A high-speed photograph of a single water droplet suspended just above a pool of water. The droplet is perfectly spherical and has just made contact with the surface, creating a series of concentric ripples that spread outwards. The background is a soft, out-of-focus light blue and white, suggesting a bright, clean environment. The overall composition is centered and symmetrical, emphasizing the purity and clarity of the water.

Creating True Value

Editorial Note

The Advantest Group published its Environmental Report from fiscal 2000, its Social and Environmental Report from fiscal 2006, and its CSR Report from fiscal 2007.

From fiscal 2011 and from the perspective of minimizing the use of paper resources, we have been providing reports on our businesses and business activities in a PDF format and from fiscal 2012, we have been providing these reports on our website.

Within the Special Feature Corner of the fiscal 2012 report, we describe how we are using our cutting-edge technologies and expertise in our initiatives, which are based on the “measurement and testing technologies” that constitute our DNA, to develop innovative technologies and products. In addition, from fiscal 2012 within the description of its CSR activities, we introduce the seven core ISO26000 issues that provide us with guidance on fulfilling our social responsibilities.

Scope and Period Covered by This Report

This report covers activities performed by Advantest and its affiliates (10 in Japan and 29 overseas, as of March 31, 2012) during fiscal 2011 (April 1, 2011 to March 31, 2012).

* Activities performed prior to or after the above period are also mentioned as references to expand readers’ understanding.

Guidelines Referenced

- GRI, "Sustainability Reporting Guidelines (G3)"
- Ministry of the Environment, "Environmental Reporting Guidelines 2007"
- Ministry of the Environment, "Environmental Accounting Guidelines 2005"
- Japanese Standards Association, "ISO 26000: 2010, Guidance on Social Responsibility"

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Message from CEO

CSR Report 2012

Becoming a truly trusted company globally by fulfilling responsibilities as a world top-class company

Haruo Matsuno
Representative Director, President & CEO ADVANTEST CORPORATION



Striving to meet social responsibilities as a provider of “Technology Support on the Leading Edge”

As the semiconductor testing device global leader, Advantest supports industrial development globally through leading-edge measurement and testing technologies. We consider these technologies ‘mother technologies’ that ‘give birth’ to high-performance products. Semiconductors are now used in virtually every industry, so it is no exaggeration that our technologies and products play a vital role in society’s confidence and its safety and security. In this sense, our corporate social responsibility (CSR) is our business itself.

Going forward, we will continue to support industrial development and help ensure safety and security for people around the world by further honing our measurement and testing technologies. The ultimate expression of this goal can be found in our corporate mission, “Technology Support on the Leading Edge,” and corporate mantra, “Quest for the Essence.” Also, based on our fundamental CSR policy of “Aiming for sustainable business development and enhancing corporate value in line with our corporate mission and mantra,” all employees are fearlessly taking on the challenge of creating leading-edge technologies and contributing to a more affluent society.

1000 Days Created Foundations for Leap Forward

Recently, the semiconductor industry business environment has been tough. Despite the challenging conditions we have worked to meet the targets of the Corporate Initiative “1000 Days” launched in July 2009, of “posting a cumulative profit in the three years from fiscal 2009 to fiscal 2011.” Employees have worked as one to implement reforms from a mid-term perspective. Thanks to these efforts, by the end of 1000 Days in March 2012, employees had submitted over 1,600 theme proposals and we achieved major improvements in operational efficiency and cost reductions.

I believe we achieved our goals in this program, including our main goal of returning to profitability, which we realized on an operating income basis if Verigy Ltd integration costs are excluded. I consider to be even more important achievement is that through this 1000 Days, a corporate culture has now taken root in Advantest in which employees independently search out areas for improvement and provide reform themes, and work in teams that cut across department or country borders. I strongly feel that this corporate culture provides a solid foundation for a major leap forward in the future.

New Corporate Initiative ACT2014

Prior to our integration with Verigy in April 2012, total combined market share between the two companies was 39%. Post-integration, this has increased to 47%(by VLSI Research), which is undoubtedly the result of utilizing both companies’ strengths to more precisely meet customer needs.

We secured leading market share globally though the integration, but our social responsibilities have also increased in step. We are strongly aware that we now affect more customers, more employees, and more people in different parts of the world. Reflecting this, we launched our new Corporate Initiative ACT2014 to meet these responsibilities by leveraging integration synergies to the maximum.

ACT, or “Advantest Culture Transformation,” expresses our strong intent to integrate our corporate culture with former Verigy and implement reforms that reflect the New Advantest. One of the series of activity under ACT2014 is our new human resources system, Advantest Resource Management System (ARMS), which creates a globally unified employee qualifications, remuneration, and education and training system. I believe this system will help cultivate a corporate culture that encourages employees to proactively endeavor to achieve growth for both the company and for themselves.

■ Entering New Business Fields Without Fear of Failure

In addition to increasing market share in our core test systems business, in ACT2014 we have set ourselves the goal of achieving a four-fold increase in our new business segment.

Until now, we have mainly provided technologies and products to the semiconductor industry. Fundamentally speaking, our core competence of measuring and testing technology can be applied to an extremely diverse range of areas and aspects of life. Therefore, going forward we will not confine ourselves to only areas where we have past success, but without fear of failure we will take on the challenge of entering new business fields.

Within these new fields, we will particularly focus on areas that solve society's problems, such as healthcare, environment, and energy. For example, in the healthcare field we are utilizing our technologies to advance medical diagnostics and we have developed a photoacoustic imaging system that can safely examine skin tissue damage.

Going forward, we will strive to achieve the ACT2014 goals of developing high value-added products that can contribute to solving societies' problems via our technological strengths and corporate culture of taking on challenges. At the same time we will listen to the voices of our customers in a wide range of fields to better understand their needs.

■ Fulfilling Social Responsibilities as a Global Leading Manufacturer

We hold a globally leading market share in our industry and thus our business can have major impact on societies throughout the world. We must therefore place even greater importance on CSR. I believe that considering that our business represents our CSR, then we must also accept the importance of fulfilling responsibilities by constructing a flexible management system able to respond rapidly to changes and pursuing our corporate mission and mantra regardless of economic conditions.

Also, based on our environmental policy we enacted the Advantest Group Environmental Action Plan, which aims to harmonize our business with the global environment, and the entire Group proactively engages in environmental management. Fiscal 2012 is the final year of our Fifth Action Plan and under this plan we have strived to develop green products that help to reduce our environmental footprint. We furthermore are continuously working to improve employees' environmental awareness, including through power saving measures carried out since the March 2011 earthquake in Japan.

We have been evaluating CSR initiatives using the ISO26000 International Standard in order to self-evaluate our CSR initiatives in order that we may implement even more effective initiatives in the future. As the name of our corporate mantra, Quest for the Essence, suggests, we are searching for our essence and by this process clearly identifying our strengths and weaknesses. While asking "What type of CSR reflects Advantest?" we will use this quest to implement further reforms around the world and become a truly global company trusted by the world's societies.

To achieve this, I believe that it is vital that we communicate even more closely with all our stakeholders and I would like to thank them all for their support and look forward to their continued understanding and encouragement.

Advantest's CSR

CSR Report 2012

The ADVANTEST Way and the Code of Conduct

The ADVANTEST Way and the Code of Conduct provides a set of rules and standards of behavior that all executives and employees must observe when carrying out the Group's global corporate activities. At Advantest, we take a global perspective when implementing our company management and our social and environmental activities so that we may use our cutting-edge 'measurement and testing technologies' to fulfill the expectations that our customers and all of our stakeholders throughout the world hold for us.



▶ [The ADVANTEST Way and the Code of Conduct](#)

CSR Organization and Policy

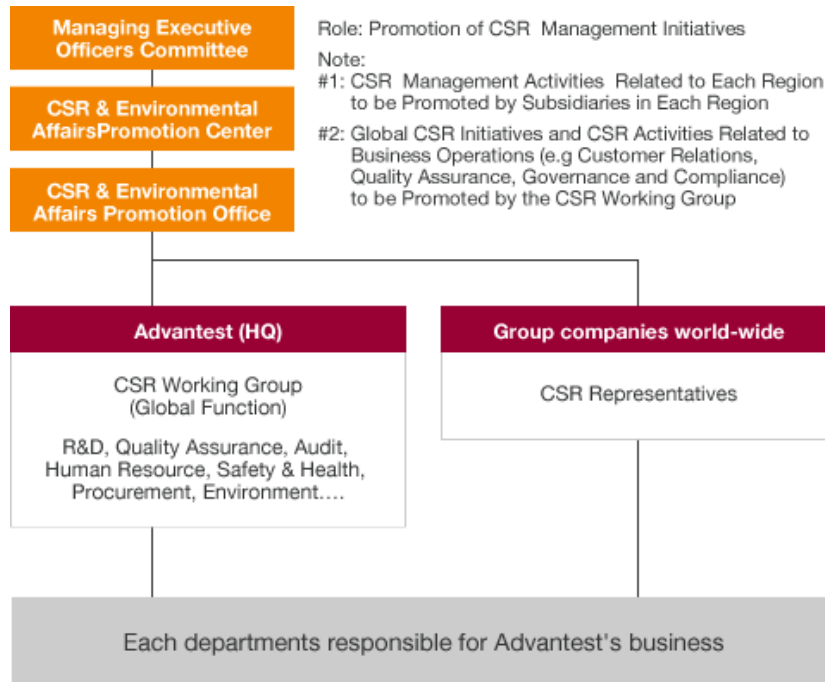
Based on the Advantest Group's corporate mission of delivering "Technology Support on the Leading Edge," our purpose as a Group is to use our 'measurement and testing technologies' to support the development of society and to help to ensure that people throughout the world can live safely and securely. We provide our customers in many countries with a range of products and services and we are contributing to society through our business activities in our core competence field of 'measurement and testing technologies.' In addition, we are using our business activities to meet the needs of our stakeholders and of society and to fulfill our social responsibilities as a group with a presence throughout the world.

Organization for Promoting CSR

We established the CSR & Environmental Affairs Promotion Center, which is headed by the President and CEO, in order to clarify the objectives and responsibilities of the executives within the Advantest Group. The Center is responsible for the overall promotion of our CSR initiatives and affairs. Beneath this organization we have positioned the CSR & Environmental Affairs Promotion Office, which is responsible for implementing our social contribution activities. In addition, all divisions and departments within the Company exchange CSR-related information and conduct CSR activities on a daily basis; this in turn supports our compliance with ISO26000 standards.

Moreover, we established the CSR Working Group to promote CSR initiatives horizontally across the entire Group. The Working Group is staffed by members of the various departments that are responsible for the Group's CSR and it is developing and coordinating activities on a global scale.

Advantest's Organization for Promoting CSR



Medium-term Management Targets

CSR Report 2012



With the Verigy integration complete, Advantest embarks on a new corporate initiative to strengthen its global position and solidify a cultural transformation

In April 2012, Advantest announced that it had completed the process integrating Verigy Ltd., acquired in July 2011, into its corporate structure. The integration also marked the start of a new corporate initiative, called ACT2014, which signifies a bold plan of action targeted at significant change by the end of FY2014, and is itself an acronym for “Advantest Culture Transformation,” an evolution to a corporate culture that embraces the values and philosophies of both Advantest and Verigy.

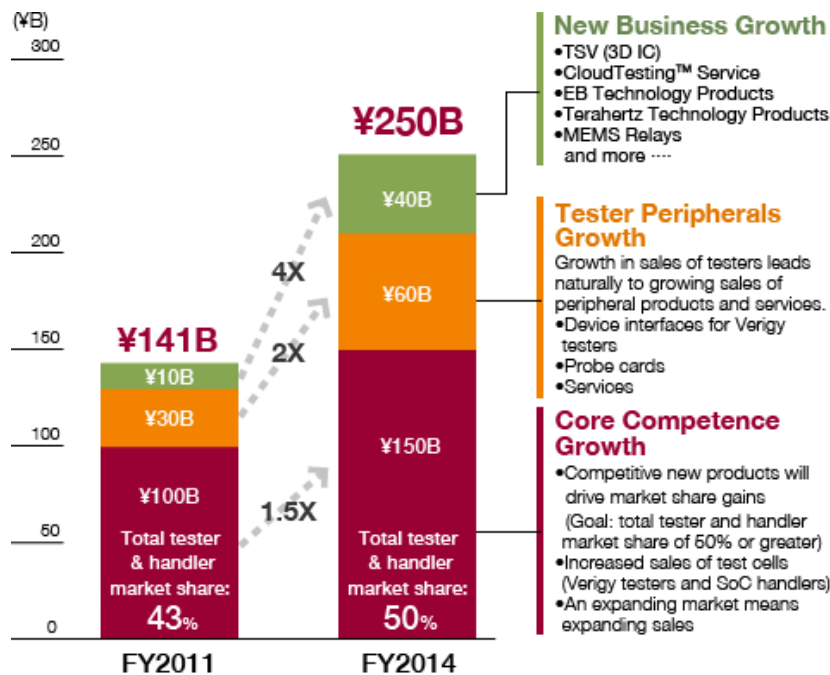
Advantest will take a long-term perspective in this corporate initiative and through the creation of innovation, will push ahead with the establishment of a solid foundation to achieve continuous growth.

In terms of specific targets of ACT2014, in fiscal 2014, which is the final year of the program, we are aiming to achieve sales of ¥250 billion, an operating profit margin of more than 20%, and a total share of the tester and handler market of more than 50%. Toward achieving these goals, we will pursue three measures; “strengthening the competitiveness of our core businesses,” “strengthening our tester peripherals business,” and “expansion of our new business.”

Fiscal 2014 Targets

Sales; ¥250 billion	Operating profit margin; 20% or greater	Tester & handler market share; 50% or greater
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Three growth themes



Feature



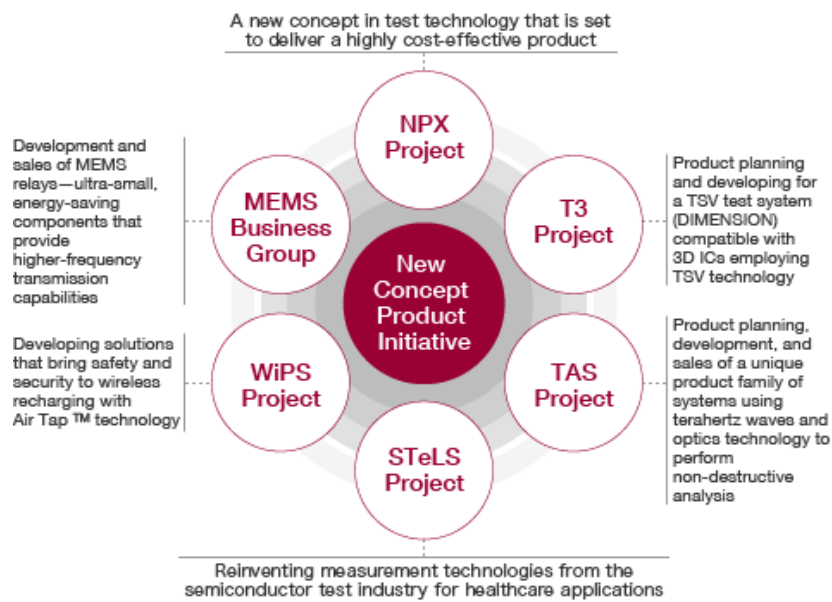
Concept	Project 1	Project 2	Project 3	Project 4
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Advantest's New Concept Product Initiative is chartered to grow the 'seedlings' of ideas into new businesses in the medium- to long-term.

Advantest's New Concept Product Initiative was established in 2009 under the direction of then president Toshio Maruyama, who gave it the mission of generating innovative concepts that would open up new areas of business.

With innovative measurement technologies at the core of our corporate DNA, we are leveraging this expertise to take on the challenge of developing new businesses that go beyond the framework of our existing operations. From this technology-rich starting point, our goal is to expand our reach into cutting-edge fields that play an ever-increasing role in society and effect positive change in the world.

The Initiative's work is now progressing with six such projects, all independently propagated out of our existing business activities. These early ideas are being nurtured from concept to development in our R&D Department, soon to be rolled out as products that target unmet market needs with cutting-edge technologies.



Feature



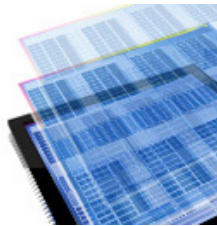
- Concept
- Project 1**
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Toward a New ADVANTEST

Project 1

Measuring Next Generation Devices

DIMENSION - measuring 3D ICs using TSV technology



Kazuo Takano
Leader, T3 Project,
New Concept Product
Initiative

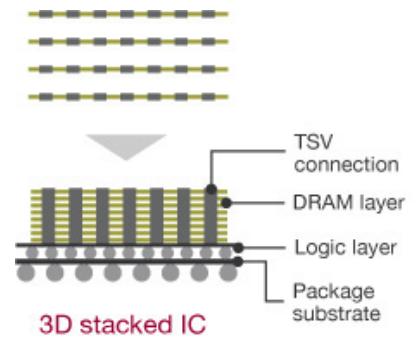
Long-awaited 3D stacked ICs utilizing through-silicon via (TSV) wiring techniques are approaching commercialization, and are poised to bring extremely high-performance and multi-functional capabilities to next generation semiconductors. These complex, stacked TSV devices employ a unique fabrication processes and require new testing methodologies for which Advantest is pioneering solutions. In fact, a prototype 3D TSV test system, dubbed DIMENSION, was announced by the company earlier this year. The system integrates a high parallel test cluster along with bare die and 3D die stack automated handling capabilities, which offer improvements to density, power, and performance.

- ↓ [Use of through-silicon via between stacked chips to achieve miniaturization and higher performance in 3D stacked ICs](#)
- ↓ [Development of handling mechanism able to inspect delicate devices safely and reliably](#)
- ↓ [Efficient test process using a clustered test system](#)

Use of through-silicon via between stacked chips to achieve miniaturization and higher performance in 3D stacked ICs

Development of technology for the miniaturization of semiconductors has already reached the stage of studying physical phenomena at the atomic level, and is said to be approaching the limits of what is possible in both physical terms and in terms of development cost. This has led to growing interest in recent years in technology for 3D stacked ICs that package a number of chips together in a vertical stack. This approach has the potential to produce semiconductors with higher performance and greater capacity, without relying on further miniaturization.

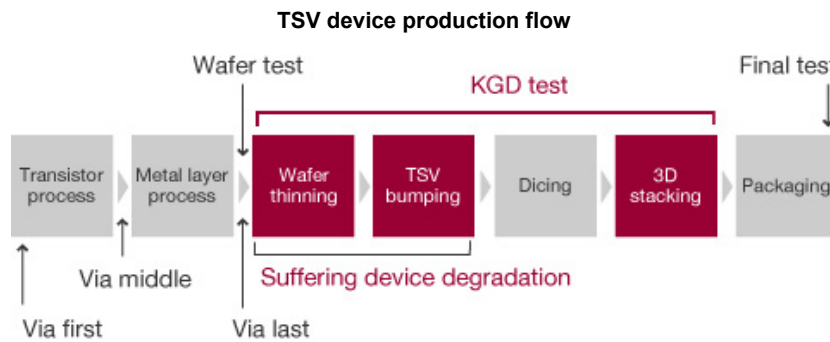
A new wiring technology that has attracted attention for its ability to connect these 3D stacked ICs together is called “through-silicon via” (TSV). TSV connects stacked chips together by forming small holes in the chips and injecting conductive metal. Use of TSV allows devices to be made smaller and thinner than is possible using the conventional wire bonding technique that attaches wires to the exterior of a chip.



Another major benefit of TSV devices is that they can minimize problems such as signal delay and attenuation or waveform degradation by connecting circuits on different layers across the shortest possible distance. This makes possible improvements such as faster device operation and lower power consumption because it eliminates the need to increase operating voltage and current to boost drive capacity. Furthermore, the ability to form microscopic, vertical connections anywhere on the chip means that systems can be designed with interconnections numbering in the thousands, increasing circuit layout flexibility, and allowing the development of multi-functional devices that stack different types of semiconductors, such as memory, processors, and image sensors. Even low end semiconductor devices achieve huge advantages using 3D TSV, such as sensors, RF amplifiers and even passive components. Recognizing these advantages, major semiconductor manufacturers and assembly manufacturers are currently working on development of TSV devices.

New testing processes required for mass production of TSV-based devices

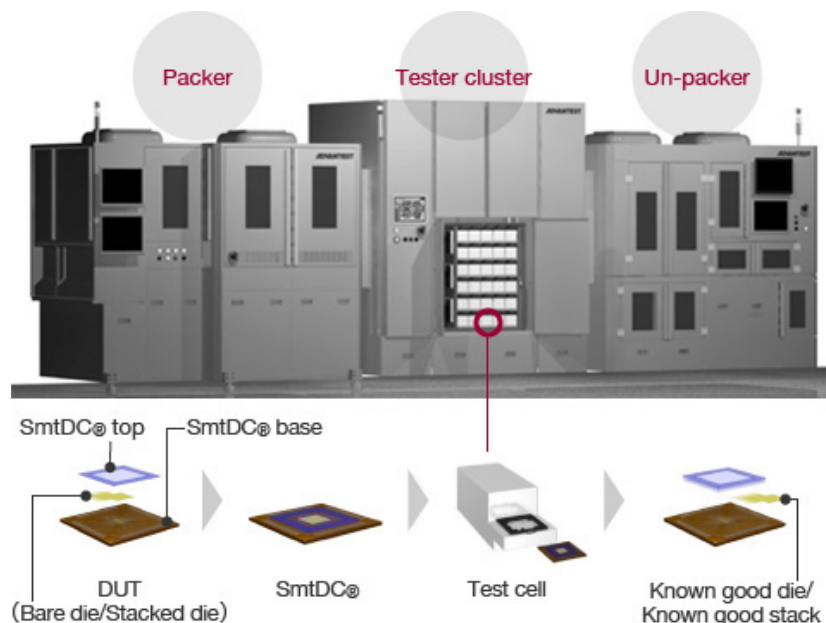
As described, TSV devices promise significant advantages over traditional ICs in performance and capacity. However, to enable mass production of these devices, new wafer processing technologies need to be developed in areas such as wafer thinning (to create thin layers to make it easier to bore fine holes), TSV bumping (a process for electrode mounting) and 3D stacking (a process for stacking multiple chips).



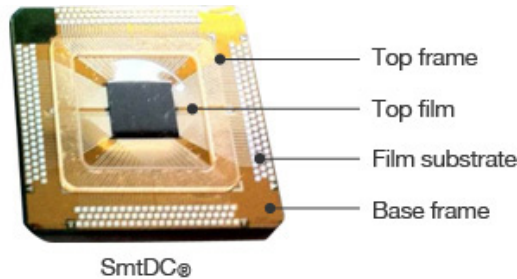
Semiconductor production lines typically perform testing at two different points: wafer testing at the end of the wafer process and final testing after the chips have been diced and packaged. Production of TSV devices, however, involves a number of additional processes that take place between these two tests. Accordingly, to boost yields, it is important to perform additional testing before and after these new processes to confirm device quality, performance and reliability.

Development of handling mechanism able to inspect delicate devices safely and reliably

With the aim of moving TSV device technology forward, Advantest developed the industry’s first prototype 3D TSV test system. Dubbed DIMENSION, and exhibited at ADVANTEST EXPO 2012 in June 2012, this integrated solution offers efficient testing to safely and reliably handle device structures not supported by conventional automatic test equipment (ATE), including individual chips formed on extremely thin substrates, and multiple chips that have been fully or partially stacked.



Advantest originally developed the Smart Die Carrier (SmtDCR) that acts as a “Temporary Package” for the safe handling of very delicate devices, including stacked chips or individual chips formed on extremely thin substrates. It works by encasing the devices in film. Advantest also developed an advanced device handling mechanism incorporating alignment control capable of positioning devices on the carrier with precision of $\pm 10\mu\text{m}$ or less, which can cope with large numbers of closely spaced pins. For the operations of device transport and encasing, and for the unsealing, sorting and delivery operations performed after testing is finished, this has successfully produced a system able to operate automatically at a speed suitable for mass production.

