3	Hydrofluoric acid	16	16	0	0	0	0	0	16	0	For semiconductors
Total			1,078	598	480	0	0	0	0	321	277	—

HORIBA

Explore the future

HORIBA, Ltd.

Quality, Environmental & Safety Management Center

2, Miyanohigashi-cho, Kisshoin, Minami-ku,
Kyoto 601-8510, Japan
TEL: (81) 75-313-8121
FAX: (81) 75-316-0194
URL: http://www.horiba.com

Cover Illustration

According to Greek mythology, Gaia is the maternal goddess of the Earth who ensures that the planet thrives and is capable of cleansing itself.

HORIBA, as a manufacturer of analytical and environmental measurement instruments, contributes to environmental protection by providing society with products that play an important role in safeguarding the environment. To demonstrate this determination, we have named our communications media Gaiapress (our website) and Gaiareport (this environmental report). At HORIBA, we remain committed to the global environment by focusing on environmental measurement.

R100 Printed on 100% recycled paper.

PRINTED WITH SOY INK

This document is printed on Eco-Mark-certified 100% recycled paper made of used and recycled paper. It is also printed with biodegradable and readily erasable soy ink to ensure ease of recycling.
Printed with non-VOC ink.

Printed in Japan June 2006