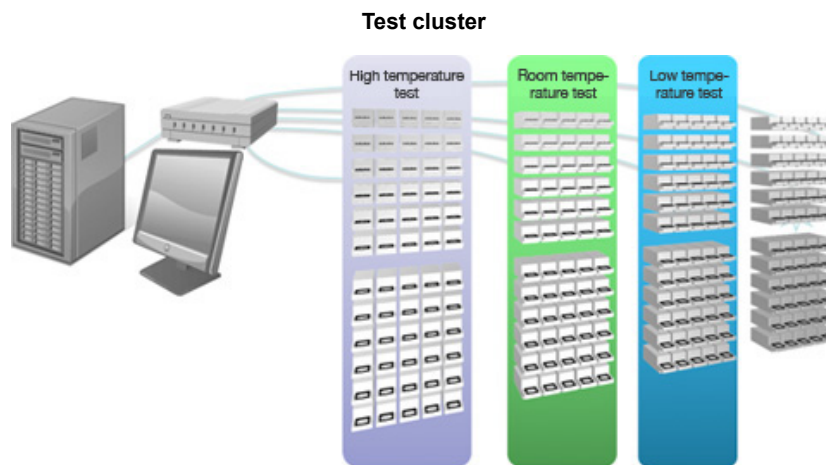


Efficient test process using a clustered test system

Advantest has also employed innovative concepts in the testing process itself. Conventional device testing typically uses a large tester to conduct simultaneous testing of large numbers of chips formed on a wafer, or large numbers of packaged devices. Unfortunately, an unavoidable consequence of this configuration is that it increases the distance between the tester and the devices being tested. TSV devices, however, are designed with a reduced drive capacity compared with conventional devices, making it necessary to reduce, as far as possible, the distance between device and tester during testing. Added to this is the fact that TSV devices have significantly more input and output signals than conventional devices. Consequently, there is a limit to the processing capacity that can be achieved using a test system based on the centralized testing approach that tests multiple devices in parallel.

To overcome this problem, Advantest developed a new highly miniaturized “test cell” that minimizes the distance between device and tester, and which is capable of testing a single device with up to 2,000 pins. By combining large numbers of these test cells into a highly flexible and expandable test cluster, this approach produces a distributed-architecture test system able to efficiently perform the series of tests and processes needed by TSV devices, and to do so with the required processing capacity.

For example, each test cell has a device temperature control function with a range of -20°C to $+125^{\circ}\text{C}$, and the system incorporates transport robots for moving carriers between test cells. When performing testing at different temperatures, this avoids the need to change temperature settings for each test as occurs in conventional test systems. By controlling test cell temperatures to establish high, medium, and low temperature zones, the same test cluster can perform the different temperature tests simultaneously and efficiently. Naturally, test results from each test cell are collected automatically, and RFIDs can be used to track device and carrier information.



Along with the development of the DIMENSION, Advantest has also built a prototype desktop model called a “personal tester” that contains a single test cell. Because it can be used to develop test programs for the actual production line under the same conditions that occur on the line itself, the personal tester helps shorten turn-around-time (TAT) in semiconductor device development.

Since their announcement, the DIMENSION and personal tester prototypes have provoked considerable reaction from the semiconductor industry. Advantest now plans to proceed with commercialization of these machines, taking into consideration the input generated since the concept was introduced. Advantest intends to continue helping improve the quality and reliability of semiconductor devices by supplying test solutions based on technology that anticipates the industry's direction.

Feature



- Concept
- Project 1
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Toward a New ADVANTEST
Project 2
Enabling the Future of the Semiconductor Industry
 On-demand test solutions to meet diverse customer needs



As semiconductors continue to play an ever-increasing and vital role in society, there is a growing need for accessible test solutions to measure and evaluate IC functionality and quality at every stage of the manufacturing process. In addition to design, procurement, and training needs, the need for less traditional cost-effective test solutions in research and at institutions of higher education is also increasing. To address the demands of this expanding segment, Advantest has introduced its CloudTesting™ Service the industry’s first ever on-demand test solution that can meet an ever more diverse set of customer needs.

- ↓ [Meeting the testing requirements of a wider population](#)
- ↓ [An on-demand service that enables customers to freely select functions and software](#)
- ↓ [A test solution that contributes to sustainable progress in the semiconductor industry](#)

Meeting the testing requirements of a wider population

Keeping pace with technological progress in chip integration and functionality, Advantest continues to apply a wealth of intellectual property (IP), including test functions and applications software, to the challenge of improving productivity during volume production. The company’s newest large-scale test systems offer I/O pin counts in the 10,000s and unprecedented levels of performance and functionality.

However, Advantest recognizes that even these efficient new large-scale systems cannot meet the testing needs of all customers. As the semiconductor industry evolved from a primarily IDM (Integrated Device Manufacturer) driven business to a broader model that includes foundries, ‘fabless’ design companies and test houses, Advantest has stayed ahead of the trends, designing unique test solutions for diverse customers.

The new CloudTesting™ Service is the company’s latest offering to target the needs of design houses which may lack the resources to invest in ‘big iron’ testers. It is also an optimal solution for large semiconductor manufacturers’ R&D operations, where an average of 25 engineers must currently share a single test system, compromising efficiency and degrading job performance. Offering on-demand “cloud” access to Advantest’s cutting-edge test technology, the CloudTesting™ Service is also an affordable option for universities, research institutes, and training centers, giving students hands-on experience and the freedom to experiment without the capital expense outlay.

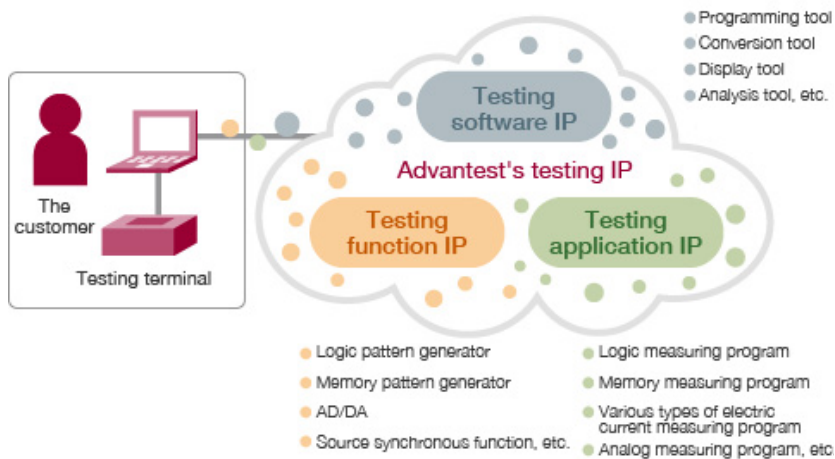
An on-demand service that enables customers to freely select functions and software

Advantest's CloudTesting™ Service gives customers access to cutting-edge test solutions using nothing more than a PC and an internet connection. Proprietary test software (including test applications and evaluation / analysis tools) can be downloaded from the cloud through a dedicated small-size CloudTesting™ Station terminal provided by Advantest to each subscribing customer. This "plug and play" hardware enables the PC to function as an on-demand test environment using precisely calibrated tools. Compared to large-scale testers, throughput is relatively limited, but thanks to Advantest's industry-leading test technology, the CloudTesting™ Station can hold its own against the newest test systems on the market. Most notably, the CloudTesting™ Service requires no upfront investment at all. Customers have the freedom to select and add test functions and applications according to their needs.

Issues in semiconductor testing



The CloudTesting™ Service solves these problems



Testing terminal



CloudTesting™ Service web page

A test solution that contributes to sustainable progress in the semiconductor industry

Since introducing the prototype model of its CloudTesting™ Station in 2010, Advantest has conducted customer research among potential users of the device, including global semiconductor manufacturers and distributors, design houses, and universities and research institutes. The company's research indicates the existence of considerable latent demand for the service. Customer feedback has also been incorporated into the CloudTesting™ Service, such as suggestions that the solution be usable to identify counterfeit products, and requests for troubleshooting functionality.

With all relevant patent applications completed, Advantest is anticipating the official launch of the CloudTesting™ Service in the fall of 2012. The new service exemplifies Advantest's commitment to provide leading-edge test solutions to an increasingly diverse set of customers, helping to shape a sustainable model for progress in the semiconductor industry.



We expect that the easy-to-use and compact interface will enable use of the CloudTesting™ Service in evaluation of a wide range of actual devices. Going beyond evaluation, we expect it to also contribute to the shortening of test program compilation lead times.

Takashi Maruyama

Chief Specialist
Analog System LSI Test Design Group, Analog System LSI Development Dept.
Analog System LSI Division, TOSHIBA MICROELECTRONICS CORPORATION

Feature



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- Project 4

Toward a New ADVANTEST

Project 3

For Everyone's Health and Future

Our first step into the healthcare field - a photoacoustic imaging system



Taiichiro Ida
STeLS Project

New Concept Product Initiative

Drawing upon decades of expertise in developing advanced measurement technologies Advantest is now turning its sights on practical applications for new diagnostic technologies in the field of healthcare. One such project is the development of a prototype photoacoustic imaging system that can safely examine damage in skin tissue. This project is being carried out jointly with a well-known medical research institution. Going forward, the Company is aiming to have this prototype certified as a medical device and in concert will be developing new applications for this technology.

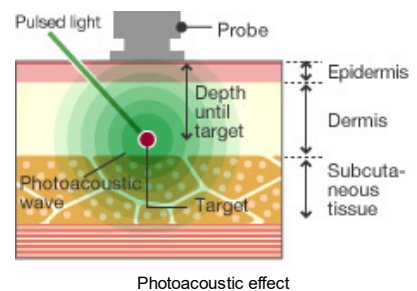
- ↓ [Using the photoacoustic effect to safely examine human tissue](#)
- ↓ [Using proprietary technology to realize highly sensitive and real-time image processing](#)
- ↓ [Developing new applications](#)

Using the photoacoustic effect to safely examine human tissue

Since its founding in 1954, Advantest has amassed an impressive range of technologies and expertise in its core field of electronic measurement, and is recognized globally for its cutting-edge products and services, particularly in the field of semiconductor tests. As a means of maintaining its industry leadership, the Company is relying upon its core capabilities to diversify its product lines, and has taken on the challenge of developing innovative testing and diagnostic technologies for the healthcare field.

One such effort is its photoacoustic imaging system now under development. This system relies upon the properties of the “photoacoustic effect,” which is the emission of an ultrasonic(photoacoustic) wave through adiabatic expansion that occurs when pulsed light is directed at and absorbed by a material. This effect is harmless to human tissue yet enables an image to be created to detect the presence of specific elements within the tissue and make visible any changes that have occurred.

For instance, one property of hemoglobin, which is present within the red blood cells of living organisms, is that it absorbs green light. Therefore, when tissue is irradiated with the light of a green wave length, only the hemoglobin generates a photoacoustic wave, through the photoacoustic effect. When this acoustic signal is measured by a sensor and converted into an image, it becomes possible to ascertain conditions in the part that includes the hemoglobin; for example, location of blood vessels and presence of blood flow.



Using proprietary technology to realize highly sensitive and real-time image processing

In June 2010, Advantest began collaborating with a medical research institution which had been developing this new technology for applications in dermatological testing and other areas. Since then, Advantest has developed additional key technologies and systematized testing devices to further this application. In April 2012, the company completed a prototype of the new photoacoustic imaging system (not certified as a medical device at present) that employs a "phantom" to ensure the accuracy of the system. Developed jointly with a leading Japanese research organization, the phantom imaging function enhances performance by periodically checking the output of the imaging system against values generated from the analysis of a plastic sample--known as a phantom--with a probe. (See fig. on the right.) This assures the high quality of images produced by the system.

In photoacoustic imaging, a minute acoustic signal emitted by the target material must be captured and accurately converted into an electrical signal. Advantest has applied a proprietary advanced signal processing technology, originally developed for its measurement business, to this photoacoustic application, in order to realize a multichannel sensor with extremely high levels of sensitivity.

Moreover, ultrafast signal processing and proprietary algorithms allow the system to reconstruct images at a top speed of 30fps (frames per second), which is the same as conventional video imaging. This enables easier examinations, as the images can be observed with no lag, and operators can monitor subjects in real time even while the sensor is being moved.

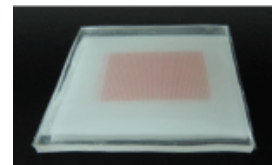
Furthermore, the large size of the laser light source used in current photoacoustic imaging research makes it difficult to mount it on a device. But Advantest is aiming to enable the device to be both miniaturized and integrated with the laser light source, by developing a new, smaller light source with high-power laser-emitting capacity.



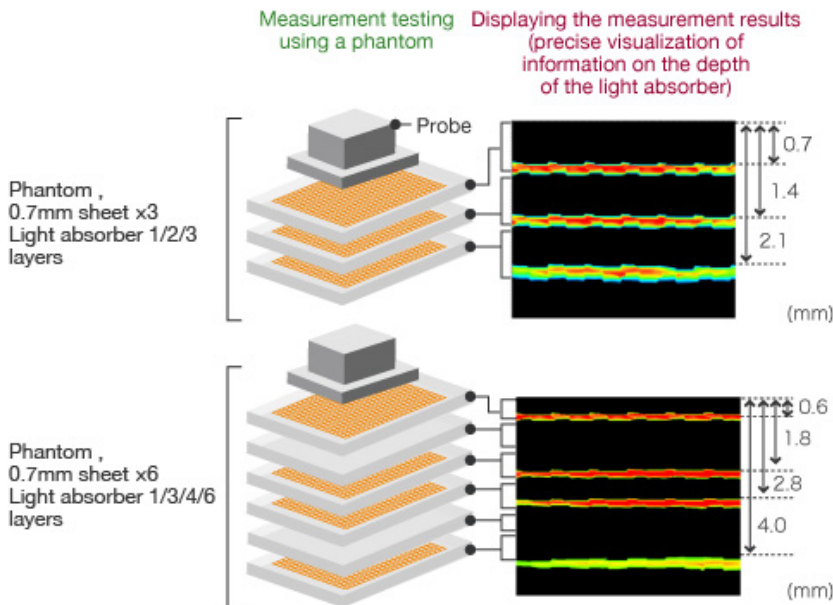
Prototype photoacoustic imaging system (not certified as a medical device at present)



Probe and phantom



Phantom

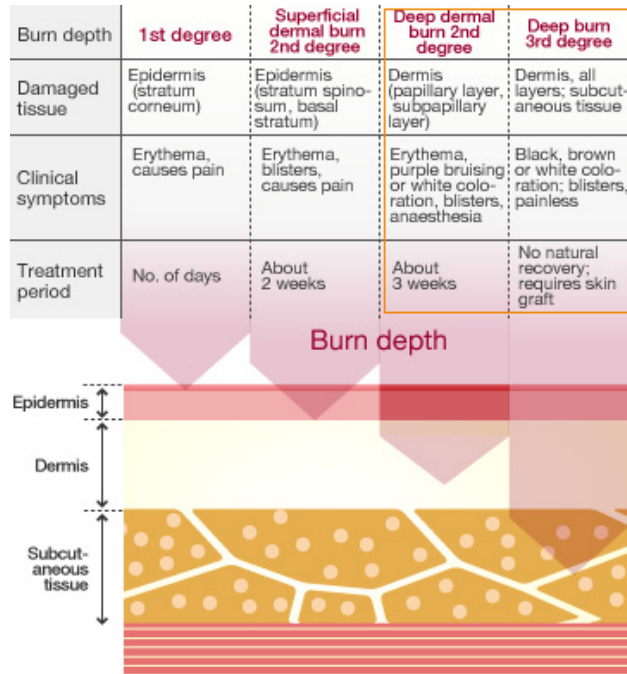


Developing new applications

Going forward, after Advantest’s photoacoustic imaging system completes its clinical trials, is certified as a medical device, and is employed at accident and emergency centers, medical staff will be able to rapidly access the state of damaged skin, be it from burns or bruising, and provide appropriate treatment.

In the meantime, Advantest continues to improve upon this device and anticipates that once certified, it will make marked contributions to the field of medicine.

Classification of burn depth



Differential diagnoses are important in cases of deep 2nd degree dermal burns and 3rd degree burns, as their severity will have a major effect on the treatment strategy selected. Doctors using photoacoustic imaging can rapidly discover what damage has occurred to the skin, which makes it easier for them to select the most appropriate treatment.

Beyond this, the Company is proactively working to develop its photoacoustic imaging system for use in new diagnostic applications other than for dermatological examinations. It also plans to commercialize this technology not just for use in medical diagnostics, but also as a measurement device for use in life-science research.

Advantest intends to integrate the measurement-related technologies and expertise that it has honed over decades with its other cutting-edge technologies, taking on the challenge of creating innovative new products and solutions that can contribute to the development of society and the field of healthcare.

Feature



- Concept
- Project 1
- Project 2
- Project 3
- Project 4**

Toward a New ADVANTEST

Project 4

How can Power Devices Give You Peace of Mind?

Living comfortably and safely with certified power devices



Tatsuhiro Oriyama
Power Device
Enabling Group

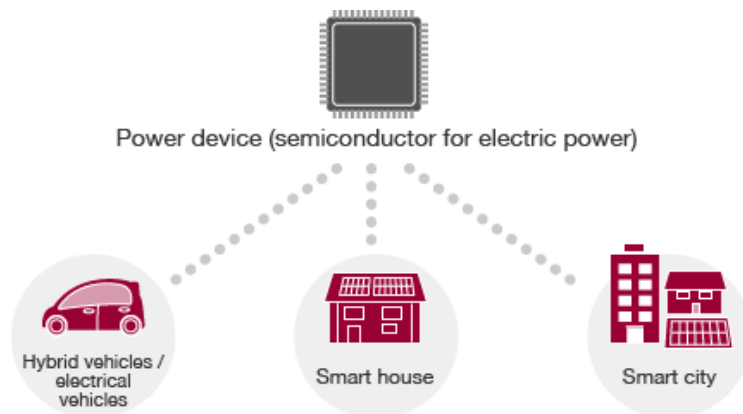
Amid the rising interest in environmental technology throughout the world, the market is growing for power devices, which are a core technology in electric vehicles (EVs) and next-generation power networks.

Within the industry, Advantest is championing the cause for standardization of technical specifications and quality inspection methods for power devices, in order to improve overall quality and reliability, and to promote a wider use of these devices industry-wide. It is also independently participating in the Power Device Association, a nonprofit voluntary-membership organization established in 2010, and it is involved not only in efforts to formulate standard specifications, but also in an initiative to introduce an engineer certification system to improve inspection technologies.

- ↓ [A key device supporting the evolution of environmental technology](#)
- ↓ [Achieving major quality assurance benefits](#)
- ↓ [With an eye to standardization, promoting technological exchanges and educational activities](#)
- ↓ [Introduction of the engineer certification system for improved inspection technology](#)

A key device supporting the evolution of environmental technology

Today, the deteriorating global environment owing to the depletion of energy resources is becoming increasingly more serious the world over. In response, industry and markets are answering the call for a proliferation of eco-sensitive cars, such as hybrid vehicles (HVs) and EVs, and for products for the next generation electric power supply network for smart homes and smart cities. One of the core technologies in these fields of vehicles and electric power is the power device, which is a semiconductor used in electric power transformation and control functions.



The basic principles of operation for power devices are the same as for semiconductor ICs in weak electric current applications, such as those used in memory devices and microcomputers. However, power devices need to be able to regulate higher voltage and current levels. In some cases, they are exposed to an extreme environment, including high temperatures and intense vibration. Moreover, as they are used in mission-critical fields such as vehicles with high safety standards, and the electric power network which is an important part of the social infrastructure, the development of power devices and the production technology used for them must ensure that high levels of quality, reliability and durability are maintained, regardless of their application.

Currently, the Japanese manufacturing industry is the world leader in the development of power devices, their production technology, and the applied technologies for HV/EV and electric power equipment. However, unlike for semiconductors used in weak electric current applications, industry-wide benchmarks for technical specifications and quality control methods have yet to be established. Instead, the auto and equipment manufacturers that use power devices and semiconductor manufacturers have each established their own proprietary quality control standards.

Achieving major quality assurance benefits

Going forward, the Japanese manufacturing industry will continue to provide users throughout the world with power devices and products installed with power devices. In order for these to be used safely and securely, it is important for the industry to establish power device standards based on the intended use, with mechanisms for objective third-party evaluation and authentication of device quality and safety.

Advantest advocates that in the future, when market growth leads to mass production and reduced production costs, the enforcement of industry-wide standard specifications over proprietary standards will benefit the consumer as well as overall safety. Also, from the perspective of quality assurance, once power devices are authenticated as a 'standardized product' that have met industry-wide and open technical specifications and have passed verification testing, then society's confidence in the product will increase.

Moreover, as interest in environmental technology is increasing throughout the world, many of the world's leading companies in Europe, the United States, and other regions, are paying greater attention to the growing importance of power devices. For the Japanese manufacturing industry to maintain and strengthen its competitiveness in the field in the future, it is vital that it creates at the earliest opportunity standard specifications while also deepening ties with leading overseas companies and seizing the initiative in the formulation of global standards.

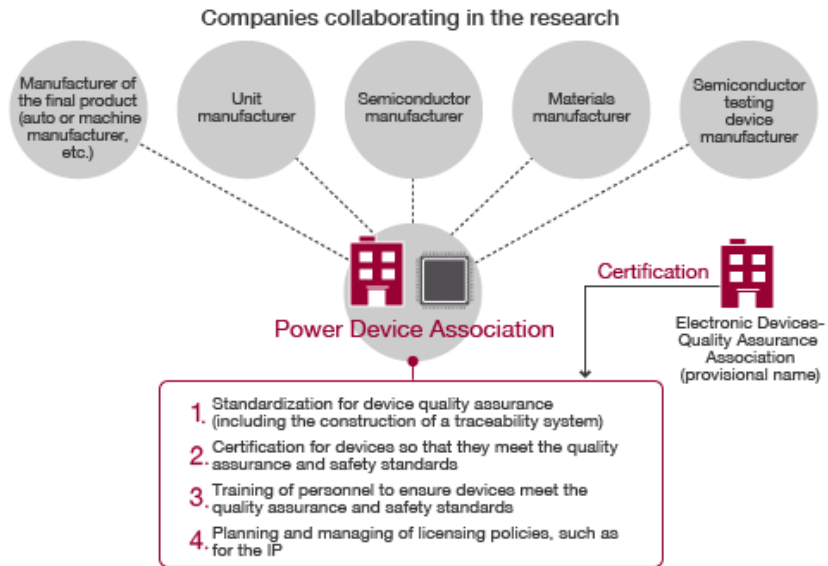
With an eye to standardization, promoting technological exchanges and educational activities

For many years, Advantest has supported the quality inspection process for semiconductor devices through its development and supply of semiconductor test systems. The need to create standards for power devices is now accepted as a critical path by the industry at-large. In April 2010, Advantest established an in-company project and began actively promoting standardization to the industry, the government, and other relevant bodies.

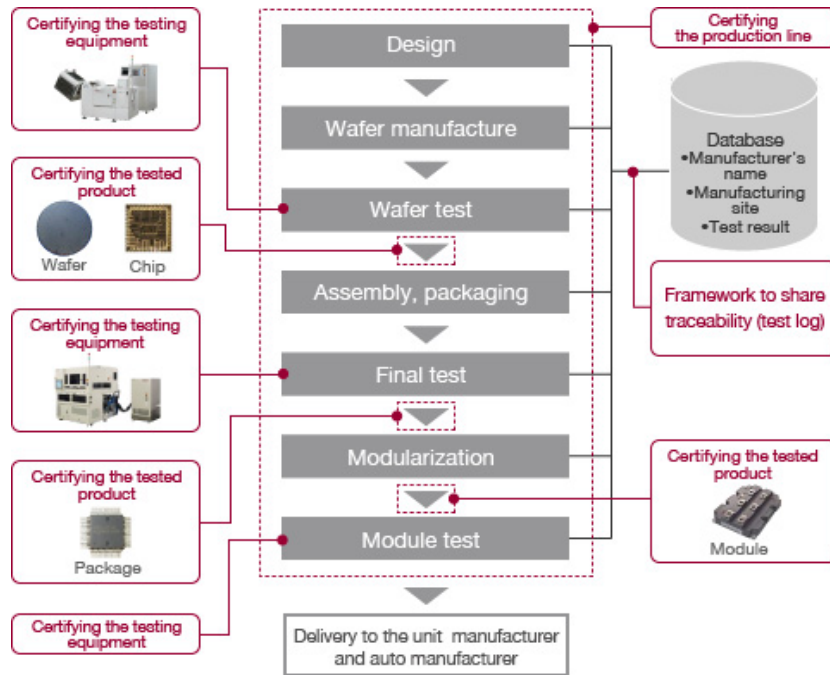
As a result of these efforts, in October 2010 the Power Device Association was created, with the members coming from both private and public sector organizations, and from companies in power device-related industries, such as manufacturers of automobiles, equipment, and semiconductors. Since its establishment, the Association has been working toward the standardization of technical specifications and quality-measurement methods for power devices. In addition, it has been promoting the sharing of technological information among its members and conducting educational activities on how to improve the reliability of power devices and the importance of standardization.

The Association has since convened Power Device Seminars in three cities - Tokyo in December 2010, Osaka in June 2011, and Fukuoka in February 2012. It invited experts from industry and public bodies to these meetings, the goal being for the attendees to share information on such topics as market prospects for power drives, the technological issues they face, and the potential of next-generation silicon carbide (SiC) power devices. In addition, in September 2011 and in March and May of 2012, it held its Power Drive Workshop in Nagoya, with the themes of "Evaluating the Reliability of Power Devices for Vehicles" and "Improving the Quality of the Next Generation Power Devices (SiC)." Researchers at the leading edge of this field discussed these themes, aiming to discover problem areas and search for solutions.

Role of the Power Device Association



Traceability system (concept)



Introduction of the engineer certification system for improved inspection technology

Going forward, the Power Device Association will continue to strengthen its organizational structure while working to formulate technical and quality assurance standards, the goal being to establish international standards by around 2015. Also, in order to improve the level of power device quality inspections in power-device related industries, it plans to implement its Test Engineer Certification program to support companies' personnel training. In addition, in cities that are implementing METI's Project for Promoting the Introduction of Smart Communities, such as Kitakyushu City, Fukuoka Prefecture, it is working with local companies and government bodies participating in this project in order to contribute to the revitalization of regional industry.

Advantest has taken the lead and been involved in the management of the Power Device Association since its establishment. In the future, it will continue to join forces with other member companies and carry out initiatives toward the creation of standards for power devices and to promote the use of products installed with power devices, the primary reasons for the Association's establishment. In addition, as a test system manufacturer, Advantest will continue to improve the quality and reliability of power devices by rapid development of test equipment that will be compliant with the technical and quality assurance standards that are to be formulated, and also by providing its expertise in measurement technologies.

Highlights 2012

Organizational Governance

We reviewed our disaster prevention and response system following the Great East Japan Earthquake and as a result have been implementing various measures as a priority. We have revised our policies for dealing with the rolling blackouts and electricity shortage and for implementing power saving, we have updated our disaster recovery manual, and we are reconstructing our business continuity plan.



▶ [Click here for further details](#)

Labor Practices

In order to increase our employment of overseas students and also of overseas students studying in Japan, we took part in employment fairs held throughout Japan that were intended for these students.

▶ [Click here for further details](#)



We are preparing a safety and health training system based on the Advantest Group Labor Safety and Health Basic Policy and also through revising our training programs, which are necessary for the future. As one part of these

efforts, we are carrying safety and health training for work that involves high-voltage electrical equipment.

▶ [Click here for further details](#)

Consumer Issues

We have prepared a form for recording the details of a request for support and these details are then transferred to a board. This enables us to track the progress of a request, from the point we receive it until it is fully dealt with.



▶ [Click here for further details](#)



We have launched an exchange program of engineers responsible for global support between our overseas affiliates, particularly those in Asia, and our customer support department within Japan.

▶ [Click here for further details](#)

Human Rights

We have newly employed two persons with disabilities. We are updating and implementing our procedures manual, have introduced a JIT (just in time) production system for equipment, and are working to create an environment in which everyone can work effectively.



▶ [Click here for further details](#)



We have taken on trainees from local special support schools.

▶ [Click here for further details](#)

Fair Business Practices

Taking up such themes as 'The Risk of Information Leaks,' we use Hiyari Hatto (close call) case studies from actual work sites in our data security training, through which employees learn about the relevant laws and regulations and also in-Company rules.

▶ [Click here for further details](#)



In order to build strong bonds of trust with our business partners, we hold informal meetings with them each spring and provide other opportunities for them to exchange information with our executives.

▶ [Click here for further details](#)

Community Participation and Development

During a five day period in 2011, from May 16th to the 20th, 55 Advantest Group employees participated in volunteer activities in Sendai City, which is within the Great East Japan Earthquake disaster zone.



▶ [Click here for further details](#)



In fiscal 2011, Advantest America, Inc. donated 10,000 US dollars to the Rebuilding Together campaign. In addition, 24 employees of Group subsidiaries AAI and Verigy took part in volunteer activities to repair mobile homes.

▶ [Click here for further details](#)

Corporate Governance

CSR Report 2012

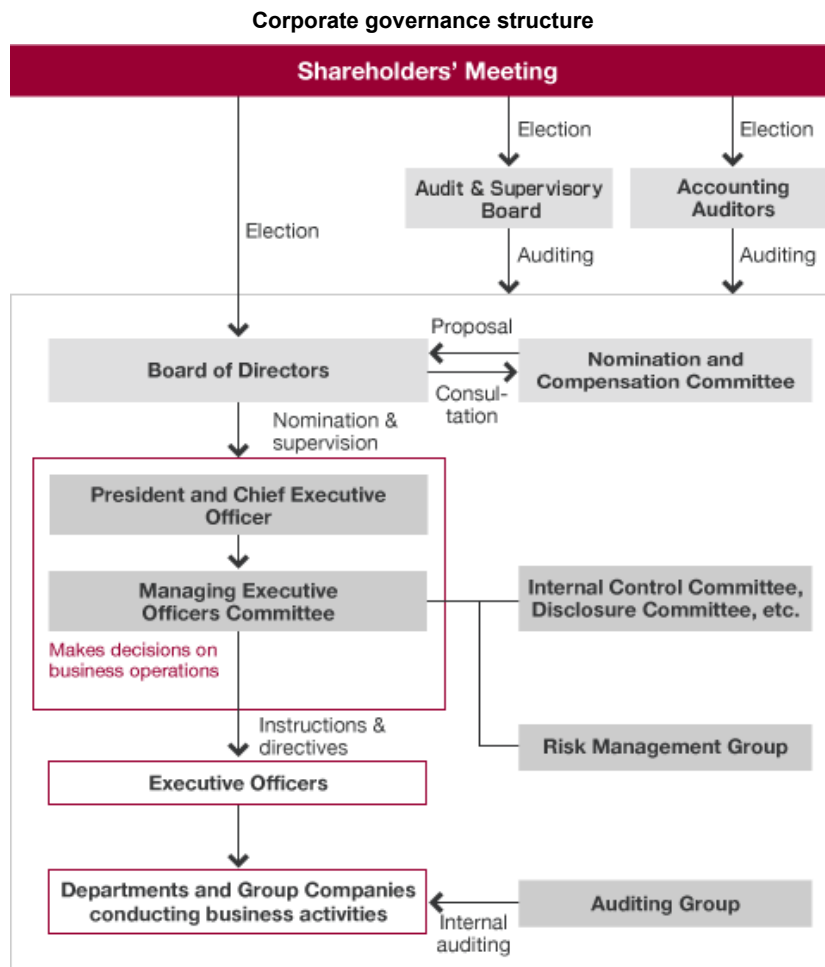
Our approach to corporate governance

We aim to increase operational transparency, achieve sustainable growth, and increase our corporate value in line with the basic principles of management set out in The ADVANTEST Way and Code of Conduct, a set of rules and standards of behavior that all executives and employees must observe. We clearly separate decision making and supervising functions from executive functions, enhancing management efficiency and transparency.

Management structure

The global business environment is changing more rapidly than ever before. To continuously increase our corporate value and competitiveness in today's world, we emphasize speedy decision-making and execution. We also place an emphasis on sound, highly transparent business operations in compliance with laws and regulations. In order to meet these challenges, we draw clear lines of authority within our organization and set responsibilities in accordance with each management function, assigning each role to the best person for the job.

Advantest utilizes a corporate audit system built around the Board of Directors and Board of Corporate Auditors. Since 2003, we have also introduced an executive officer system in order to improve our response times and enhance corporate governance.



Board of Directors

The Board of Directors makes decisions on management policy, strategy, and other critical matters for the Group. It also monitors and supervises the company’s executive officers to ensure business is conducted swiftly and efficiently. Effective June 2006, we shortened the directors’ term of office from two years to one, to clarify their management responsibilities and build a management structure capable of rapidly responding to changes in our business environment. The Board of Directors currently consists of seven directors*, of whom five are internal directors. Two are external directors.

In 2005, we also established the Nomination and Compensation Committee to discuss matters concerning the nomination and compensation of officers in consultation with the Board of Directors, and propose the results to the Board of Directors.

* As of April 1, 2012

Executive Officer System

Advantest has introduced an Executive Officer system to separate decision-making functions from executive functions, in order to boost management efficiency.

Executive Officers are selected by the Board of Directors as senior management dedicated to the execution of operations. They have the responsibility of swiftly and efficiently implementing management policies and strategies determined by the Board of Directors. The term of each Executive Officer is limited to one year to clarify their accountability.

There are a total of 17 Executive Officers*, some of whom are based in Japan while others are assigned to locations in North America, Europe, and Asia to enhance integration of the company’s global operations.

* As of April 1, 2012

Executive compensation

The Nomination and Compensation Committee discusses executive compensation in consultation with the Board of Directors and proposes the results to the Board of Directors. Director compensation is determined by the Board of Directors based on the above proposal, while auditor compensation is determined with the cooperation of the auditors after the above proposal is presented to the Board of Corporate Auditors by the Board of Directors.

Executive compensation at Advantest for fiscal 2011 was as follows.

Classification	Number of employees	Compensation amount
Directors	9	501 million yen
Corporate Auditors	6	76 million yen
Total	15	577 million yen

Notes

1. The above compensation amount includes stock-option related compensation and the fixed compensation for two Directors and two Corporate Auditors (including one External Corporate Auditor) who resigned at the conclusion of the 69th Ordinary General Meeting of Shareholders held on June 24, 2011.
2. The above compensation amount includes 39 million yen in compensation for two External Directors and three External Corporate Auditors.

Internal controls

We created an internal controls system compliant with the US Sarbanes Oxley (SOX) Act, enacted in July 2002. The system has since been upgraded to meet the compliance requirements of Japan's Companies Act, which came into effect in May 2006, as well as the Financial Instruments and Exchange Act (April 2008). In June 2011, our Internal Controls Committee assessed the efficacy of our fiscal 2010 internal controls, and met again in February 2012 to confirm the progress of assessment in fiscal 2011.

As part of an internal system of control, we carefully identify and classify potential risks that may be latent in our management environment, business activities, and company properties. We analyze the seriousness and probability of these risks, and formulate policies and procedures to properly manage them.

Furthermore, in the interests of consolidated group management where focus is placed more on consolidated financial performance than on separate aspects of financial performance, we ensure that the same high quality internal control systems are maintained and operated throughout Advantest Corporation and its affiliates. The internal control systems employed within Advantest's worldwide affiliate companies are operated regionally in accordance with the group wide, uniform policy formulated by the Internal Control Committee. Important matters concerning internal controls that occur within the Group are reported to the Board of Directors by the Internal Control Committee.

Audit system

The Auditors audit the Directors, Executive Officers and other executive bodies of the company in accordance with the audit policy and audit plan created by the Board of Corporate Auditors. They carry out their duties by attending the meetings of the Board of Directors and other important meetings, and conducting detailed reviews of Advantest's operations and assets. The Board of Corporate Auditors has four auditors, two of them full-time. Two are internal auditors and two external*. We have also established an Auditing Group as an internal audit organization. The Auditing Group monitors the status of Advantest's internal controls on a daily basis, and identifies problems and recommends improvements wherever needed.

* As of April 1, 2012

Internal auditing

Advantest's Auditing Group annually conducts an internal audit of risk and operational control of each Group company to ensure compliance with relevant laws and regulations.

As a listed company on the New York Stock Exchange, Advantest is required to comply with the US Sarbanes Oxley (SOX) Act. We therefore utilize the COSO framework* and the control self assessment (CSA)** technique to ensure that the operational processes of each division exceed the standards required. In recognition of the indispensability of these efforts in boosting the transparency of our business activities and building a positive corporate culture, we work hard to address each and every problem discovered during an internal audit.

* COSO framework:

A framework for internal control proposed by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in 1992. In order to ensure- largely for the benefit of shareholders - that internal control is performed systematically over the activities of the manager and all other personnel, internal control is defined as having three objectives: (1) effectiveness and efficiency of operations, (2) reliability of financial reporting, (3) compliance with applicable laws and regulations, and consisting of five components: (1) control environment, (2) risk assessment, (3) control activities, (4) information and communication, (5) monitoring. These components are considered to be the standard elements by which to measure the effectiveness of internal control.

** Control self-assessment (CSA):

An internal control method that allows executives and managers directly involved in businesses of the entity to assess the effectiveness of the entity's control processes and risk management. With this technique, it is expected that risks can be identified, and control activities can be assessed and improved effectively and efficiently.

Risk Management

CSR Report 2012

Risk management basic policy and structure

The Advantest Group will conduct measures to minimize damage should any of the following events occur:

1. **If damage is caused to buildings or facilities, or if networks and systems stop functioning making it difficult to continue our business operations, or if there is the possibility of this type of situation occurring due to a disaster or accident;**
2. **If there is the danger of one of our executives or employees being killed or injured or their life or physical health is put at risk due to a disaster or accident;**
3. **If there is an occurrence of scandal or incident that has the potential to become a social concern; or,**
4. **If any event other than those described above were to occur that could cause a significant impact on the business of the Group or its affiliates due to a disaster or accident.**

Organizational structure for promoting risk management

The Risk Management Group (Group Manager: President) was established in December 2001. If any of the events described above should occur, the Risk Management Group quickly convenes to unify information, conduct an initial evaluation, make adjustments between divisions, and establish recovery plans. This Group continues operations until recovery work is fully completed.

Business Continuity Plan

Advantest Corporation established the following basic policy during fiscal 2007 in preparation for large-scale natural disasters. We have devised our business continuity plan based on this policy.

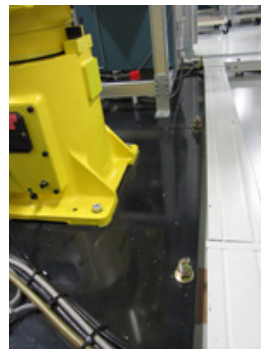
Business continuity plan basic policy

- **If a disaster occurs near any of our offices and factories, the safety of employees and their families must be secured first and foremost.**
- **Disaster prevention activities, as well as recovery activities in the event a disaster occurs near any of our offices and factories, must be conducted diligently and in collaboration with local communities.**
- **We must fulfill our responsibility to our stakeholders by ensuring that any damage caused to our business by a disaster has a minimal impact on suppliers and other stakeholders.**

The Great East Japan Earthquake that occurred in March 2011 was a catastrophe of such proportions that it has reaffirmed our awareness that unexpected events can and do occur. Advantest formulated a business continuity plan during fiscal 2007 in preparation for large-scale earthquakes. As a result of floor stabilizing and tip-over prevention work that was conducted on production facilities in line with this plan, it was possible to resume business with limited problems. However upon reflection of the lessons learned in the recent earthquake, we have become aware that there is the need to establish a more practical business continuity plan based on updated damage assumptions, and that we also need to improve and expand our training and drill system.

We focused on three initiatives during fiscal 2011, consisting of a review of our disaster prevention system following the Great East Japan Earthquake; energy saving measures in response to planned power outages and power shortages; and an update of disaster restoration manuals and a restructuring of our business continuity plan.

After conducting a review of our disaster prevention system, we adopted a system that has allowed for more rapid evacuation and safety confirmation in the event of disasters through the distribution of disaster safety helmets to all employees and other measures including changes in the self-defensive organization for disaster prevention and evacuation sites. Furthermore, satellite telephones and transceivers were installed at all business locations in preparation for interruptions in the telecommunications infrastructure.



Stabilizing the floor for production facilities



Tip-over prevention for production facilities



Disaster drills



Satellite phone and transceivers

In terms of response to planned power outages, we managed to continue with operations without any slowdown in production and development through the adoption of a shift working system as a form of provisional response. In energy saving measures in response to summer power shortages, private power generators were installed at the Gunma R&D Center, Gunma Factory, and Gunma Factory 2. In addition, the air conditioning temperature was set at 28°C as a general rule, and room temperatures were decreased by sprinkling water on roofs. As a result of these and other measures, we achieved a 35% reduction from peak power use last summer (initial target of 20 % reduction, government policy of 15% reduction).

In addition, disaster restoration manuals were updated for all managing departments. In the restructuring of our business continuity plan, we worked towards reconfirming the current situation and revealing the issues we face, and confirmed the importance of cooperating with and contributing to the local community through a partnership with a municipality organization in Meiwacho.

Following the earthquake, as a result of these measures, our employees have become more aware of disasters and we have conducted more practical disaster and evacuation drills. As we restructure our business continuity plan in the future, we plan to further expand the scope of our training and drills, and take steps towards establishing business continuity management to ensure that damage assumptions are updated, the contents of our plans are verified, and that the business continuity plan is adequately implemented and improved upon.

Response to the H1N1 flu

Advantest began gathering information on the H1N1 flu as early as 2007, and was prepared for a possible pandemic from the outset. In April 2009, when the flu spread rapidly, we determined countermeasures to check infections, and implemented them in close cooperation with subsidiaries both in Japan and overseas. Employees were updated on the situation within the company and their communities, and reminded at every meeting that protection is better than cure. Infected employees or employees with infected household members were contacted individually to communicate procedures for returning to work as well as advice on what actions to take at home. These and other risk-reduction measures illustrate Advantest's commitment to protecting the safety of employees and their families and ensuring the continuity of business operations.

Initiatives Related to the Protection and Respect of Human Rights

CSR Report 2012

Basic Concept of Personnel Management

Our employees are important assets. As such, we treat employees fairly and with respect. We also support our employees' diverse lifestyles and individual growth and are committed to growing together with our employees. Guided by our Basic Concept of Personnel Management established in September 2000, we have a wide range of human resource initiatives to protect these valuable assets and increase their value. Specifically, the Group conducts pro-active human resource development initiatives while taking into consideration fairness and soundness.

Our performance-based pay system is designed to maintain a balance between employees' financial well-being and the company's financial situation. This system is expected to reduce or eliminate employees' financial concerns and give them a sense of security, allowing them to concentrate on their jobs, overcome challenges and achieve outstanding results.

In addition, the global human resources management system, ARMS (Advantest Resource Management System), was introduced on April 1, 2012 to serve as the basis for optimal global human resources allocation. The qualification system, fixed pay policy, and bonus policy have been standardized on a global level through this system, making our human resources system a fairer and more even one.

It is our hope that Advantest employees will retain their adventurous spirit to take on new challenges without fear of failure. As we aim to further improve our organizational capabilities and attain an even sounder human resources system in the future, we plan to unify employee performance assessments, the promotion system, hiring practices, and training on a global level and construct a global database.

Advantest's human resources basic philosophy

At Advantest, we consider our employees to be indispensable business assets. We have established the following philosophy that underpins our personnel-related policies, and we are constantly working towards the achievement of this philosophy.

1. Focusing on results

We promote a human resources system that highly regards and fairly handles employees that exhibit a can-do spirit with which they overcome challenges and achieve outstanding results.

2. Taking into consideration fairness and soundness

We take constant care to ensure that all of our policies and systems are extremely objective, fair, and sound so that we can achieve the biggest and best results with our employees as a result.

3. Pro-actively supporting human resources development

We actively support personnel that face self-development through persistent hard work in order to acquire advanced specialist knowledge and a broader education.

Establishment of the Human Rights Protection Committee

Since August 2007, when a difficult human rights issue that cannot be solved in the workplace occurs, it is referred to our Human Rights Protection Committee.

The Human Rights Protection Committee is composed of executives from the Advantest Labor Union and employees from the Health Promotion Office and Human Resources & General Affairs Department. Although the expansion of our business overseas in the future will be a challenge, we plan to respond by carefully considering the individual conditions of each country where we deploy our business.

We strive to create a stress-free work environment where all employees respect one another's human rights.

Human rights education

Creating workplaces that respect human rights

The ADVANTEST Way and The Code of Conduct pledge that we will respect human rights without discriminating on the basis of age, gender, nationality, religion or other factors.

In addition, since April 2006 we have included training on human rights themes such as sexual and power harassment prevention in new employee training and new manager training.

In fiscal 2008 The Code of Conduct was revised to The ADVANTEST Way and The Code of Conduct to reflect these themes. As of fiscal 2011, training has been provided on these themes to approximately 170 new employees and approximately 80 new managers. We plan to continue providing education on these themes in the future.

Harassment prevention

To prevent sexual harassment and power harassment, in July 1999, we created a manual and placed it on the intranet for easy reference.

The key points are as follows.

1. Definition of sexual and power harassment
2. Sexual and power harassment in the workplace
3. Impact of sexual and power harassment
4. Sexual and power harassment prevention measures

We are working to devise methods for self-check that can be conducted in response to the issues above.

Employment of people with disabilities

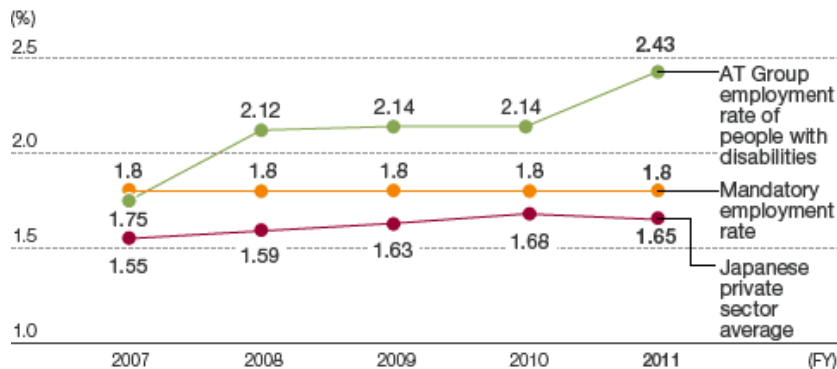
Advantest Green Corporation (AGC) was established in September 2004 as a special subsidiary of Advantest for the purpose of promoting the employment of people with disabilities. Since then, AGC has been striving to offer job opportunities for and continuous employment of people with disabilities under the slogan, "Support employee independence and achieve social growth in partnership with the local community." Business is primarily focused on activities that provide a comfortable workplace environment for customers, such as landscaping, cleaning, reception duties, selling bread, deliveries, and the management of dormitories. Advantest also actively takes place in various activities in partnership with local communities and relevant organizations to create workplaces where all employees, regardless of their disability status, can work comfortably.

During fiscal 2011, Advantest faced three major issues: ensuring that the ratio of employees with disabilities exceeds 1.8%, the mandatory employment quota in Japan; developing a workplace environment where employees with disabilities can work comfortably; and collaborating with the local community and contributing to society. Advantest made the following plans and focused on the following activities to meet the above challenges.

- Maintaining the employment rate of people with disabilities at the Advantest Group (Japan) at 2.0% or more, and developing a working environment that allows employees with disabilities to work more efficiently by improving manuals and equipment replenishment methods.
- Continuing social contribution activities in response to the needs of the local community, such as workplace internships and company visits.



A working employee



Advantest Group employment rate of people with disabilities (Japan)

During fiscal 2011, two new employees with disabilities were hired. Improvements were made to the working environment to ensure that everyone can work efficiently through the improvement and adoption of manuals and the introduction of new equipment replenishment methods. In addition, we actively conducted exchange with the local community as we responded to many requests for our participation in forms that included workplace internships, company visits, and visiting lecturers. The specific activities we participated in are as follows.

Activities for the local community

- Exhibiting a booth at the Disabled Person Work Fair 2011 in Saitama
- Dispatching visiting lecturers (eight times)
- Training was conducted for nine trainees in total from local special needs schools.
- Ten company tours were organized for outside organizations.
- Cleanup activities were conducted around our business sites on seven occasions.
- We took part in an event organized by a local special needs school.



Trainees

Recognition by outside organizations

- Received the Chairman's Prize as an Excellent Workplace for Persons With Disabilities from the Japan Organization for Employment of the Elderly, Persons with Disabilities and Job Seekers
- Two employees received Exemplary Disabled Worker Awards from the Saitama Employment Development Association



Awards ceremony for workers with disabilities

Relationship with the labor union

The current labor unions consist of JEIU, the company union that over 95% of union members belong to; the industrial union JMIU; and the Verigy Ltd. labor union. Advantest sincerely conducts labor negotiations with each of these labor unions.

Giving consideration to human rights in the supply chain

In order to fulfill our social responsibility throughout the supply chain including our suppliers, the Advantest Procurement Policy is disclosed on our website and suppliers are requested to comply with the relevant laws, regulations, and social codes to ensure that consideration is given to human rights throughout the supply chain. In addition, we conduct a questionnaire with our major suppliers (41 companies that account for 85% of transaction volume) once a year so that we can better understand the current situation. For fiscal 2011, a questionnaire was conducted in March 2012, with responses from suppliers indicating that human rights and labor issues were included in company policies and codes of conduct as a form of corporate social responsibility. We plan to conduct a similar questionnaire in fiscal 2012 to confirm the response of suppliers to the Advantest Procurement Policy.

Note that response to the conflict minerals issue was incorporated in the Advantest Procurement Policy as of April 1, 2012 and announced on our website. We will notify our suppliers of the details of this change and request their compliance.

▶ [Procurement Policy](#)

Maintaining and Creating Employment

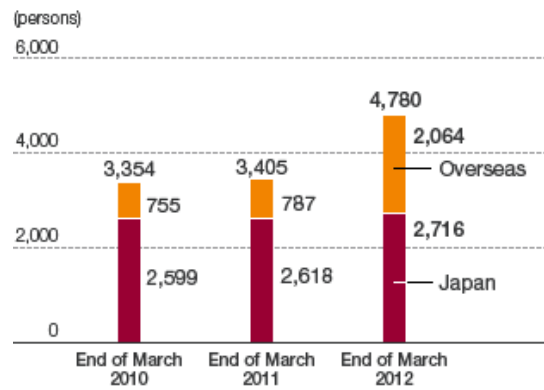
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Status of employment

The Advantest Group has pledged in its basic policy to respect the human rights of every employee and eliminate all forms of direct and indirect discrimination on the grounds of race, creed, gender, nationality, religion, disability, and any other grounds determined to be the basis of discriminatory practice. We practice fair and equal recruitment and treatment of personnel and provide equal career development opportunities for individuals able to work globally.

The number of employees is displayed in the chart below. There was a particularly large increase in the number of foreign employees when Verigy Ltd. became an Advantest subsidiary in July 2011.

Status of employment



Fair Evaluation and Treatment

CSR Report 2012

Fair Evaluation and Treatment

Based on Advantest's basic human resources philosophy, our basic policy is focusing on results and taking into consideration fairness and soundness. Employee performance assessments are conducted as a form of annual target management. We are able to achieve a detailed evaluation by focusing on the two aspects, a results evaluation and an activity evaluation.

Our specific stance is as follows:

- **Division of employee performance assessments into a results evaluation and an activity evaluation**
Results and progress towards goals and initiatives through challenges and innovations are each properly evaluated.
- **Activity evaluation: once a year**
Evaluation is conducted based on a qualification requirement document.

Human Resources Development

CSR Report 2012

Our approach to employee development

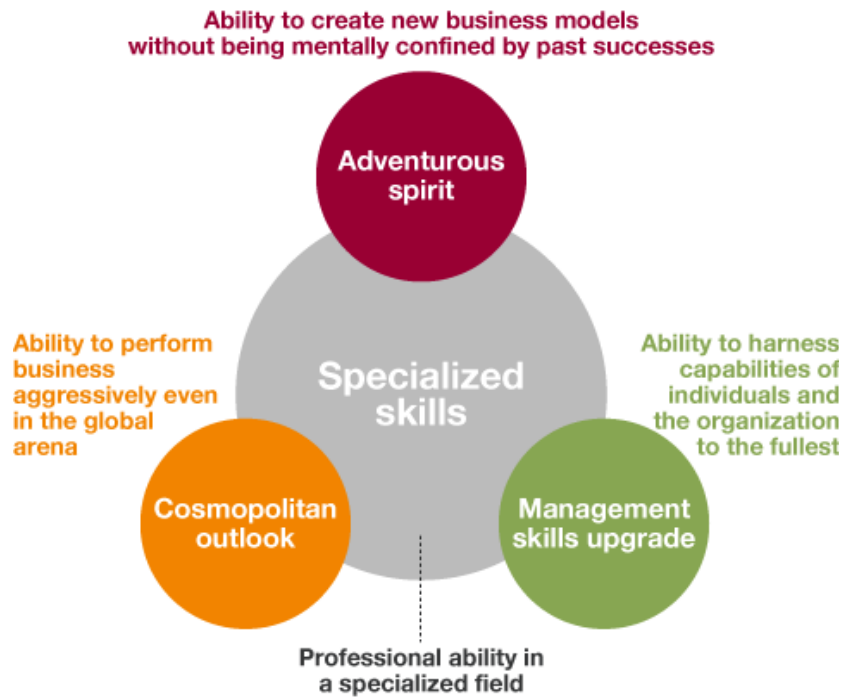
To enhance corporate value, it is important to ensure that employees clearly understand their role, and make efforts to develop their capabilities. While employees are expected to refine their skills independently, they are also expected to work in a global arena as part of a team.

Moreover, in the process of turning innovative ideas into products and delivering them to the market, good team management skills are also indispensable.

Our human resources development is based on the three policies outlined in the illustration below in line with the Advantest Human Resource Development Policy established in April 2003.

Focusing on the three policies of developing an adventurous spirit among our workers, providing our workers with a cosmopolitan outlook, and improving the quality of management, we conduct human resources development to develop professional employees with global-level skills. Through this policy Advantest actively supports employees who work consistently to refine their skills, acquire greater expertise, and broaden their knowledge.

Development of globally competitive professionals



■ Status and implementation of education and training system

Advantest Group has training programs open to every employee to teach them everything from the basics of a particular job to the latest technological trends. We are constantly studying improvements to these programs so that we can adopt new training systems in response to changes in the business environment.

Furthermore, during fiscal 2011 we identified the qualities required of employees to meet the needs of our business strategy in response to the rapidly changing business environment and our own globalization, and have created a training system that will help develop such qualities. To make this training even more effective, we have planned and implemented plans for new programs, including the expansion of our global training program.

Our existing training system is designed to train the personnel of Advantest Corporation and its affiliates in Japan. However, because this system needs to be redesigned from a more global perspective in consideration of the inclusion of Verigy Ltd. in the scope of consolidation, we have examined the training systems adopted by each of our overseas affiliates and interviewed the relevant personnel to get new ideas. With regard to the newly added training programs, we have decided to use both external and internal instructors depending on the program course and to conduct effective programs taught by specialists in the respective fields.

The new training programs were implemented on a trial basis in fiscal 2011. As surveys conducted after the program showed that many attendees found the programs useful, they will be provided again in fiscal 2012. With regard to the new training system, we plan to finish developing it by incorporating the views of both Japanese and overseas affiliates to make the system more global-oriented.

Program	Objective	For	No. of times implemented	No. of trainees
Subordinate Development Training	Enhance management skills	Managers	2	40
Mental Wellbeing Training	Enhance management skills	Managers	14	403
Sexual Harassment and Abuse of Power Prevention Seminar*	Enhance management skills	Managers	1	59
Project Management Training*	Enhance management skills	General employees	1	24
Career Development Program	Enhance management skills	General employees	1	15
Problem-Solving Training	Enhance marketing skills	Engineers	3	67
Technology Marketing Course	Enhance marketing skills	Engineers	2	33
Global Mindset Training*	Enhance communication skills	Managers	2	30
Business Communication Training*	Enhance communication skills	General employees	3	37
Cross-Cultural Understanding Training*	Enhance communication skills	General employees	2	54
Confidence Improvement Training*	Enhance communication skills	General employees	1	15
Technology Seminar	Acquire knowledge about the latest technologies	Engineers	92	2,084

* New programs introduced in fiscal 2011

Development of engineers

To ensure our products can continue to support technology on the leading edge, we place particular emphasis on the development of engineers.

We have created a training program in which every employee of the Group can participate. It covers a wide range of subjects, from basic knowledge to the latest technologies.

In fiscal 2011, about 90 training sessions were provided, with a total of approximately 2,000 engineers participating. The program includes seminars hosted by Advantest's senior engineers. For example, at a seminar on design quality, an employee in charge of design delivers a lecture, based on his own experience, on the basic technologies required to maintain and improve product quality. Through this program, not only technical knowledge but also Advantest's DNA is passed on to successive generations.

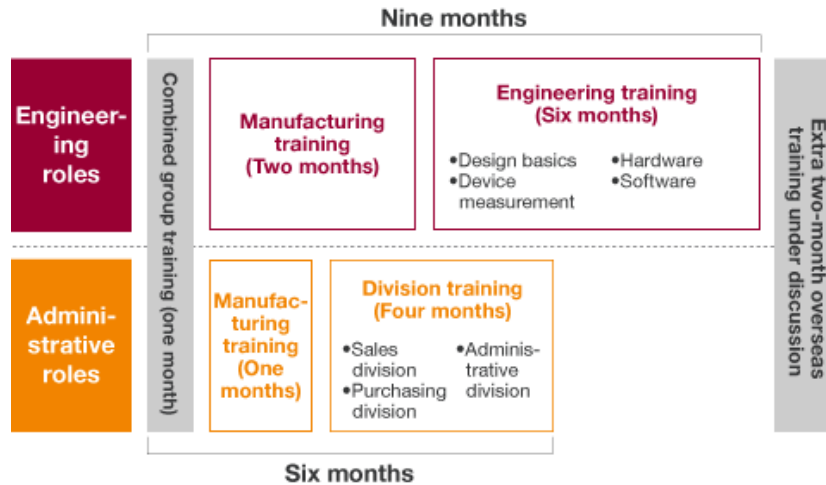
New employee education and training

Advantest's training program for new employees starts with a month-long combined group training course, which teaches new employees the basics of working life. After this, new employees receive production training — the foundation of the manufacturing industries — at our factories, as well as separate training for engineering jobs and administrative jobs.

In training by occupation, engineering staff members start off by learning design basics, and then conduct device measurement training using actual testers, hardware training that involves designing simplified testers and hardware development, and software training during which they learn about programming. Through this process they learn the skills that are required of Advantest engineers. Administrative employees receive on-the-job training in the sales, purchasing and administrative divisions to learn about the Group's business and how the divisions are inter-related. Currently, we are considering dispatching employees abroad for training for the purpose of language study and gaining an understanding of different cultures through exchange with local people.

By having new employees experience various areas of company operations in this way, it is ensured that they will clearly understand their own roles, and value teamwork with other divisions. This is a very important period for new employees at Advantest.

New employee training



Leveraging diversity in human resources management

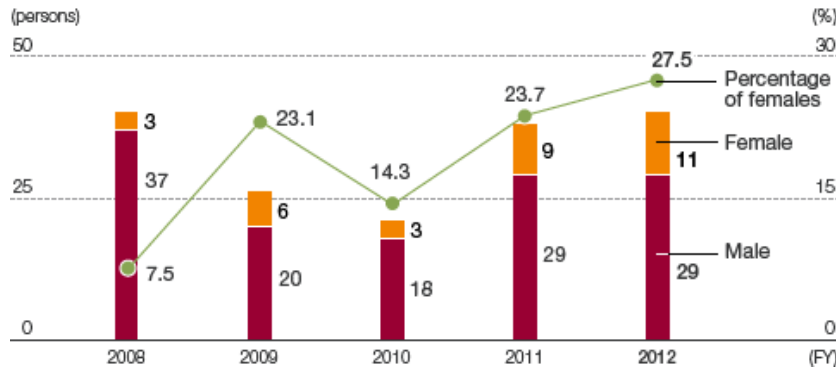
Advantest values the diversity of its workforce and strives to create a workplace environment where every employee can achieve their full potential.

Advantest respects the personal values of individuals and promotes a corporate climate in which all employees can be fully engaged regardless of their gender, age, or nationality. Recognizing, however, that women remain underrepresented in our workforce (accounting for 13.6% of all employees and 1.7% of all managers), we identified a need to increase the recruitment of women in fiscal 2011.

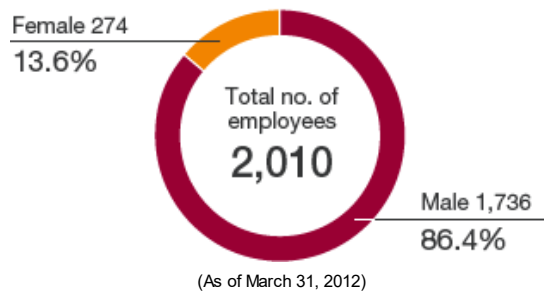
The overwhelming percentage of new graduates employed by Advantest has traditionally been male engineering majors and our earlier attempts to attract women have largely fallen short. In fiscal 2011, therefore, we participated in a job fair for women and planned and held a site tour to raise awareness of the advantages of working at Advantest among prospective female recruits, specifically engineering students. We organized a job fair specifically targeting women. At the fair, we met with a large number of students and explained Advantest’s workplace environment, possible career paths, and various programs, highlighting the areas in which female employees currently excel. In December, we also conducted a tour of Gunma R&D Center for female engineering students from around the country. Female employees that actually conduct development work held discussion meetings, during which they gave talks on developments in cutting-edge technologies and their daily lives.

As a result of these efforts, the percentage of women who joined the company as new recruits in April 2012 was 27.5%. We will continue our efforts to increase this figure.

No. of new graduates employed (Advantest Corporation)



No. of male and female employees (Advantest Corporation)



Employment and use of global human resources

In recent years, it has become increasingly necessary for the Advantest Group to strengthen its recruitment of culturally aware workers with outstanding communication skills and the ability to perform well in the global arena as our business becomes more globally oriented. In an increasingly borderless business environment, there is a need to accelerate the globalization of human resources development and organizations through active exchanges with personnel from overseas affiliates.

Under these circumstances, we are promoting the recruitment of students in other countries and foreign students studying in Japan to expand the workforce and remain competitive in the global arena. In addition, we are planning exchanges of human resources between Advantest Corporation and its overseas affiliates to allow employees on both sides to work in different cultural environments and share knowledge and expertise with local employees through daily operations and training. Through this exchange program, participating employees are expected to improve their job skills, versatility and adaptability to a range of environments.

In 2011, Advantest participated in job fairs for foreign students held all over Japan to boost recruitment of international employees. We also timed induction activities for each overseas student to coincide with their graduation and start date, taking a more flexible approach than in the past to help ease them into their new environment.

The human resources exchanges with overseas affiliates are implemented frequently at each division regardless of type of job. Under this program, which is specifically designed to promote interaction among personnel in Japan and abroad, employees participate in the exchange either on a short-term or long-term basis.

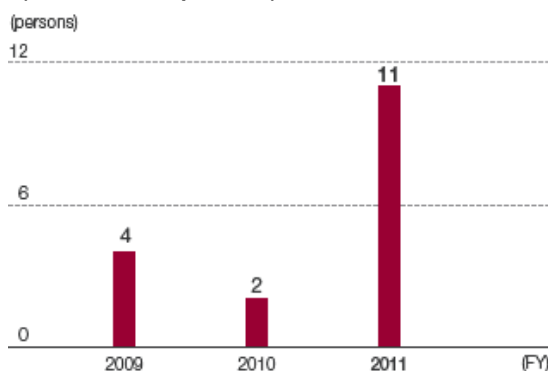
As a result of these activities, we were able to recruit students in overseas countries and foreign students studying in Japan through the job fairs. We plan to participate in similar job fairs, both overseas and in Japan, to further globalize our recruitment activities. Although new employees training is generally geared toward new graduates who join the company in April, we are modifying this to allow all new graduates to take the training irrespective of when they start work.

We presently count among our workforce employees from ten countries and four of the 17 executive officers at Advantest Corporation are non-Japanese. We will continue to provide equal opportunities to all promising individuals regardless of nationality while underscoring the need to develop a global perspective and global organizations through borderless promotion and personnel exchange.

Active use of elderly employees

Since April 2006, when the age at which national pensions are awarded was raised, it has been mandatory to gradually employ elderly persons up to the age of 65. Accompanying this change, Advantest has revised its re-employment system for elderly persons and responded flexibly to individuals desiring employment. In our re-employment activities, we decide on an employment package and posting most suitable for actively taking advantage of the skills and know-how possessed by elderly persons.

Users of the re-employment system (Advantest Corporation)



Supporting a Better Work-Life Balance

CSR Report 2012

Ensuring a good work-life balance

The Advantest Group supports the achievement of a good work-life balance by its employees based on Japan's Next Generation Education and Support Promotion Act. We believe that the work-life balance concept will help make the company a comfortable place to work for all employees and ultimately contribute to increasing the company's corporate value. Therefore, we are working to reduce overtime hours and create a work environment that facilitates the achievement of a good work-life balance in order to allow our employees to actively pursue their own outside interests and become well-rounded individuals.

The most important issue was the reduction of overtime hours. To solve this issue, we set the goals specified below and then focused on increasing operational efficiency, changing employee mindsets, and making the most of the available work arrangements such as flextime and shift work. Our goals are:

1. Zero employees whose monthly overtime hours are 83 hours or more
2. Average monthly overtime hours of 36 or less

We also focused on providing more flexibility in start and finish times and introduced half-day leave slots to make it easier for employees with working spouses to share household chores and responsibilities.

In fiscal 2011, the company reduced the maximum working hours under Japan's "Article 36 Agreement," pledged to do everything possible to reduce overtime hours for all employees, and reminded supervisors of their responsibility to ensure employees do not work excessive hours. As in the previous fiscal year, we continued to make announcements via the public address system urging employees to leave the office on time on Wednesday. When individual employees were found to be working excessive overtime (15 or more hours of overtime already clocked up by the 15th of the month, or 70 or more hours by the 20th and 25th of the month, or three days of holiday worked already by the 20th and 25th), this was brought to the attention of their immediate supervisors. We also made the following arrangements to enhance our employees' work-life balance.

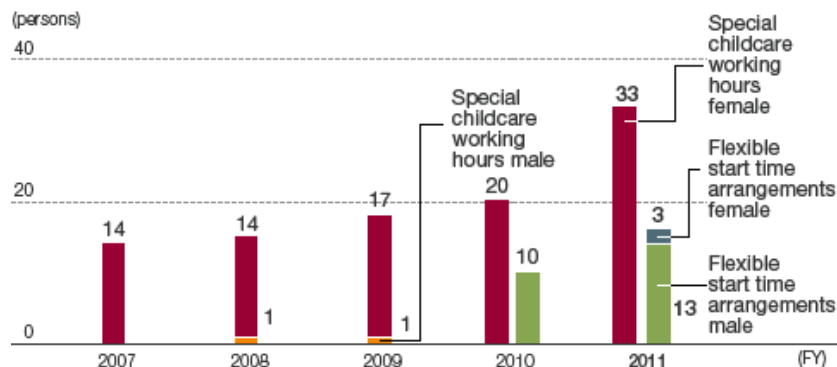
1. Broaden the scope of employees eligible for the shorter-hours system for childcare/home healthcare duties to working couples.
2. Give employees with childcare/home health care provider responsibilities more flexibility with regard to start and finish times as an additional measure to the existing flextime system.
3. Offer each employee five days of annual leave — more than the number required by law — to care for sick or injured children or other family members, and introduce half-day leave.
4. Relax conditions on the taking of cumulative paid leave (Simplify procedures and allow employees to take their leave on a half-day basis).

Although we were able to achieve our goal of 36 hours or less as the average number of monthly overtime hours as a result of these initiatives, we were not able to achieve our goal of zero employees working 83 hours or more monthly overtime hours. The reason was that we had to deal with unexpected problems and meet short lead times. Countermeasures to prevent recurrence were discussed at leader meetings.

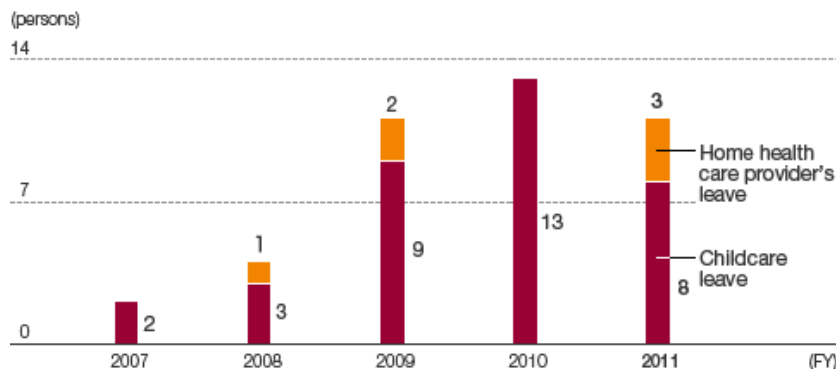
We plan to work towards achieving the same goal in fiscal 2012.

With regard to the work-life balance issue, we have completed some improvements, and we will ensure that all employees are well aware of the new systems and work to improve them while monitoring how they are utilized.

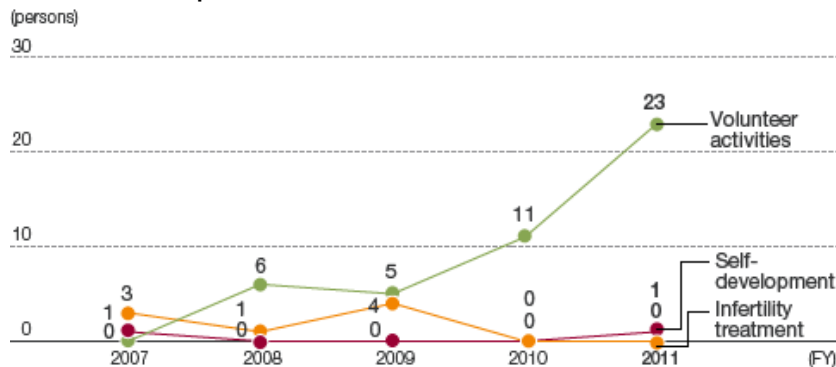
No. of employees to whom special childcare working hours or childcare/home health care flexible start time arrangements applied



No. of employees who took leave to care for sick or injured children or other family members



No. of employees who took cumulative paid leave



Supporting a better work-life balance

The Advantest Group supports the achievement of a good work-life balance by its employees based on Japan's Next Generation Education and Support Promotion Act. Advantest carries out various measures aimed at helping our employees to balance work with child-rearing while achieving their full individual potential.

Expectant mothers are eligible for paid leave to see their doctor or paid time off in case of a difficult pregnancy (both programs introduced in April 2007,) while employees with young children are entitled to childcare leave of up to two years (introduced in April 2001). Shortened working hours are also available for employees with children up to the third grade.



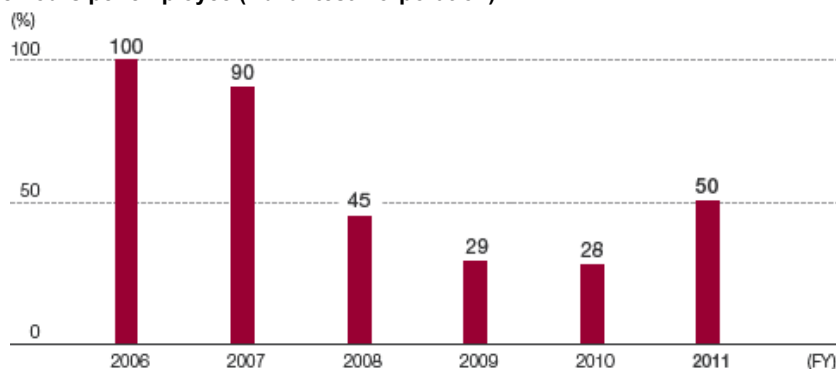
Work-Life Balance Support Guide

In 2007, we placed the Work-Life Balance Support Guide on the intranet to gain broader recognition of the various programs Advantest provides and encourage take-up. The guide also offers information on related services provided by local governments. The number of employees on maternity leave as of the end of fiscal 2011 was 25.

Reducing overtime hours

In November 2006 Advantest established the Working Hours Improvement Committee composed of company employees and labor union members for the purpose of reducing overtime hours. In addition, subcommittees set up in each division have studied the causes of overtime work and continued to conduct measures aimed at reducing overtime hours. As a result of these activities, the number of overtime hours per employee did not exceed 30 hours for fiscal 2011.

Reduction of overtime hours per employee (Advantest Corporation)



* Rate of reduction, with fiscal 2006 as 100%

Occupational Health and Safety

CSR Report 2012

Advantest Group Health and Safety Policy

Advantest Group recognizes that Health and Safety (H&S) is one of the important aspects of our business operation. This policy is set forth to ensure every Advantest employee's Health and Safety.

1. Health and Safety First

We will make H&S as the first priority for employees in all Advantest operation groups.

2. Compliance with Laws and Regulations

Aim to achieve compliance with legal requirements through good occupational health and safety performance.

3. Regular Review of Health and Safety Compliance

To support this policy we will provide employees with an annual activity plan which will address every business location's H&S regulations through management support.

4. Education and Training

Ensure that employees receive appropriate training, and are competent to carry out their designated responsibilities.

5. Disclosure of Health and Safety

To raise awareness, we will announce our H&S information to all employees publicly.

Promoting occupational health and safety activities

At the Advantest Group, annual occupational health and safety plans will be prepared based on the basic policy and systematic health and safety activities will be conducted, mainly by the Safety and Health Committee established at each business site of Advantest Corporation and its affiliates in Japan. In addition, the Safety and Health Committee will inform business sites of problem areas and implement improvements as it works to establish consistent occupational health and safety activities.

Fiscal 2011 served as a preparatory period during which a safety and health training system was created based on the Advantest Group's basic policy towards occupational health and safety and a review of the training required. These measures were conducted in preparation for the establishment of occupational health and safety plans to be implemented by each Safety and Health Committee from fiscal 2012.

Continuing with the training plan from fiscal 2010, we trained internal instructors and conducted x-ray safety and foreman training. In addition, a factory analysis was conducted in Gunma Factory and Gunma Factory 2 by an external party, based on which safety improvements were conducted in response to risk factors that hadn't been noticed internally.

In addition to these initiatives, a draft of the Advantest Group's basic policy toward occupational health and safety, and the Advantest safety and health training system based on the fiscal 2010 training plan, were prepared ahead of fiscal 2012.

During 2012, we will roll out initiatives under this basic policy by steadily implementing the annual plans at each business site. Additionally, in terms of training and drills, we will conduct various training activities in accordance with the Advantest safety and health training system as we strive to attain a safe and comfortable working environment by eliminating the causes of work-related accidents, improving safety levels, and improving the awareness of each and every one of our employees towards safety.



Safety and health education on work handling high voltage equipment

Mental Health

To maintain employee health, it is important for managers to understand mental health issues and make every effort to alleviate employees' occupational stress to prevent health impairment. Managers also need to know how to identify and address any mental health problems at an early stage for employees that require particular care.

Similarly, each and every staff member needs to deepen their understanding of stress and mental health issues. At Advantest, we believe that lively workplaces are created by lively employees and support is provided mainly by our Health Promotion Office for the physical and mental health of employees to promote a safe, comfortable work environment. Specifically, we conduct training for management posts (follow-up training) on stress and other mental wellbeing issues in the workplace, to promote the prevention and early detection of problems.

During fiscal 2011, mental wellbeing follow-up training was conducted for management posts (including senior leaders) at Advantest Corporation and Group companies in Japan (basic training was conducted in fiscal 2010). The training session was conducted 14 times in total at ten locations across the country between January and March 2012. The total number of participants was 250. Advantest's own industrial physician delivered the training through case studies based on the theme of creating workplaces that don't cause mental wellbeing problems among employees and hands-on training conducted through group work. In addition, mental wellbeing training that included self-care topics has been conducted for all employees at regional business sites that don't have full-time staff members. Moreover, as a first step for a deeper understanding of mental wellbeing, a lecture on self-care was presented at a Group general meeting.

As a result of these measures, the response of managers to employees with mental wellbeing issues has gradually improved. During fiscal 2012, we will conduct training on self-care (the most basic and important form of care for mental wellbeing) for all employees as we strive to progress from early detection to prevention of mental wellbeing issues.

Health care

Since a permanent industrial physician was assigned in 2005, Advantest has gradually established a system for health management support following health examinations. However, we have not been able to provide sufficient support in some aspects due to there being no set method for providing support and no standards for handling data due to factors including changes in the companies that conducted health examinations for us. Due to this issue and other issues such as the difficulty in conducting comparative analysis with past data, it became necessary for us to review the status of health-related measures following health examinations and study how we should approach the future.

In response to these issues, the Advantest health examination judgment criteria were created during fiscal 2011, and initiatives were launched aimed at a 100% health examination receipt rate and a 100% health management support rate after health examinations. With activities focused on the permanent industrial physician at the Gunma R&D Center, we worked together with industrial physicians at regional business locations to provide post-examination support. Of the 1,660 employees subject to health management support, we provided support via e-mail or over the telephone for 448 employees, support through meetings with industrial public health and other nurses for 552 employees, and support through meetings with industrial physicians for 539 employees. As a result, we achieved a health management support rate of 93%.

Out of information related to periodical health examinations and health examinations on life-style related diseases, the Group only manages data on periodical health examinations. In order to use this data more efficiently the Group plans to make improvements by having its industrial physician confirm the results of health examinations on lifestyle-related diseases so that this data can help us manage the health of our employees.

Compliance

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Compliance policy

Overview of policy

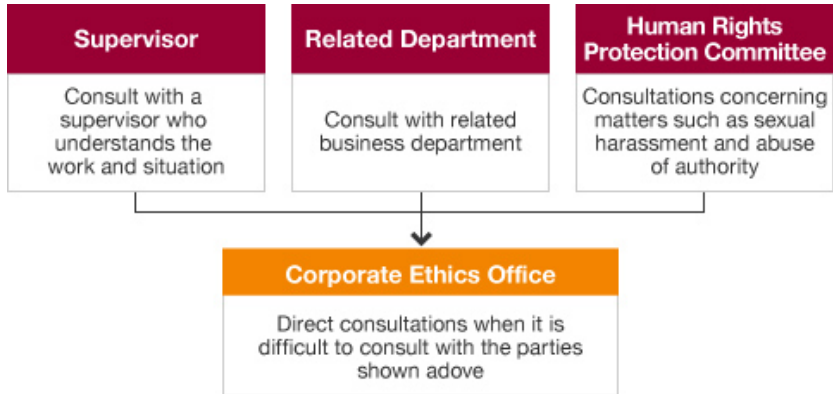
Companies aiming for sustainable growth need employees who fulfill their social responsibilities and who carry a strong sense of ethics. They also need to earn the trust of stakeholders. Based on this belief, Advantest has established The ADVANTEST Way — the fundamental handbook which lays out our management direction and policy, and which comprises our Corporate Mission (“Technology Support on the Leading Edge”), Corporate Mantra (“Quest for the Essence”) and CSR Policy — as well as The Advantest Code of Conduct, which provides specific guidelines for employees to enhance their ethical awareness.

▶ [The ADVANTEST Way & Code of Conduct](#)

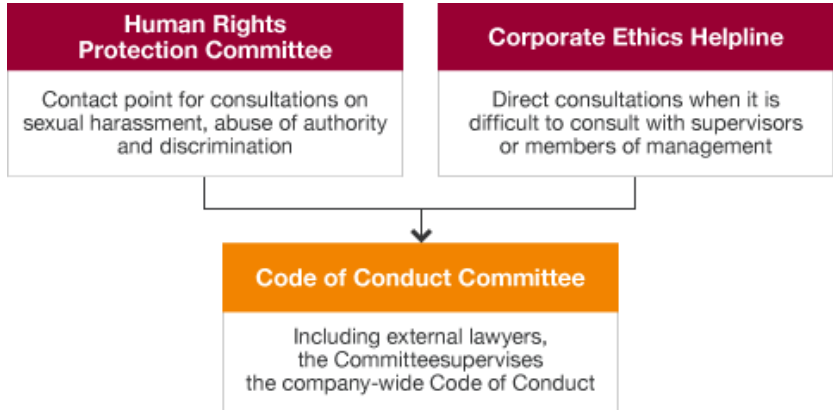
Compliance system

If there is any violation of — or any act that employees think unacceptable under —The ADVANTEST Way & Code of Conduct, employees are advised to first report this to their supervisors and, if necessary, to the managers of any other departments involved. However, with the understanding that in some cases employees may feel uncomfortable reporting to their supervisors, in 2006 Advantest opened a Corporate Ethics Helpline, which employees can use to discuss or report any compliance issues. Since the Corporate Ethics Helpline was set up six years ago, it has received various reports, and, while respecting the privacy of reporting employees, has notified the Corporate Ethics Committee, which works with senior management and outside lawyers to solve the problems. We will continue to deal earnestly with every employee report to ensure sound Group operations. This system has been applied to all Group employees both in Japan and overseas, including the employees of Verigy Ltd. who joined the Group in July 2011.

Contact point for reports



Compliance promotion system



■ Compliance training

To prevent compliance issues from arising and to encourage their swift discovery and resolution, Advantest has distributed The Advantest Way & Code of Conduct booklet (in Japanese, English, and Chinese) to employees of all Group companies, and has set up a Corporate Ethics Helpline. However, with the expansion of our business overseas and the addition of employees from the Verigy Group in July 2011, it has become even more necessary to remind employees throughout the Group of the importance of compliance and thoroughly implement worldwide compliance based on a full understanding of the differing laws and regulations in each of the countries where Advantest operates.

Advantest took measures to ensure that all new employees received copies of the policy by distributing The Advantest Way booklet to all Verigy employees in February 2012, and by having them acknowledge their understanding of the terms of the booklet, ahead of the full corporate integration with the Advantest Group in April 2012. During fiscal 2012 we will also strengthen cooperation between the legal division and the Global Audit Teams that are stationed in each region and reinforce educational activities relating to the laws and regulations in the countries where we operate and compliance activities through the audits we conduct. Furthermore, we will continue studies on arranging regular e-learning related to compliance for all Group employees.

Fair Trade

CSR Report 2012

Policy on procurement (The Advantest Procurement Policy and CSR Procurement Policy)

Advantest's CSR Policy, which pledges respect for our suppliers, places value on open communication with its suppliers, and maintains fair business relationships in accordance with relevant laws and regulations. The Advantest Group is also committed to sharing values and building collaborative relationships with the goal of mutual growth.

▶ [Procurement Policy](#)

Framework and system for managing fair trade (CSR procurement)

To promote and manage fair trade, the Advantest Group has established a procurement administrative division independent of the purchasing division. This procurement administrative division conducts a questionnaire survey once a year with suppliers and also conducts an evaluation of supplier QCD (quality, cost, and delivery) on a quarterly basis. We provide feedback to suppliers on the results, a process which helps us to grow together with our suppliers.

An audit is conducted by corporate auditors on transactions with suppliers twice a year to confirm that there are no issues or deviations from standard commercial practices. In addition, an internal control audit by an external body is conducted once a year. This audit confirmed that there were no issues during fiscal 2011.

Furthermore, total order balances are managed through checks at the end of each month to ensure there are no omissions in acceptance inspections. For items for which there is a long delay from the order date to the acceptance inspection, the reason and planned acceptance inspection are clarified and a report is made to the corporate auditor.

Training on conducting fair trade

Advantest will conduct seminars on the Subcontractors Act once a year for purchasing staff members. During fiscal 2011, an expert from the legal division was invited to present a seminar on the Subcontractors Act for purchasing staff members on March 23, 2012. We plan to continue to provide training on conducting fair trade in the future.



Subcontractors Act seminar text

Building a win-win relationship with suppliers

At Advantest, we hold a suppliers' New Year's party, meeting and reception once a year to help create good relationships and provide an opportunity for them to exchange opinions with Advantest executives.

We also hold seminars for suppliers every year. During fiscal 2011, we held seminars five times on topics including market trends, quality management, and leader training, contributing to mutual improvement in service levels.



New Year's party

We also plan to hold five seminars during fiscal 2012 on similar topics. Following the Great East Japan Earthquake, Advantest supported its suppliers in the affected area by providing them with relief supplies as fast as possible to support the resumption of operations at factories.

Information Security

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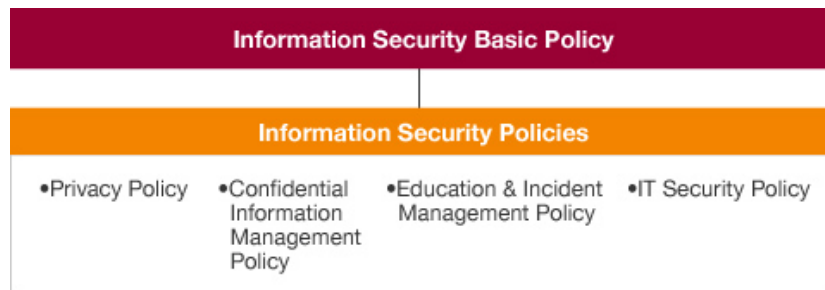
Information security management policy

The information we receive from suppliers and Advantest technical and sales information is considered as important assets. Advantest conducts information security measures to effectively manage this information, including the development of regulations, the construction of a management system, and the provision of employee training.

Following the merger with Verigy Ltd. in April 2012, we conducted a review of basic policies and rules relating to information security as well as the management system for the purpose of ensuring the same information security management standards following the merger.

Policies and rules relating to information security

Advantest established the Information Security Basic Policy in July 2003. This policy describes the importance of effective management of information assets and declares that Advantest will work to ensure the confidentiality, completeness, and availability of information assets. Following a recent review, Advantest decided to adopt a set of rules now considered its Information Security Basic Policy. The regulatory documents have been reorganized and integrated to form four policies: the Privacy Policy, Confidential Information Management Policy, Education & Incident Management Policy, and IT Security Policy.



Information security management system

Advantest considers information security management to be an important management issue, and has assigned the Senior Executive Officer that serves as the Head of the Corporate Administration Group as the Information Security Officer. The Information Security Officer is responsible for information security management throughout the Group.

In addition, an Information Security Committee reporting to the Information Security Officer was established during fiscal 2012. This committee is responsible for determining the applicable set of information security measures for the entire Group, and for considering amendments and abolishment of policies and rules. Information Security Committee members were selected from each division, including overseas Group companies, for the purpose of considering information security from various perspectives.

To ensure that information security measures are implemented and policies and rules are fully complied with, we believe that each division needs to work autonomously to achieve information security. Accordingly, a system has been adopted in which information security officers are appointed to the Group's major business locations.

Specifically, the head of each Group company's administration division has been assigned as the Regional Information Security Officer. They are responsible for security management in their region and for implementing the measures that are determined by the Information Security Committee. The Regional Information Security Team composed of staff members from related divisions such as the information systems, legal, and human resources divisions are responsible for implementing the information security measures they are entrusted with.

Advantest Group Information security management system



Information security training

The key to information security is people. Based on this belief, Advantest provides training to ensure employees are familiar with the company's information security policy and associated rules.

In addition to the handling of information devices, during fiscal 2011 training was also given on themes such as information leak risks. Based on case studies of potentially dangerous incidents that occurred at work sites, employees learned about things they should be cautious of and the related laws, regulations, and company rules. In addition, e-learning was introduced to develop a more efficient learning environment.

In the future we plan to develop and conduct training based on more practical content by conducting repetitive learning on rules that should be complied with and covering topics relevant to the current situation.

Initiatives for strengthening information security

In the past, the management of confidential information for each division was confirmed by the security management division visiting the business site and guidance was provided if it was found that improvements were necessary. However, from fiscal 2011 a system was adopted in which Advantest's audit division would conduct audits on information security. As a result, it has become possible to conduct more objective rules-based checks and provide feedback to the division that was audited.

In the past, rules for the handling of information devices stipulated that it was only possible for employees to use encrypted PCs outside the company to minimize the risk of information leaks due to loss of theft. However, these rules have been revised to allow for the use of thin client PCs. The use of thin client PCs has facilitated work in a secure environment that doesn't leave any data behind in the devices. In addition, unified Group security standards have been established for the business use of smart phones that have rapidly gained a strong user base. Based on these standards we aim to maintain information security while improving operational efficiency and customer service.

We are studying the adoption of objective evaluation standards in the future that will make it possible to confirm how effective these information security measures have been, the order of priority for measures to be conducted, and the weaknesses and strengths in Advantest's information security system.

Confidential information protection

Advantest's Information Security Basic Policy defines information disclosed by clients under contract and the Advantest Group's material information as confidential information, and stipulates that such information be handled in accordance with relevant regulations.

Specifically, the policy stipulates that the head of the department that holds the confidential information is responsible for security management and declares that confidential information be protected from exposure outside the company or improper access by conducting management, storage, and disclosure that is suitable for each piece of confidential information.

In addition, the importance of confidential information management and the rules that should be complied with are studied repeatedly in the annual information security training.

Personal information protection

Advantest considers the privacy of personal information provided by individuals to be very important, and accordingly takes steps to ensure that it is properly protected and managed.

▶ [Advantest Privacy Policy](#)

Management staff responsible for maintaining personal information is assigned to divisions that handle personal information. We ensure that personal information is protected by having these staff members make sure that information is adequately managed. In addition, divisions are audited on a regular basis on the management and use of personal information, and improvements are carried out if any insufficiencies are discovered.

In Group companies overseas, Regional Information Security Officers work to protect and manage personal information in accordance with the laws, regulations, and demands of each respective country or region.

Intellectual Property Protection

CSR Report 2012

Intellectual property management system

Advantest’s overarching policy is to observe all laws and regulations relating to intellectual property rights and to respect the intellectual property rights of third parties. Advantest has developed the system displayed below to ensure that intellectual property is properly managed.

Following the acquisition of Verigy Ltd. in fiscal 2011, Advantest acted quickly to evaluate the strengths of both companies so as to best leverage the synergies created by the acquisition. This quick action will help us to maintain efficient ongoing business development and improve our technical capabilities.

Ultimately, the process enabled us to assess the intellectual property rights owned by Verigy Ltd., merge organizations, and restructure our systems to allow for uniform management. Specifically, we have taken stock of the intellectual property rights owned by Verigy Ltd. and adopted a system that allows for the management of all patents throughout the Group. Aiming to launch this system by April 2013, we will unify intellectual property rights regulations and enable management by technological field.

Intellectual property management system



Employee training related to intellectual property

To improve the awareness of each and every one of our employees towards intellectual property, Advantest is changing the content of training provided based on continuous service milestones and employee posts as it strives to conduct training that is more closely related to the work of each of its employees.

During fiscal 2011, training was conducted on the theme of basic intellectual property knowledge for approximately 60 new employees and managers. We plan to train personnel responsible for R&D, PR and advertising, and manual creation on issues related to trademarks and copyrights.

We will strengthen training for personnel engaged in operations that require knowledge of intellectual property rights. In addition, we will conduct surveys after each training program and analyze participants’ level of understanding in order to improve our training and materials. We will also regularly hold IP Promotion Working Group meetings and continue other various activities to gain more knowledge about intellectual property.

Litigation and disputes relating to intellectual property

Not applicable as of March 31, 2012.

Improving Customer Satisfaction

CSR Report 2012

Overarching policy for improving customer satisfaction

Customer satisfaction is the most fundamental of principles underpinning Advantest's business. Our product quality policy — “Offer the timely, high-quality products our customers expect, by designing for quality and by optimizing the production and engineering process globally” — characterizes our portfolio of products that offer not only superior performance, but also superior environmental friendliness and safety. We are committed to keeping our customers satisfied at every stage, from design and manufacturing to sales and service, via painstaking quality assurance and top-notch service and support on a global scale.

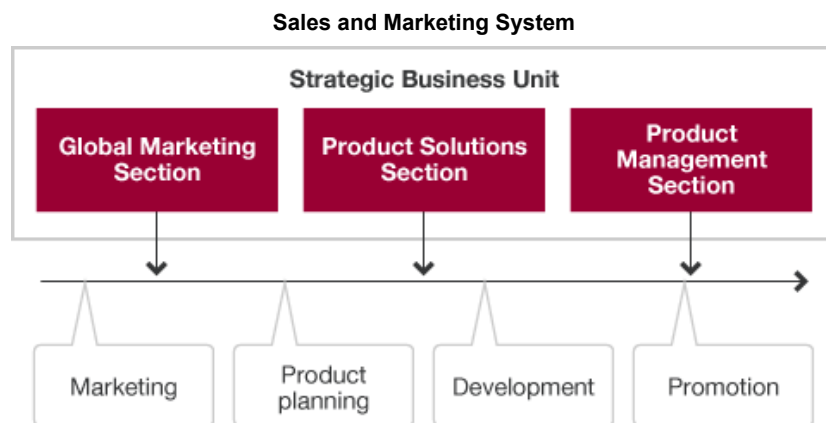
Sales and marketing practices that support customer satisfaction gains

Fiscal 2011 initiatives

With the increasing globalization of semiconductor manufacturing, from design to final test, IC test equipment manufacturers like Advantest must remain focused on the specific needs of its key customers, and also on the direction of the fast paced and evolving industry, in order to be responsive to changing technology trends.

As part of our efforts to create a system capable of responding quickly, Advantest established the Strategic Business Unit in June 2011. The Strategic Business Unit is composed of three sections: the Global Marketing Section, which handles marketing and promotion on a global level; the Product Solutions Section, which is responsible for the processes from product planning to product specifications; and the Product Management Section, which manages the development process and conducts risk management. Each section promotes the integration of resources and product road maps to maximize the synergies resulting from the merger with Verigy Ltd., in order to efficiently and promptly advance the cycle of marketing, product planning, development, promotion, and new product introductions. In addition, in the sales system the cross-region FFO Team was established, with FFO standing for Fabless, Foundry, and OSAT (Outsourced Semiconductor Assembly and Test).

Advantest will leverage this strengthened marketing and sales system to speed up the decision making process as it strives to create products and solutions that will truly satisfy its customers.



Customer satisfaction improvement activities in sales and marketing

The trend toward miniaturization of semiconductors that meet the demand for devices that are smaller, offer higher-performance and use less power is continuing, bolstered by the increase in smart phones, netbooks and other popular consumer devices. These smaller devices are taking the form of single-package solutions that incorporate a bevy of chip-based intellectual property, including microcontrollers and analog semiconductors, CPUs and memories, in a single chip. These devices are commonly known as SOCs, or Systems on Chips. Despite the increased functionality and complexity of these devices, chip makers put continual pressure on ATE manufacturers to lower test costs and also find a means for eliminating the need to purchase new test systems to meet each new generation of device.

Advantest has responded to these demands to lower test costs with test solutions that are both compact and flexible, and can keep IC manufacturers' costs down with interchangeable modules and upgrades designed to accommodate new device technology and generational advancements.

For example, the CPUs used in smart phones, a rapidly expanding market, are both extremely compact and high-performance. Our T2000 EPP (Enhanced Performance Package) enables multiple parallel tests of these compact and high-performance CPUs in a short period of time, which significantly reduces test costs.

Higher reliability and efficiency are also needed for testing the myriad of semiconductors that are used in environmentally-friendly hybrid cars. Because these semiconductors operate under high voltage and high currents, care is required in their handling. We will work to improve productivity and reduce test costs through the development of automatic test equipment (ATE) for high output semiconductors that had previously been tested individually with conventional measuring systems.

Promoting customer support

The Advantest Group has established a basic policy for customer support in an aim to restructure its service business from a global perspective.

Policies, targets, and plans for fiscal 2012

During fiscal 2012, we will leverage the synergies from the Verigy and Advantest merger to unite Field Service Center engineering resources as we aim to improve efficiency through the sharing of technologies and knowledge.

In the same manner, we will integrate activities in which Verigy and Advantest overlap in their respective supply chains and integrate the operations for maintenance equipment to reduce administrative costs.

In addition, the Global Support Center will respond more quickly to customer requests by reducing its turnaround time in our aim to improve customer satisfaction. Furthermore, the Field Service Center will establish work safety standards by thoroughly enforcing work safety in field service in line with plans to keep the number of accidents at zero.

Strengthening domestic customer support

When we began our improvement activities, we resolved 64% of domestic customer problems reported to the Global Support Center within 24 hours. In cases where the transportation of replacement equipment or parts was involved, we resolved 50% of problems within 48 hours. To further strengthen domestic customer support, the Advantest Group set the target of resolving no less than 85% of problems within 24 hours, and in cases where the transportation of replacement equipment or parts was involved, a target of resolving no less than 95% of problems within 48 hours was set in consideration of the time required for shipping.

During fiscal 2011, we adopted a system in which receipt sheets detailing the support request would be prepared on the board so that the progress from the receipt of the support request until response was completed could be visually grasped. In addition, by assigning staff responsible for managing this progress and giving clear instructions to the individual staff members conducting customer support, we reinforced our means of responding to customer issues before defects became prolonged. Moreover, we took steps towards providing more certain resolution of customer problems in the future by sending an e-mail to customers after support had been provided.



Support receipt sheet

Customer support email sample:

Dear Customer,

Thank you very much for using Advantest products.
This is the Global Support Center.

Were there any progress in the issue you previously inquired about?
Do not hesitate to contact us if you have any further questions or concerns.

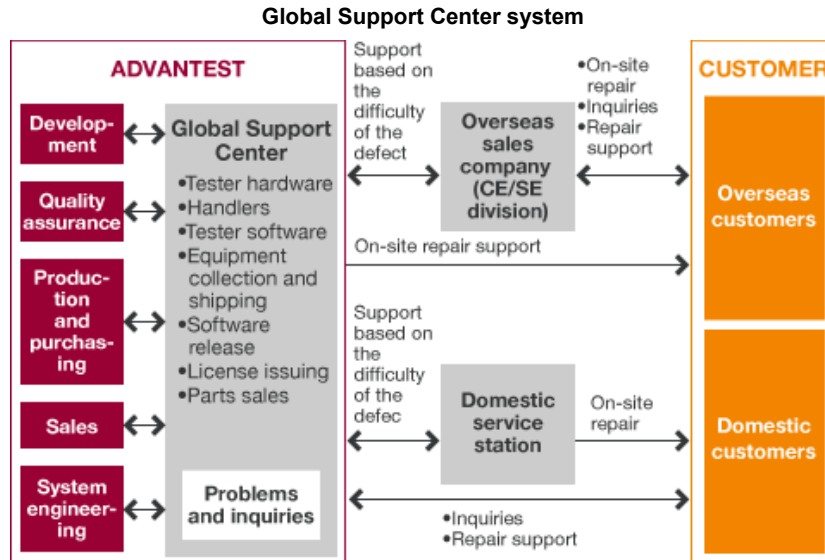
Warm Regards,
Advantest

As a result of these initiatives, the rate of problems resolved within 24 hours, or 48 hours in cases involving the transportation of replacement equipment or parts, improved to 90% and 95% respectively.

Strengthening overseas customer support

Since many of our customers have adopted a fabless manufacturing model, outsourcing production to subcontractors, the Advantest Group derives more than 80% of its sales from overseas markets and its market is expanding worldwide.

The Advantest Group is working to strengthen its global support system so that the Group can swiftly and effectively resolve any production equipment problems and minimize customer downtime when customers move their production bases overseas. One of our greatest challenges is to help our customers maintain stable operations of their production equipment. Accordingly, our goal for overseas customer support is to complete all the work required to resolve a problem within 72 hours (downtime) after the problem occurs. Since fiscal 2011, we have reviewed our support system and are making improvements aimed at launching a new system, as described below.



- During fiscal 2011, the Customer Support Center for customers in Japan was integrated with the global support division responsible for assisting the customer support functions of overseas affiliates to create a new Global Support Center staffed with dedicated engineers on standby. By providing a central contact point with engineers who are proficient in English for all support requests and inquiries from customers around the world, the Global Support Center has reduced the time required for response.
- In fiscal 2011, to provide fuller overseas support and improve the skills of engineers, a two- to three-year long-term training program has been launched which rotates global customer support engineers between domestic (Japanese) offices and newly established Asian and other off-shore locations, to help them improve their language, cultural adaptation, and technical skills. Currently four Japanese engineers have been dispatched, and four overseas engineers have been hosted in Japan to conduct skill improvement programs.
- At each overseas service center we have stocked inventories of replacement equipment and parts so that we can ship required parts from the service center nearest to each customer within 24 hours in more than 95% of cases. To provide even better overseas customer support, we have adopted a framework in which replacement equipment and parts delivered from each service center are analyzed by a centralized system based in Japan for determining and controlling inventories at each service center. In addition, to improve the turnaround time for service parts for handlers and other products, two new parts warehouses have been added at facilities overseas.
- Besides those mentioned above, in terms of production-related issues, solution engineers that work together with customers to resolve issues have been stationed in Taiwan, the US, and Japan, and technical support staff are working with the R&D division to prepare a system to improve the turnaround time for problem resolution in Germany, the US, and Japan. In addition, the Group is setting up repair factories in Taiwan, South Korea, and China in an effort to reduce repair turnaround time.

As a result of these initiatives, we achieved our response goals in more than 75% of all cases during fiscal 2011. When we are not able to solve a problem within 72 hours, we conduct systematic research to identify the reasons so that we can improve our performance in the future.



Global Support Center



Exchange Engineer from overseas



Taiwan warehouse

Advantest received a 10 BEST award in the customer satisfaction survey conducted by VLSI Research for the 24th consecutive year

Advantest aims to accurately understand the needs of its customers and provide them with high-performance and high-quality total test solutions in a timely manner.

In addition to the information we acquire from our daily business activities, Advantest strives to understand the needs of its customers by participating every year in the customer satisfaction survey conducted by VLSI Research, a company well-renowned for semiconductor market research. In this survey, Advantest received a 10 BEST award for the top-ten ranking companies for the 24th consecutive year.

Moreover, the sales and marketing division, system engineer division, and field service division jointly conduct an independent Advantest customer satisfaction survey once every two years. Advantest will work towards further improvements in customer satisfaction in the future by listening to the voices of its many customers and providing them with the solutions that best suit their needs.



Quality Management

CSR Report 2012

Quality management system

In keeping with a strict company-wide mandate of continuously improving customer satisfaction, our quality management system has been designed to comply with the international quality assurance standard ISO9001.

Lead by the Quality Assurance Manager under the supervision of executive management, an organizational framework has been established that promotes a culture of quality management throughout the company. In addition, an independent internal audit framework regularly conducts internal audits, helping to continually maintain and improve quality systems.

Fiscal 2012 saw the expansion of Group companies and a number of significant changes, including revisions to our quality manuals and the upgrading of internal audits.

ISO9001 certification

Applied Standard	ISO9001:2008
Certificate Registration No.	12 100 15196 TMS
Applied Scope	Design, Development, Manufacture, Sales, Installation, Calibration Service and Support of IC Test Systems, Electron Beam Lithography Systems, Electron Beam Inspection Systems, Optical Sensing Products, Terahertz-wave Application Measurement Systems and Electronic Measuring Instruments
Certification Body	TÜV SÜD Management Service GmbH
First Certified	June, 1993
Facilities Covered	Advantest Corporation, Japan Engineering Co., Ltd., Advantest Kyushu Systems Co., Ltd., Advantest Component, Inc.

Design review system aimed at improving quality

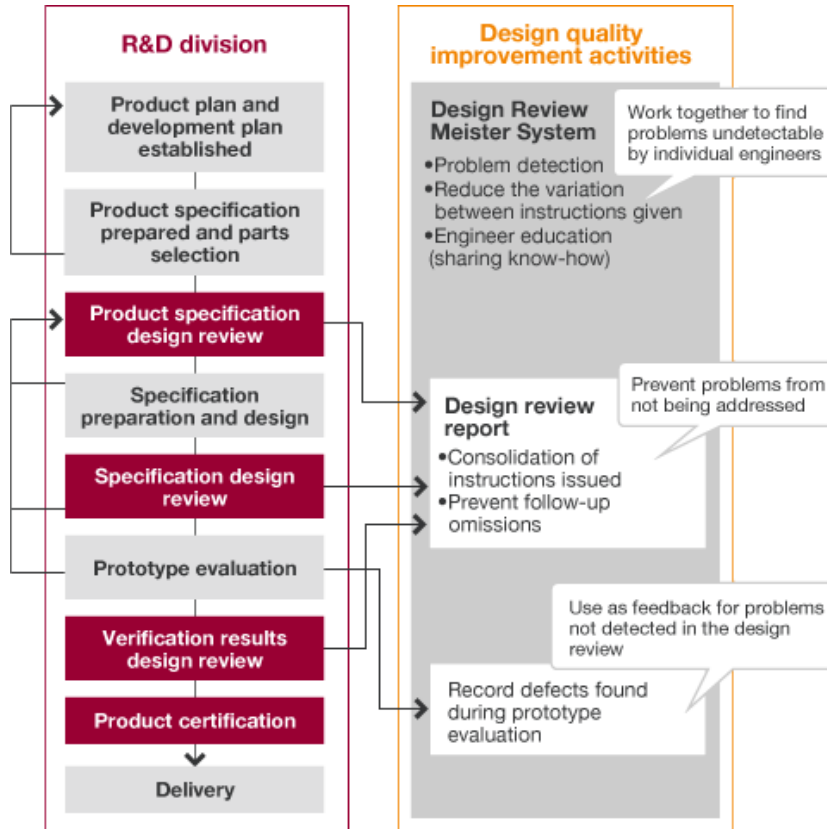
Functionality, performance and quality are hallmarks of Advantest products and are expected by our customers. To continually meet these high standards, Advantest must anticipate the challenges of each new generation of technology, such as today's complex, SOC chips. Advantest must also meet calls for reduction in development lead times. In order to respond to these demands, we believe instill quality at the upstream design phase which enables us to promptly detect potential issues. A new design review system was introduced in fiscal 2008 as a framework for achieving these goals.

Although Advantest had conducted design reviews previously, there were no rules stipulating that a design review plan had to be established in advance and the frequency and content of reviews varied considerably depending on the division. Furthermore, setbacks occurred as a result of less than timely reviews. The following framework has been adopted for the new design review system to address these problems.

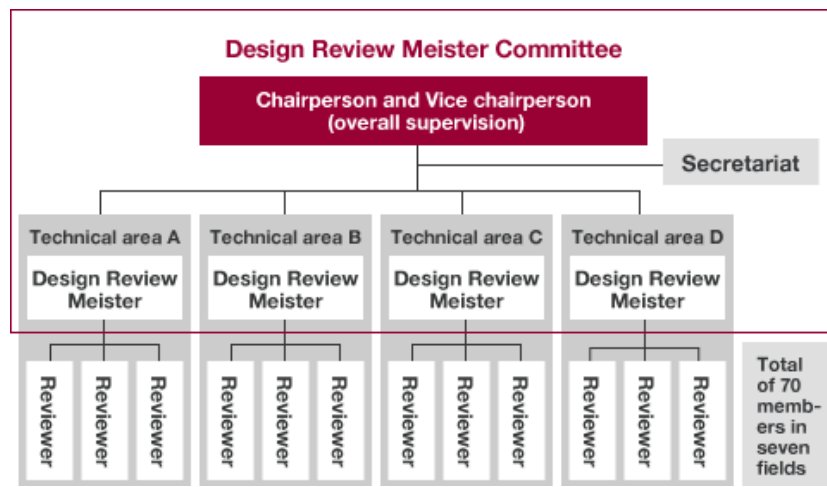
- The system was amended to ensure that the project leader establishes a design review plan when product development begins, and that reviews are conducted regularly.
- The system was changed so that the responsible staff and project leader, as well as the quality assurance division, carry out monitoring to prevent follow-up omissions, by enabling visual identification of issues raised.
- The Design Review Meister System was adopted, which involves forming groups of in-house experts for each technical area to participate in the related design reviews. This system increases the problem detection rate in design reviews, encourages the succession of technologies, and promotes in-house education.

Design Review Meister System

Development process and design quality assurance system



Design Review Meister System organizational chart



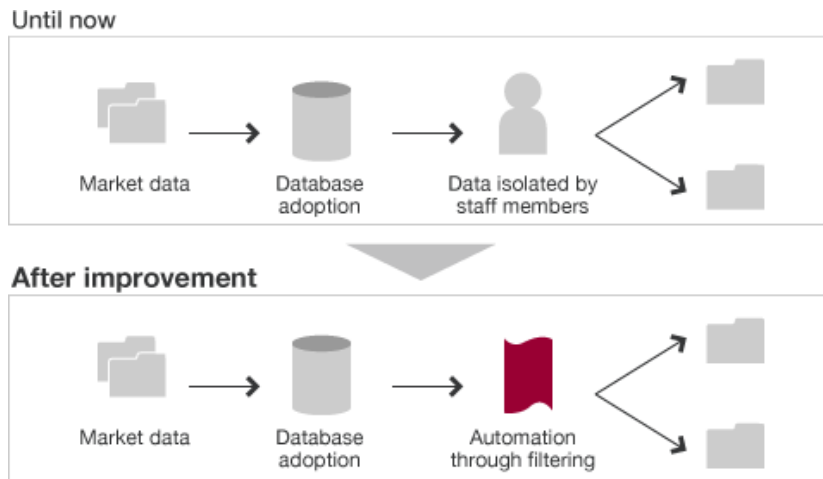
Many positive results have been achieved through these activities. Recently the rate of defect detection during the design phase has improved, leading to a decrease in setbacks and the number of defects that find their way into later processes, resulting in minimizing of development delays. The new design review system has resulted in improvements in design quality and a reduction in development lead times. However, it has also revealed many cases in which problems that should have been detected by the designer were allowed to find their way into the design review or later processes.

Although Advantest regularly collects analysis and feedback on issues that go undetected and makes improvements to the review framework in response, in the future we will make further improvements to the design process through thorough advanced confirmation before design reviews to achieve higher design quality.

Reliability design utilizing a framework to assess all failure data

To ensure reliability throughout the entire product life cycle, at Advantest we try to eliminate all elements that could lead to failures and defects from the product design phase. As a foundation for achieving this, we have established an integrated quality management system that aggregates quality-related information in a database containing information such as the number of market defects and shipment parameters for all parts used in products since 2005. This data is then used to estimate the reliability of new products, and if the target reliability is not achieved, the design of the applicable parts and devices is reviewed.

However, in addition to parts that resulted in market defects, this database also includes parts that were used as replacements, making it necessary for staff members to isolate data on defective parts from other data. Because this situation affects the homogenization of data, the accuracy of data has been improved through the addition of a function that automatically filters data on defective parts so that highly reliable parts can be efficiently selected. This framework has facilitated the achievement of targets by making it possible to focus on activities aimed at reliability improvements.



Initiatives aimed at improving software quality

Before Advantest ships software that controls devices such as testers and handlers, quality is confirmed by the quality assurance division after development has been completed by the R&D division.

As devices grow in complexity, high-quality software becomes more critical to performance, and development time increases. This can lead to the potential of software not meeting internal qualifying standards and contributing to delivery delays.

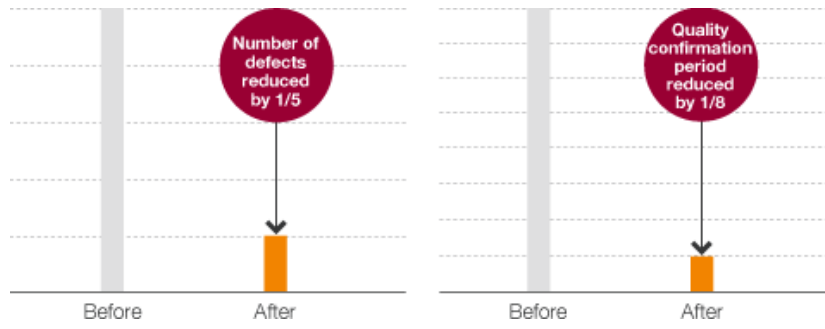
In response to these issues, New Software Process Review initiatives ("nSPR initiatives") were adopted in 2008 with the cooperation of the R&D division. Under these initiatives, the quality assurance division participates in the development planning and design reviews for certain products from the upstream processes of development, to confirm the deliverables (specifications) at each stage of development and provide prompt feedback on problems in order to improve the quality of development deliverables.

During nSPR initiatives conducted during fiscal 2011, the quality assurance division regularly confirmed whether there were omissions in development plan work items during the planning phase and whether there were any issues or risks relating to plan progress. Furthermore, in response to development deliverables (specifications), the quality assurance division confirmed whether there were omissions in the contents of specifications for each step of the development process and provided feedback to the R&D division on potential issues. In addition, after development completion, the quality assurance division identified areas needing improvement to ensure the same problems would not be repeated in future software development.

As a result, when software (A) for test systems manufactured before the adoption of nSPR initiatives is compared with software developed (B) for test systems after the adoption of nSPR initiatives, it is apparent that the number of defects after software shipment was reduced by approximately 1/5 for (B) compared to (A). In addition, the period of time required by the quality assurance division to confirm quality was reduced by approximately 1/8 for (B) compared to (A), allowing us to provide high-quality products to customers in a timely manner.

From fiscal 2012, in order to implement nSPR initiatives for all software products, we will revise our product certification system for software as we aim for even further quality improvement and more timely delivery.

Benefits of new software process review activities



Social Contribution Activities

CSR Report 2012

Promoting social contribution activities

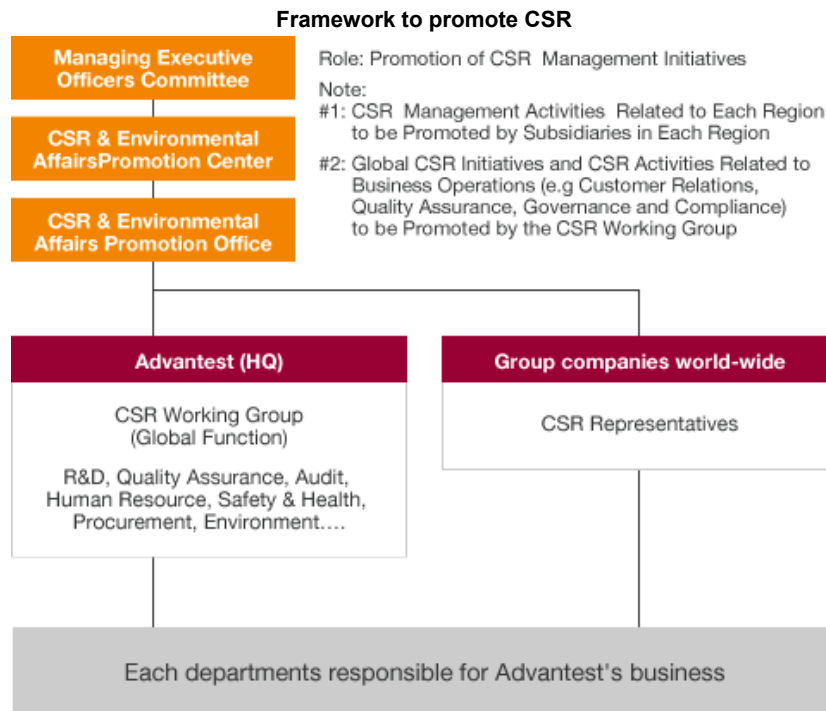
Stance towards social contribution activities

Advantest's Corporate Social Responsibility (CSR) Policy was stipulated as follows in April 2008: "Advantest respects each of its stakeholders and strives to maintain harmony with society in all its operations while contributing to the goal of a sustainable society." Based on this stance, Advantest conducts social contribution activities focused on the areas of preserving the global environment, developing the next generation, and contributing to local communities.

Advantest seeks to respond to the needs of its stakeholders and the community in order to contribute to the development of an affluent society through its social contribution activities to fulfill its corporate social responsibility as a global company.

Framework to promote CSR

Advantest has a track record of promoting CSR and environmental initiatives in every country and region it operates in, especially Japan. However, it has been increasingly important to conduct more global CSR and environmental initiatives through its supply chain as a company that contributes to a broader range of society. We would like to use the recent merger as an opportunity to establish a new framework for promoting and implementing CSR and environmental initiatives on a global level.



Social contribution activities conducted during fiscal 2011

Participated in tree-planting activities on the Hibikinada Reclaimed Land in the City of Kitakyushu

The Advantest Group participated in an event called the Tree-Planting Day in the Green Corridor with Singing Birds held at Hibiki-cho, Wakamatsu-ku, Kitakyushu-shi, on March 24. This was an environmental protection project hosted by the city of Kitakyushu and local NPOs. The objectives of the project were to plant trees on the Hibikinada reclaimed land and to create a green corridor with singing birds so that the citizens can relax and enjoy themselves in lush greenery.



Tree-planting activities

The total of 25 volunteers, including the Advantest Group's employees and their families, participated in the Tree-Planting Day and planted approximately 600 trees. There were nearly 1,500 people participated in the entire tree-planting activities, and they planted as many as 13,000 trees. One of the participants and his family said, "It was a great opportunity for me and my family to learn about the environment," and "I hope these trees will grow and become a forest one day and a lot of birds will fly over here."

The Advantest Group will continue to be part of the activities which will contribute to our society, our community and the global environment in the future.

A special science class at an Elementary school in Sendai City

On February 15, 2012, the Advantest Group offered a special science class at the Koriyama Elementary School in Sendai City. The objectives of this class were to provide children with an opportunity to become interested in science and technologies, to contribute to the recovery from the Great East Japan Earthquake and to contribute to the future development of this region.

On the day of the class, 48 fifth graders of the elementary school were divided into eight groups and worked together to make simple speakers by hand, using magnets and enamel coils. Advantest employees participated as instructors for the groups and explained the principles of a speaker. They then supervised the pupils while they made their own speakers. When their hand-assembled speakers were completed and made sounds, the pupils pushed the speakers to their ears and their friends' ears and roared with excitement. The Advantest Group received a certificate of appreciation from the board of education in Sendai City for holding this activity.

The Advantest Group will continue to utilize its expertise in manufacturing and be part of the social contribution activities by offering science classes which cultivate children's intellectual curiosity and by holding seminars which introduce the latest science and technology developments to school teachers.



Special science class

Volunteer activities in the areas hit by the Great East Japan Earthquake

For five days from May 16 to May 20 2011, 55 employees of the Advantest Group volunteered to work in the city of Sendai, one of the areas hit by the Great East Japan Earthquake.

The fact that our R&D facility, Advantest Laboratories Ltd., and our manufacturing site, Sendai Factory, are both located in Sendai symbolizes our strong tie with the city. In response the Advantest Group decided to recruit volunteers from our employees to provide support for the reconstruction effort in the city that contributes so much to our daily operations. By taking into account the information on the disaster areas' needs made available by the Northern Tsunami Disaster Volunteer Center, the volunteers were dispatched to the Okada District and the Gamou District in Miyagino Ward and worked to dump out the mud, remove debris from the wreckage, and clean up the victims' houses in these areas, among other things. Since it was the first time for the volunteers to be engaged with such tasks as removing the sludge piled up in the ditches after the tsunami and cleaning up the debris, they struggled to make the desired progress. However, the gratitude expressed by the victims warmed up their heart and became their motivating power to work. Participants made comments such as "I realized how much damage tsunamis caused when I went to the disaster area," "Although the work was hard, it was worth it," and "I would like to participate in these types of activities again."



Volunteer activities in the disaster area

The Advantest Group hopes to continue to be involved in any activities that would lead to support for the earthquake-hit areas in the future.

Advantest Taiwan Inc. participates in coastal cleaning activities

Advantest Taiwan Inc. (ATI) participated in a coastal cleaning activity on June 5, 2011 hosted by the Environmental Protection Bureau of Hsinchu City in Taiwan.

Its objectives included the protection of marine resources and the reduction of CO2 emissions by reducing the amount of waste. A total of twenty ATI employees and their families, as well as about fifty organizations, participated in this activity. They picked up garbage on the coast for two and a half hours from 8:30 to 11:00 AM. The garbage they picked up included not only empty cans and waste paper but also what appeared to be illegally-dumped large trash, such as tires and an organ, which damaged the beautiful landscape and the nature of the coast. The participants were drenched with sweat during the cleaning activity in strong sunlight, but they were extremely satisfied with the fact that they were able to be part of an activity to protect the global environment.

ATI hopes to continue its proactive participation in activities to protect the nature and learn the importance of our environment with its employees and their families.



Coastal cleaning activities

Rehabilitating houses and the donation activities in the US

Advantest America, Inc. (AAI) provides support to Rebuilding Together Silicon Valley's activities as part of our ongoing corporate social responsibility effort. Rebuilding Together is a well-known US non-profit organization that rehabilitates houses of low-income, senior, and disabled homeowners for free.

In fiscal 2011, AAI donated USD 10,000 to Rebuilding Together. This donation will be used to finance the purchase of material required by various projects held in Silicon Valley. Also on October 22, 24 members from AAI and Verigy Ltd. volunteered to take part in a mobile home rehabilitation activity. Mobile homes are wheeled homes that can be pulled by trailers and while they are inexpensive, they are not very durable against heavy rains or strong winds. There are many people that continue to live in mobile homes that have been damaged because they don't have the money for repairs. The work began at 8:00 in the morning and continued for long hours. Although it was physically challenging, all the volunteers worked together and managed to complete the entire rehabilitation before the day was over. The homeowner and their family members rejoiced to see their beautifully renewed house.

AAI and Verigy will continue to actively promote social contribution activities.



House rehabilitation activities

Environmental Highlights 2012

CSR Report 2012

Power saving initiatives at Advantest Group

The Great East Japan Earthquake that occurred on March 11, 2011 caused catastrophic damage to people in the local community and buildings, especially in the Tohoku region. The Fukushima Daiichi Nuclear Power Station and other power supply facilities were severely affected by the earthquake, leading to a serious power shortage in the Kanto and Tohoku regions. Power shortages can cause significant impact on the lives of people in the local community as well as corporate activities. This can result in an impediment to economic and industrial development, and ultimately hinder the provision of aid to the affected areas.

Up until now, the Advantest Group has formulated Environmental Action Plans as it has worked towards preventing global warming. However, in consideration of the even harsher situation the Group faces, it has been decided that efficient activities that produce high results are necessary. Mainly under the initiative of the Energy Saving Committee and the Global Warming Prevention Committee, studies were conducted on energy saving initiatives that will also lead to productivity improvements and activities at business sites and offices, such as effective energy saving measures for the summer when the amount of energy consumed tends to increase. The decision was then made to deploy these initiatives across the entire Group.

Power use limitations established by the Japanese government in accordance with Article 27 of the Electricity Business Act

15% reduction in maximum power use

Power use limitations based on the Advantest Group's voluntary target

20% reduction in maximum power use

- ↓ [Initiatives at Advantest Component, Inc.](#)
- ↓ [Initiatives at the Saitama R&D Center, Gunma R&D Center, Gunma Factory, Gunma Factory 2, and Advantest Laboratories / Sendai Factory](#)
- ↓ [Initiatives at other offices](#)

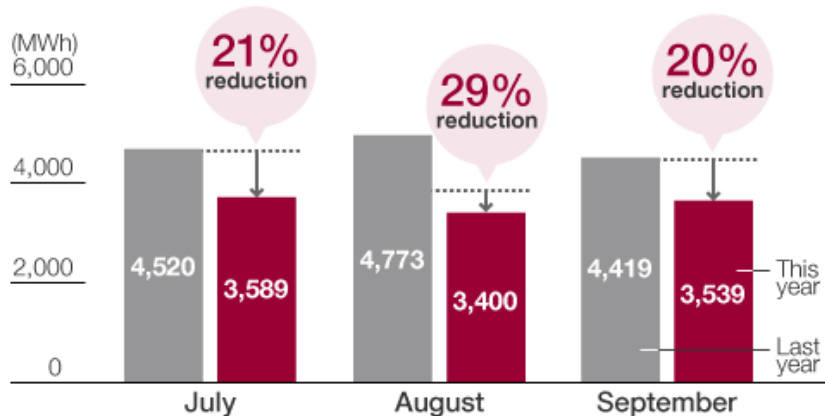
Results of initiatives

Total power use at all business locations in Japan was

reduced **20%** year on year to **41,910 MWh** during fiscal 2011

Total power use during the summer (July to September) was

reduced **23%** year on year to **10,528 MWh** during fiscal 2011



Initiatives at Advantest Component, Inc.

Following the occurrence of the Great East Japan Earthquake, Advantest Component Inc., worked to restore its research and production functions after ensuring the safety of employees and their families. It was at that time that Article 27 of the Electricity Business Act came into effect due to the great damage caused to power companies. In response, the Advantest Group set a voluntary target of a 20% reduction in summer power use, and Advantest Laboratories / Sendai Factory also participated in the Group-wide power saving measures that ensued.

Activities focused on reducing the amount of power used by the clean room air conditioning system, which accounts for 70% of all power used. At the same time, initiatives including lighting reductions and thorough cutbacks in air conditioning in general office rooms were conducted.

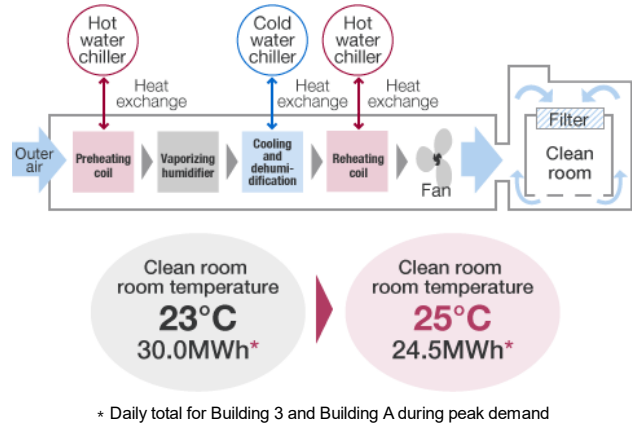
It was determined through analysis of power data that it would be possible to achieve the target by raising the clean room temperature 2°C from 23°C to 25°C, but this would have a very significant impact on manufacturing that requires accuracy at the one-hundred-thousandth of a millimeter level.

In particular, processes for which it would be difficult to adjust manufacturing conditions were concluded in advance through production adjustments. In addition, for the hundreds of other processes, adjustments to manufacturing conditions were made as required, the clean room temperature was set to 25°C, and manufacturing work was carried out.

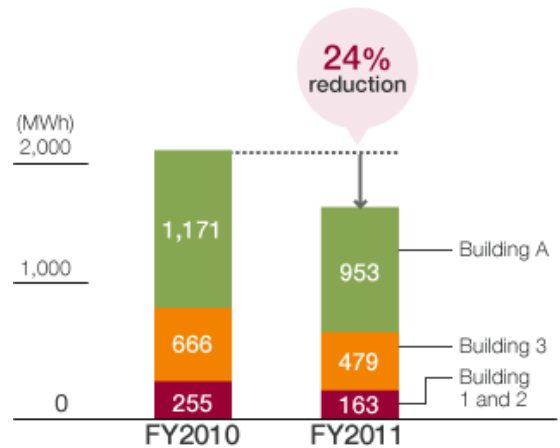
As a result of these energy saving activities, a 20% reduction in peak daytime power use was achieved over a 64-day period at Advantest Laboratories / Sendai Factory from July 1 to September 2 2011, representing a 497 MWh(24%) reduction in power use year on year.

Although the future of the power supply provided by power companies still remains uncertain, we will gather information from various sources as we continue our energy saving measures during the summer of 2012 as well as the long-term future.

Clean room air conditioning control framework



Comparison of energy used at Advantest Laboratories / Sendai Factory from July 1 to September 2 (64 days)



Initiatives at the Saitama R&D Center, Gunma R&D Center, Gunma Factory, Gunma Factory 2, and Advantest Laboratories / Sendai Factory

At five of the Advantest Group's business locations, the Saitama R&D Center, Gunma R&D Center, Gunma Factory, Gunma Factory 2, and Advantest Laboratories / Sendai Factory, the Group set the target of a 20% reduction in maximum power use, going beyond the Japanese government's target of a 15% reduction. Based on this target, the Group implemented summer power saving measures.

It is essential for companies to secure the quantity of power required for their business activities. Limiting the amount of power that can be used can result in reductions in work efficiency and delays in lead time. If corporate earnings are reduced as a result, it could indirectly impede the recovery of the areas that were affected by the earthquake. In response to these risks, private power generators were installed at three business locations (Gunma R&D Center, Gunma Factory, and Gunma Factory 2) with high contract power. By securing our power sources, we were able to curb the quantity of power that was purchased from power companies. While giving sufficient consideration to our business activities, various other energy saving measures were conducted as well, including a reduction in fluorescent lighting and cutbacks in illumination intensity after confirming the levels of lighting required for safe business operations, and the implementation of optimal operations based on tests that were conducted on the operation time of facilities. Through these measures, a 35% year on year reduction in maximum power use was achieved from July to September 2011 at the five business locations the regulations apply to.



Fluorescent light tube reductions



Sprinkling water on walls

List of energy saving measures at business sites

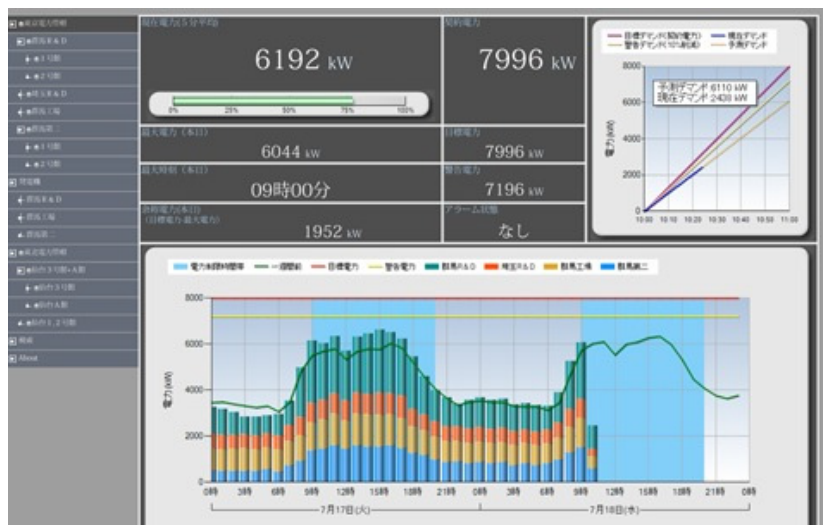
- Fluorescent lighting reductions and lowering illumination intensity
- Adoption of LED lights
- Sprinkling water on roofs and walls
- Switching over to higher efficiency equipment (such as servers, kitchen refrigerators, and air conditioners)
- Covering windows with shade film
- Shifting from electricity to heavy oil and gas as the primary source of power for air conditioners
- Storing power for nighttime operations
- Partial suspension of vending machines and electric water heaters

Initiatives at other offices

The Advantest Group established the Energy Saving Working Group in June 2011 as an organization to plan and implement energy saving initiatives to be taken on by our offices. The activities decided on by this Group are communicated to all employees through our Internet-based news system and corporate magazine. The initiatives that were adopted for offices include the thorough implementation of the "Cool Biz" campaign and shutting off lights, optimization of room temperatures, and having employees turn the power off monitors when they leave their seats. Although these initiatives may seem like little things in and of themselves, in aggregate they can be expected to produce big results.

In addition, to improve the awareness of each and every one of our employees towards energy saving, a monitor system has been installed that makes it possible to view the amount of power used at business locations over the intranet. This system makes it possible to view the amount of power used, contract power, maximum power, and target power for business locations that are subject to the power use restrictions.

The power monitor



Moreover, if over 80% of the preset target power is used, the system makes an announcement within the building, automatically cuts off some lighting on office floors and laboratories, and reduces the air conditioning.

As a result of these efforts, we managed at all times to clear the power targets that were set for the summer of fiscal 2011.

List of energy saving measures at offices

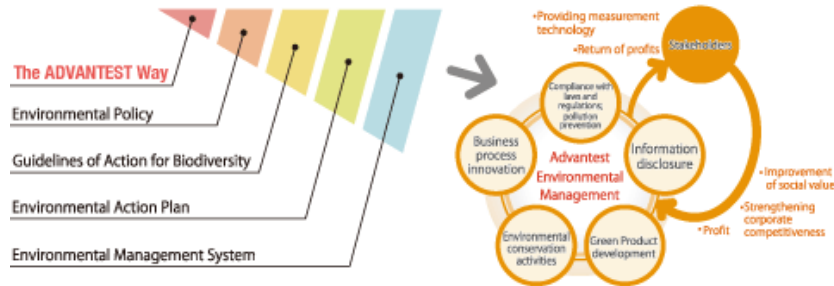
- Implementation of the "Cool Biz" campaign
- Personnel limited to owning one personal PC and monitor
- Thorough enforcement of PC energy-saving settings
- Thorough enforcement of turning off lights during lunch breaks and when leaving the office
- Turning the power off of office equipment when not in use
- Setting the air conditioning temperature at 28°C for office floors, meeting rooms, and hallways as a general rule
- Rotating operations involving summer vacation shifts by business site

Environmental Management

CSR Report 2012

Basic Policy

Based on our basic attitude of “Caring for Our Planet,” the Advantest Group promotes environmental initiatives by considering the environment in the course of its daily business activities, striving to reduce its environmental impact and offering environmentally friendly products. Through these efforts and as a corporate citizen we aim to give back benefits to industry and commerce, society, and the global environment.



Advantest Group Environmental Policy

1. Promoting Environmental Management

By establishing our Environmental Management System, we promote global environmental conservation efforts that achieve a balance between business activities and environmental concerns. Individual Advantest employees strive to protect the environment while carrying out their daily work and their responsibilities.

2. Provision of Environmentally-Friendly Products

We strive to provide environmentally friendly products throughout their life cycle -- from procurement of material to waste disposal, through energy conservation, improved recyclability, and the elimination of hazardous substances.

3. Reduction of Customers' Environmental Burden

Through our sales of products and services, we contribute to our customers' reduction of their environmental burden.

4. Better Workplace Procedures

We constantly strive to reevaluate and reform work procedures to help preserve the environment.

5. Conservation of Biodiversity

By being alert to the impact of our business activities on biodiversity, we strive for the conservation of biodiversity and the sustainable use of biological resources.

6. Complying with environmental laws and regulations and preventing pollution

Upholding all environmental laws and regulations and voluntary standards, we protect nature and shield our neighbors from environmental pollution and health hazards.

7. Disclosing information related to environment

Advantest's environmental policy is made freely available to all employees, stakeholders, and other concerned parties. We strive to disclose our environmental activities and openly communicate with society.

The Advantest Group's Guidelines of Action for Biodiversity

To show our gratitude for the gift of nature that is endowed by biodiversity, and to recognize the significance of biodiversity in underpinning the prosperity and the wellness of our society, the Advantest Group will carry out initiatives in conserving biodiversity and in contributing to the sustainable use of biological resources.

1. Understanding Environmental Impact

We identify, evaluate and share the information on any aspects that may have a significant impact on biodiversity in the entire lifecycle of our business activities.

2. Understanding Biodiversity

We increase awareness and understanding of biodiversity among all employees so that they are able to engage in activities that give consideration to biodiversity in their business activities and daily lives.

3. Reduction of Environmental Impact

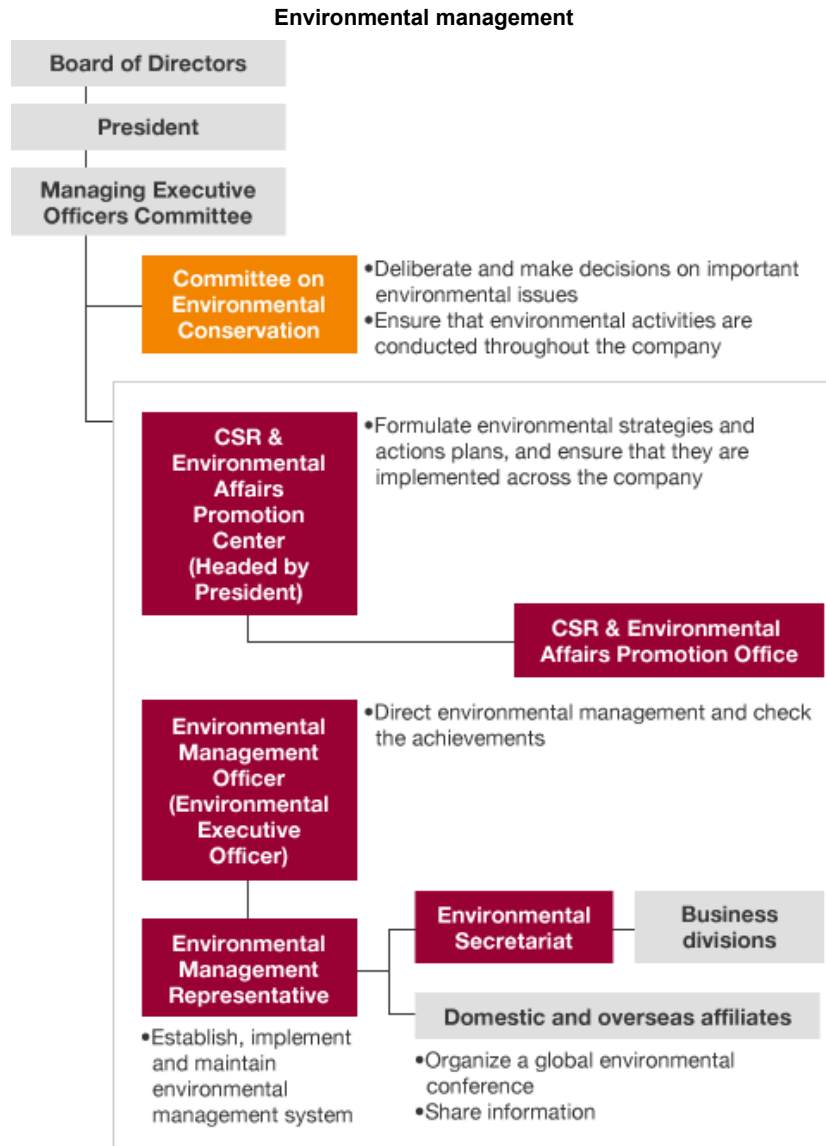
By seeking highly effective measures, and by carrying them out continuously, we reduce the impact of our business activities on biodiversity.

4. Cooperation with Stakeholders

We cooperate with a variety of stakeholders such as the government, educational organizations, NPOs, local residents and our business partners to promote activities related to the conservation of biodiversity.

Framework to promote environmental management

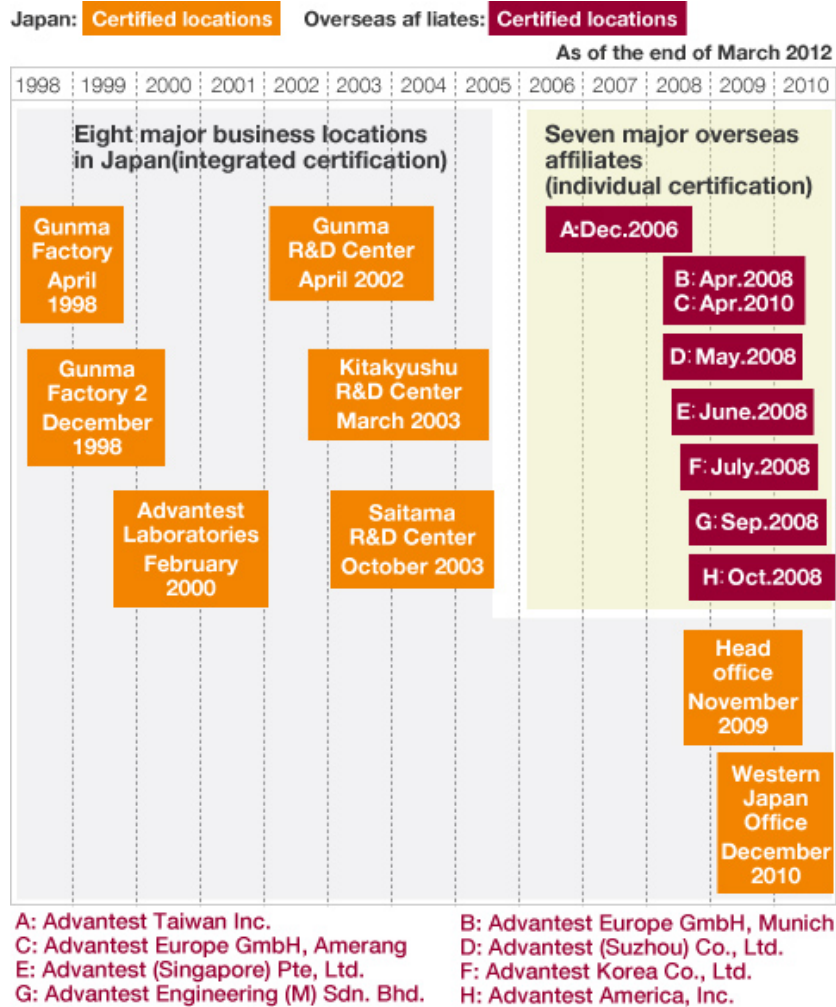
The Advantest Group has set up the CSR and Environment Management Center and the Committee on Environmental Conservation, under the direct control of the Managing Executive Officers Committee, who are responsible for formulating and determining environmental management strategies and implementing them across the Group. Furthermore, we share information with the CSR and environmental divisions of our overseas business locations to implement environmental activities on a global scale.



Acquisition of ISO14001 certification

The Advantest Group has acquired Integrated ISO14001 certification for its offices, as well as its research, development, and production facilities in Japan. In addition, at its overseas business locations, the Group is working to introduce ISO14001 based on particular circumstances of each country and is conducting initiatives to this end. Based on the unified ISO14001 standard, the Group is conducting a range of initiatives aimed at reducing energy use, reducing waste, and developing and providing environmentally friendly products in order to reduce the environmental impact of its business activities. The Group is achieving results in these efforts in each country it operates in.

Acquisition of ISO14001 certification



Improvement in operational efficiency in environmental management system

During fiscal 2011, the Group took steps aimed at ensuring more rigorous adherence by management to the ISO14001 standard as revised at the end of fiscal 2010. As a result, the Group has reduced the number of suggestions received during external reviews and internal audits, improved the level of its operations, and reduced the number of man-hours needed to ensure adherence to ISO14001.

During fiscal 2012, E-learning related to ISO14001 environmental education is planned to be introduced in Japan, as we take steps to instill and improve the efficiency of this education. In addition, we will strengthen ties with our overseas business locations as we conduct ISO14001 activities to support our diversifying environmental conservation initiatives.

Internal environmental audit

The Advantest Group conducts an internal environmental audit every year to voluntarily check its improvement in environmental performance and the suitability and effectiveness of the environmental management system to ensure that the ISO14001 standards are being strictly enforced. In September 2011, 100 qualified internal environmental auditors conducted a periodical internal environmental audit at all ISO14001-certified factories and offices, after receiving regular training provided by Advantest's internal audit unit. Although there were 17 minor improvement points, no accidents, complaints, or legal violations concerning the environment were revealed, and the improvement points were responded to promptly. The Group will ensure that the findings of the audit are faithfully reflected in its environmental management system and that ongoing reforms are conducted.

Environmental Education

CSR Report 2012

Basic stance

To advance environment conservation initiatives, it is essential for each and every employee to always remain aware that environmental issues are actual, immediate problems and consider what they can and should do in their business and home life, and that this awareness translates to action. Based on this stance, the Advantest Group conducts environmental education aimed at fostering an awareness of the environment and more practical approaches to the environment.

List of environmental education programs

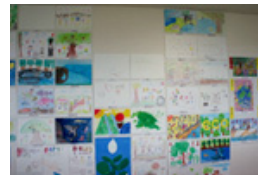
- Training for new employees
- Training for new managers
- Environmental internal auditor training
- Training on the safety of chemical substances
- ECOCH activities
- Solicitation of environmental value engineering proposals
- Holding of environmental events for employees and their family members (Ecological tours, environmental art and photo contests)
- Environmental lectures
- Local cleanups
- Forest conservation activities



Environment lecture

Environmental art and photo contest

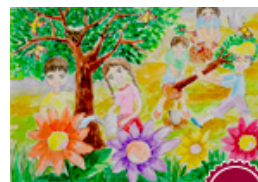
During the fiscal 2011 Environmental Month, the Advantest Group organized an environmental art contest and an environmental photo contest for employees and their family members. In this third year of the environmental art contest, 109 entries were received from the family members of employees in Japan and overseas. Works in a myriad of colors were received, including depictions of beautiful nature, cute animals, and posters warning of global warming, all worthy of being honored, making it difficult to select the top award winners. In addition, 143 works were exhibited at the first environmental photo contest, based on the theme of natural landscapes that deserve to be preserved. The strong feelings the contest participants have towards the environment were communicated through the large number of nearly professional-level photos that were exhibited. We plan to raise the environmental awareness of our employees while enjoying environmental-related events in the next year.



Environmental art contest



Environmental photo contest



Ecological tours

At Advantest Taiwan Inc., 16 employees and family members participated in an environmental education workshop on July 23, 2011 sponsored by the Tzu Chi Foundation at the Tzu Chi Environmental Protection Education Center in Hsinchu. The Tzu Chi Foundation is a humanitarian organization that was founded in 1996 for the purpose of contributing to improvements in fields such as medical service and education. Currently volunteers in 47 countries worldwide and 372 companies in Taiwan and overseas participate in Tzu Chi Foundation activities, and the environmental education offered by the Tzu Chi Environmental Protection Education Center is supported by the cooperation of many volunteers. After learning how to segregate different types of waste, the participants participated in the segregation process of waste PET bottles that would be used as raw materials for blankets by sorting out the PET bottles by color, removing the caps and rings left on the opening of the bottles, and stomping on the bottles to reduce their volume. In this manner the participants learned that waste can be an important resource, and that the segregation of waste is essential to fully utilize this resource. They also found significant value in making social contributions as they watched the way the volunteers worked for free.



Ecological tours held

Environmental Action plan

CSR Report 2012

The Fifth Advantest Group Environmental Action Plan (FY2010-2012)

Based on the theme of preparing for a low-carbon society, the Environmental Action Plan was established in April 2010, aimed at conducting environmental initiatives that reduce customers' and society's environmental footprint, give back to society and improve profitability. In line with this Plan, the Group is working to reduce the environmental burden it causes by focusing on the three areas of environmental management, environmentally friendly products, and more efficient business activities.

Scope

1. **Scope of initiatives: The Advantest Group's eight business locations in Japan and seven business location overseas (including affiliates)**
2. **Time period: Fiscal 2010 to fiscal 2012 (three years)**

Key achievements for fiscal 2011

In environmentally friendly product initiatives, environmental assessments on products designed overseas such as at Advantest Europe GmbH (AEG) were stepped up, and as a result, 12 series of green products for fiscal 2011 were marketed, making the green product sales ratio for automatic test equipment 97.5%. In addition, after acquisition of the former Verigy Ltd., a common Restriction of Hazardous Substances Directive (RoHS) standard was established and announced for the purpose of establishing shared green product standards.

In measures against global warming, each of our business locations is working towards streamlining the amount of energy used in line with the mid-to-long term plan. In particular, during fiscal 2011, we relied on the cooperation and ingenuity of our employees to save power following the Great East Japan Earthquake, to achieve an average power savings of 35% at our major business locations in response to the national goal of reducing summer power consumption by 15%. As a result, total CO₂ emissions for fiscal 2011 were 18,467t-CO₂, marking an approximately 3,000 t-CO₂ reduction over the past two years. (Fiscal 2009: 21,551t-CO₂, fiscal 2010: 20,444t-CO₂, fiscal 2011: 18,467t-CO₂)

In terms of biodiversity conservation, we believe that the Group's business activities including its supply chain have little direct impact on biodiversity. However, from the viewpoint of environmental preservation, the Group distributes guidelines for biodiversity conservation activities to materials suppliers and has requested cooperation by adding evaluation items that have been added to the supplier check sheet related to biodiversity conservation. Moreover, in addition to maintaining a biotope at the Gunma R&D Center and working to preserve the tropical rain forests in Borneo, the Group also conducts forest preservation activities in Japan and overseas.

Plans for fiscal 2012 and looking towards The Sixth Advantest Group Environmental Action Plan

Up until now, business activities in Japan have accounted for the majority of the environmental impact caused by the Group. However, the Group's environmental impact overseas has increased recently following the acquisition of the former Verigy Ltd., and expansion of production overseas. In this last year of The Fifth Advantest Group Environmental Action Plan, the Group hopes to transform its environmental activities to respond to issues on a global level as it makes the shift to The Sixth Advantest Group Environmental Action Plan.

The Fifth Advantest Group Environmental Action Plan (FY2011)

Environmental management – Target:

Prepare for a low-carbon future, and help society and build earnings through environmental management.

Environmental management

Environmental management system to all facilities worldwide and enhance environmental management.
 (Expand ISO14001 certification to non-production facilities in Japan and internationally, and ensure that all major locations will be ISO14001-certified.)
Japan:
 • Legal and ISO14001 requirements confirmed for Japan Engineering Co., Ltd. (Kawasaki office)
Overseas:
 • Certification transfer schedule confirmed for overseas affiliates following the former Verigy Ltd. Acquisition

Progress ratio
100%

Environmental contributions

Continue to implement environmental contribution programs with the objectives of environmental contribution and ecosystem preservation.
Japan:
 • Conducted three forest conservation activities (53 employees participated)* Kabasawa secondary forest (Sendai, Miyagi Prefecture) conservation activity canceled due to rain
 • Forest development activities at source area of Onga River (Kitakyushu, Fukuoka Prefecture; July); and conservation activities at Kusastu Yasuragi-no-Mori (Yasuragi-cho, Gunma Prefecture; October);
 • Tree planting event at Tori-ga-Saezuru Midori-no-Kairo (Kitakyushu, Fukuoka Prefecture; March)
 • Organized the 14th Science Craft Day workshop for schoolchildren, attracting 165 local elementary school children and their families
 • Special science course provided at Kooriyama Elementary School in Sendai, Miyagi Prefecture (48 participants)
 • Conducted disaster volunteer activity in Miyagino-ku, Sendai, Miyagi Prefecture (55 employees participated)
 • Registered biotope to the Birdpia initiative operated by Japanese Society for Preservation of Birds
 • Funds from sales of used books, CDs, and DVDs donated to a welfare organization
Overseas:
 • Donated secondhand clothes and books to those in need (China and Taiwan)
 • Conducted home repairs and donation activities (US)

Progress ratio
100%

Environmental training

Plan and continuously offer in-depth environmental training programs (e.g. seminars, lectures) that enhance employees' environmental awareness.
Japan:
 • Organized lectures on the environment at three offices (453 employees participated)
 • Organized the first environmental photo contest (143 employees and family members in Japan and abroad participated)
 • Organized the third environmental art contest (109 employees and family members in Japan and abroad participated)
Overseas:
 • Organized ecological tours for employees and family members (Singapore: 10 participants/Taiwan: 16 participants)
 • Participated in beach cleanup (Singapore: 65 participants/Taiwan: 20 participants)

Progress ratio
100%

Information Disclosure

Proactively disclose environmental activities-related information and seek in-depth communication with stakeholders.
 • Shared information (19 items) on the website.
 • Published Corporate Report 2011 (printed brochure and with web extras).

Progress ratio
100%

Environmentally friendly products – Target:

Help customers to reduce their environmental footprint by expanding Advantest's lineup of products that conform to stringent environmental standards.

Green products

Energy reduction

Reduce energy consumption of target products by 20% or more per unit function compared with comparable products.

- Reduced energy consumption of three types of memory test systems (T2000SP2MF, T5773, and T5773ES) by 20% or more per unit function compared with comparable products.
- Certified four products related to automatic test equipment-related system, five types of T2000 module products, and three test measurement instruments as green products.

Progress ratio
100%

Using fewer resources and parts

Reduce number of parts used in target products by 20% or more in comparison with previous models.

- Postponed addressing this theme due to business revisions

Target date
set back

Build target products 50% or more smaller than comparable models.

- Completed evaluation of prototype board

Progress ratio
100%

Eliminate hazardous substances

Purchase only parts free from 15 targeted hazardous substances.

- Green procurement rate: 97.1%

Progress ratio
100%

Green product sales

Market green products intensively to help customers reduce their environmental footprint.

- Percentage of green products among automatic test equipment sold: 97.5%

Progress ratio
100%

Product recycling

Promote product recycling by expanding the Advantest Recycling System.

- Recycled 15 units of our products, falling below the fiscal 2011 goal of 35 units.

Progress ratio
less than 70%

Business activities – Target:

Improve efficiency for a smaller environmental footprint.

Global warming prevention

Reduce product CO₂ emissions per unit of manufacturing volume*¹ by 75%*² compared to fiscal 1990

*1: Number of units produced, calculated by comparing product performance.

*2: Because the original target for fiscal 2012 has already been achieved, the target for fiscal 2011 was revised to a 75% reduction compared to fiscal 1990.

- Reduced product CO₂ emissions per unit of manufacturing volume by 80% compared to fiscal 1990
- Launched the ECOCH energy conservation program (332 employees and their families participated; 81 more participants than fiscal 2010)

Progress ratio
100%

Manufacturing

Improve manufacturing efficiency for a smaller environmental footprint in the manufacturing process. (Improve board production efficiency, reduce lead times for tester production processes, and improve yield etc.)

- Maintained automatic mounting machinery energy consumption at under 13.5kWh.
- Reduced the number of days T2000 is powered on from eight to four.

Progress ratio
100%

Support suppliers' environmental activities to reduce the environmental footprint of Advantest's entire supply chain.

- Informed suppliers of Advantest Group Guidelines of Action for Biodiversity

Progress ratio
100%

Promote reuse of packaging materials to reduce annual waste by at least 1,000 kg by 2012.

- Postponed addressing this theme due to business review.

Target date
set back

Resource recycling

Promote the "Three Rs" (reduce, reuse, recycle) to reduce waste by at least 15 tons annually.

- The volume of waste generated was reduced by 41.7 tons compared to fiscal 2010

Progress ratio
100%

Environmental risk management

Reinforce monitoring to ensure strict observation of environmental laws and regulations and related facilities to prevent accidents.

- Zero accidents, zero complaints.

Progress ratio
100%

Chemical substance management

Improve penetration and efficiency of chemical substance management. Construct a global management system.

- Conducted inventory for chemical substances of level 3* and above
- Confirmed status of use and legal compliance for chemical substances at overseas business locations

* : Substances that need to be reported when lost due to their high toxicity (examples: poisonous and deleterious substances).

Progress ratio
100%

Overseas affiliates (global warming prevention)

Enact measures to reduce energy consumption at Advantest's overseas business locations and lower electricity usage.

- Increased 13% compared to fiscal 2010

Progress ratio
less than 70%

Overseas affiliates (resource recycling)

Enact measures to reduce consumption of resources at Advantest's overseas business locations and minimize waste volumes.

- The volume of waste generated increased by 10% compared to fiscal 2010.
- The waste recycling rate improved from 74.7% in fiscal 2010 to 75.3% in fiscal 2011.

Progress ratio
70% or more

Environmental Contribution Activities

CSR Report 2012

Basic stance

The survival and growth of companies is supported by resources such as energy and water generated by our Earth. At the Advantest Group we believe that protecting and nurturing the global environment that we benefit greatly from is a very important issue for environmental management, and we conduct our environmental contribution activities based on this belief. A wide variety of living beings inhabit our earth and enrich the global environment. It is essential for companies to efficiently use the resources the Earth has blessed us with so that sustainable development is achieved, and it is necessary for companies to fulfill their corporate social responsibility by helping preserve the diversity of the Earth's living things. The Advantest Group has clearly defined a stance of treating biodiversity conservation activities as a business goal and is conducting initiatives to this end.

List of environmental and social contribution activities

- Organizing a nature-watching event at the biotope
- Organizing local cleanups
- Organizing forest conservation activities
- Donating used articles



Cleanups

Reforestation activities conducted on the Malaysian island of Borneo

The Eco-Forest Park is a forest site near Kota Kinabalu on the Malaysian island of Borneo where the Advantest Group conducted a three-year project starting in fiscal 2004. The Advantest Group has recently signed a maintenance contract with a local corporation for the purpose of supporting the cultivation of the reportedly hard-to-raise native dipterocarp and contributing to local employment.



Reforestation activity in Borneo

Forest conservation activities at Kusatsu and Kitakyushu

The Advantest Group is conducting forest conservation activities at Kusastu Yasuragi-no-Mori, a government-owned forest in Kusatsu-machi, Agatsuma-gun, Gunma Prefecture. After tree thinning, this forest that has been neglected since it was planted 57 years ago will revive and become a healthy forest able to absorb carbon dioxide and nourish natural water sources. In fiscal 2011, 22 Advantest volunteers participated in tree thinning activities, the fifth time these activities were conducted since being launched in fiscal 2007. In addition, the Group also participates in activities such as the Tori-ga-Saezuru Midori-no-Kairo tree planting event in Kitakyushu, Fukuoka Prefecture together with the Kitakyushu city government and local NPOs.

The Group plans to raise the environmental awareness of its employees by continuing to participate in these types of tree-planting activities in the future.



Forest conservation activities at Kusastu Yasuragi-no-Mori

Biodiversity conservation in the biotope

The Advantest Group created a biotope on the premises of the Gunma R&D Center in April 2001 to provide a living space for a variety of living beings in an effort to live in harmony with nature. This biotope that features ponds, streams, and wooded areas is an attempt to bring back to life the traditional rural landscape of the Kanto Plain, and has grown successfully over the years. A multitude of living beings inhabit this biotope, including threatened or near-threatened species that are on the Ministry of the Environment's Red List, such as the Tokyo-daruma-gaeru (Rana [Pelophylax] porosa porosa, Daruma bullfrog) and Chusagi (Areda intermedia, intermediate egret).

The biotope is also used as a venue for communication with the local community, and we have worked to ensure that the biotope provides a useful role for a larger variety of people by organizing nature observation events for local elementary school children and presenting research themes to the Faculty of Social Information Studies at Gunma University.

In addition, the activities conducted at the biotope have been registered with the Birdpia initiative organized by the Japanese Society for Preservation of Birds, and the Group is now conducting activities based on this initiative.

▶ [Biotope](#)

▶ [Birdpia](#)



Nature observation event



Daruma bullfrog

Environmental Communication

CSR Report 2012

Basic stance

The Group's business activities have affected the environment in various ways.

To achieve sincere and sustainable development, it is necessary for companies to candidly disclose this information to stakeholders so that their honest opinions and assessments can be properly reflected in environmental management.

The Advantest Group discloses information related to its environmental footprint and environmental activities through methods including its CSR Report, its corporate website, and various events and exhibitions. In addition, the Group works to achieve interactive communication with its stakeholders by creating opportunities for dialog through activities such as requesting cooperation with surveys and organizing factory tours.

List of environmental communication

- Releasing information on the corporate website
- Issuing a CSR Report
- Establishing environmental exhibit corners
- Providing tours of our business locations
- Participating in external organizations
- Participating in exhibitions
- Participating in environmental surveys



Biotope tour

Providing environmental information on the corporate website

The Advantest Group's environmental initiatives are introduced on our corporate website. Contact information has been provided on the website so that stakeholders can submit opinions and questions should they have any. Based on these inquiries, we will report to stakeholders the information they have requested, including information on green products, environmental contribution activities, and environmental impact data. We post corporate social responsibility and environmental news items on our website to keep our stakeholders updated on the latest environmental information from Japan and overseas.

If you have questions or comments related to Advantest's corporate social responsibility and environmental activities, please contact:

CSR & Environmental Affairs Promotion Center, CSR & Environmental Affairs Promotion Office

- Let us know what you think by email.
environment-inquiry@jp.advantest.com
- Or by fax.
+81-276-84-1156

Publication of the CSR Report

The Group has released an Environmental Report once a year since fiscal 2000. Upon establishment of the CSR Committee in fiscal 2003, the scope of the environmental report was expanded with the addition of CSR information from the 2004 edition of the report. From the 2007 edition, the name of this report was changed to the Corporate Social Responsibility Report, with the content expanded to provide an understanding on our initiatives towards achieving sustainable development and fulfilling our corporate social responsibility.

Previous CSR Reports are available [here](#).

▶ [CSR Report](#)

Establishing environmental exhibit corners

The Advantest Group has established environmental exhibit corners at the Gunma R&D Center, Gunma Factory, and Saitama R&D Center. The corners aim to provide an understanding of our environmental initiatives to the stakeholders who visit our business locations, including clients, suppliers, and other visitors. Panels with illustrations and photos are used to introduce the Group's environmental policies and initiatives in a manner that is easy to understand, and we also show videos that introduce our biotope and the recycling procedures for our products.



Environmental exhibit corners

Green Products

CSR Report 2012

Basic stance

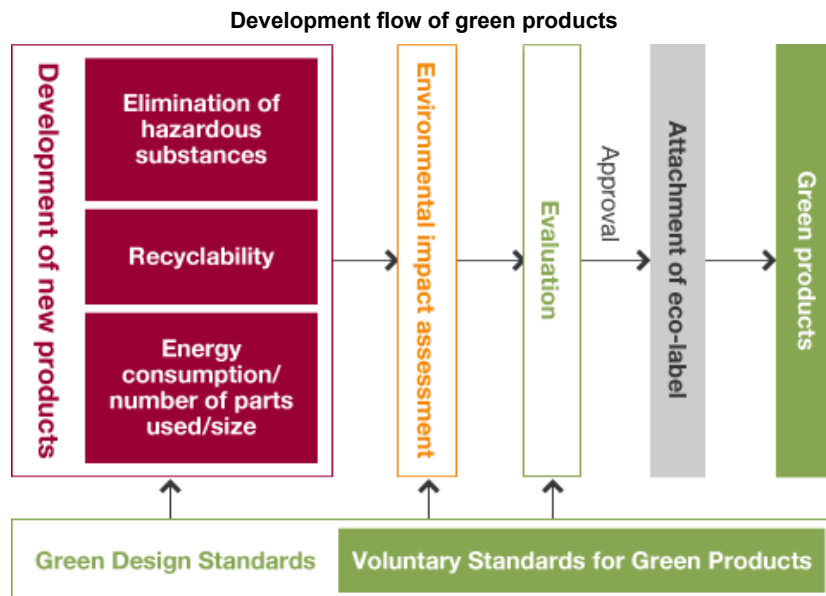
Contributing to the sustainable development of society and conducting environmentally-friendly business operations are essential issues that need to be addressed in modern business management. The Advantest Group works to develop products from the perspective of environmental conservation while prioritizing high precision and high quality, and certifies products that are environmentally-friendly in terms of the three key aspects of energy saving and resource conservation, improving recyclability, and elimination of hazardous substances as green products.

There is demand in society for the supply of green products because they provide both a reduction in the environmental footprint as well as an improvement in economic value. The Group is developing green products in response to these demands and based on the belief that these products will be beneficial for its customers.

Development flow of green products

At the Advantest Group, all new products undergo a product environmental assessment.

During the environmental assessment, products are assessed from various aspects, including energy savings, the number of parts used, product size, recyclable design, and elimination of hazardous substances. Products that meet the Voluntary Standards for Green Products are certified as green products and are awarded with an Eco Label (type II).



Advantest's Eco Labels

An original three-color design is used for the Group's Eco Label, representing energy saving and resource conservation, recyclable design, and elimination of hazardous substances (green procurement).

Energy Saving and Resource Conservation

Voluntary Standards

- Power-saving design
- Reduced-material design
- Miniaturized design



Recyclable Design

Voluntary Standards

- Design with renewable resin materials
- Design for ease of disassembly
- Disclosure of information on disposal

Elimination of Hazardous Substances (Green Procurement)

Voluntary Standards

- Improvement on green procurement rate
- Elimination of banned substances

Energy saving and resource conservation

To reduce the environmental footprint, the Group takes energy efficiency, the number of parts used, and product size into consideration when conducting product design.

Recyclable design

In recyclable design initiatives, we provide information on parts that require care during disposal, and we promote use of recyclable materials for resin parts that are designed in-house. For products that require disassembling, we ensure disassembly can be easily conducted with general tools, and we only use batteries with a recycle mark.

Elimination of hazardous substances (green procurement)

To eliminate hazardous substances from products, we have established Group standards on banned substances based on the JIG-101 standard (IEC 62474 International Standard to be adopted within fiscal 2012). Based on these standards we conduct studies on the hazardous substances contained within the parts and materials used in our products.

Green products certified during fiscal 2011

The following products were certified as green products and supplied to customers during fiscal 2011.

- T2000 SP2MF
- T5773
- T5773ES
- M4742A
- U38 series
- Five types of T2000 module products

Introducing our Green Products

T5773 Memory Test System

Responding to demands for systems that reduce total test costs

With the spread of technologies such as smartphones and solid state-drives (SSDs), the production of the NAND-based flash memory that is used within these types of technologies has increased. NAND-based flash memory volumes are also growing, and as a result the time required for device testing is increasing. As device speeds are also becoming faster and faster, the demand for systems that can reduce total test costs has increased. The T5773 was released in July 2012 in response to these needs. The T5773 Memory Test System makes high-efficiency, low-cost measurement possible for a wide range of NAND-based flash memory types, from traditional to high-speed interface.



T5773

Weight of parts reduced by 56% and size reduced by 75% compared with comparable products

From the initial development of the T5773, the requirements for the component parts were clarified and optimization was conducted by efficiently using general-purpose parts for sections composed of standard shared units and custom parts. Through this process, reliability was improved, while the weight of parts was reduced by 56% and the size significantly reduced by 75% compared with comparable products.

Possible to include only the required number of test heads

By using a stackable configuration for test heads, it is possible to configure a single test unit that can measure 128 units at the same time, and by selecting between one to six test units, measure up to a maximum of 768 units simultaneously, enabling the user to freely adjust the configuration depending on their requirements. In the past, only the test head size for the maximum-sized configuration was provided. However, the T5773 allows us to provide the size that is optimal for the customer.

Power source location changed and newly developed test processor adopted to reduce the amount of energy consumption by 79%

The power source was installed in the mainframe for previous products, based on the maximum-sized configuration for test heads. However, with the T5773, the power source for the board has been installed within the test unit. For this reason, the mainframe does not require a surplus power source and the distance between the board and power source has been minimized, reducing the amount of power lost through cables and thereby contributing to a reduction in power consumption.

In addition, a test processor has been newly developed for the function board that is central to the test system, which achieves high throughput as well as a 79% reduction in power consumption per unit compared to comparable products.

In this manner, the Group will continue to advance with manufacturing from the customers' perspective.

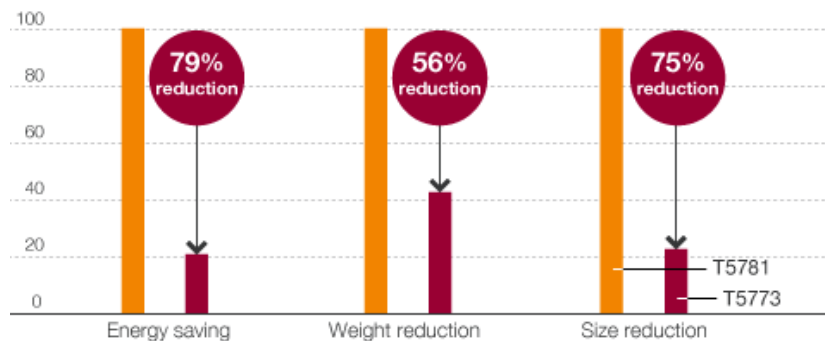
Aiming to develop products that minimize increases in power consumption

In the T5773 development project, we aimed to develop a test module that minimized the increase in power consumption by limiting measurement to NAND-based flash memories. Standard test modules are composed of driver and comparator circuits that use dedicated ICs that are specialized for testers. While these dedicated ICs excel in terms of performance and functionality, they tend to significantly increase the amount of energy consumed. By adopting a driver and comparator circuit that uses general-purpose complementary metal oxide semiconductor (CMOS) ICs for the T5773, it limits the performance and functionality compared to standard testers, but by limiting the T5773 to NAND-based flash memory testing, we were able to successfully develop a test module with low power consumption. We will continue to develop products that minimize power consumption increases by carefully narrowing down the functionality required depending on the subject of measurement.

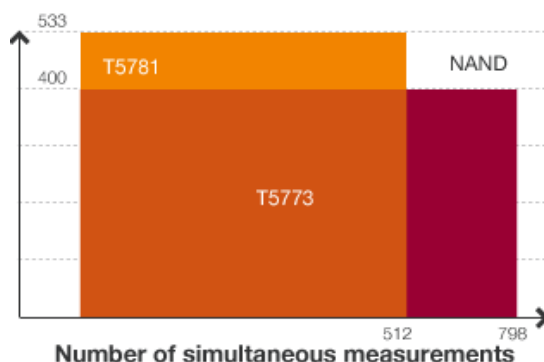


Yuki Taniguchi
7th R&D Department
Memory Test Business Group
Advantest Corporation

Comparing products' environmental information



Test frequency (Mbps)



Scalable class testers: the V93000 Smart Scale series

The V93000 Smart Scale series are scalable testers used for evaluating and testing system-on-chip (SOC) devices. Fully compatible with the V93000 platform, the Smart Scale series is an innovative generation of "smart" testers with advanced per-pin capabilities.

Each of the four Smart Scale tester classes - designated A, C, S, and L - has a different test head size, enabling provision of the most efficient solution for each user's specific applications. Because the tester classes are seamlessly compatible with each other, users can quickly and easily move their semiconductor devices from one Smart Scale class to another when the production volume of ICs changes over the lifetime of a device. In addition, flexible system configuration depending on device functionality is made possible through module support.



V93000 Smart Scale A-Class

These functions mean that it is not necessary to introduce a test system for each device to be measured, which makes a significant contribution to efficient use of resources by reducing test costs, conserving test resources, and reducing waste. In addition, increasing test processing capabilities through parallel testing allows users to reduce power consumption per unit.

Promoting Sales of Green Products

Recently, many companies have started working towards business management that is environmentally-responsible. The Advantest Group has adopted an environmental policy that aims to provide green products and reduce the environmental footprint of customers. Based on these aims, the Group is conducting development in accordance with Green Design Standards based on product environmental assessments and providing products that have been certified in accordance with proprietary green product standards.

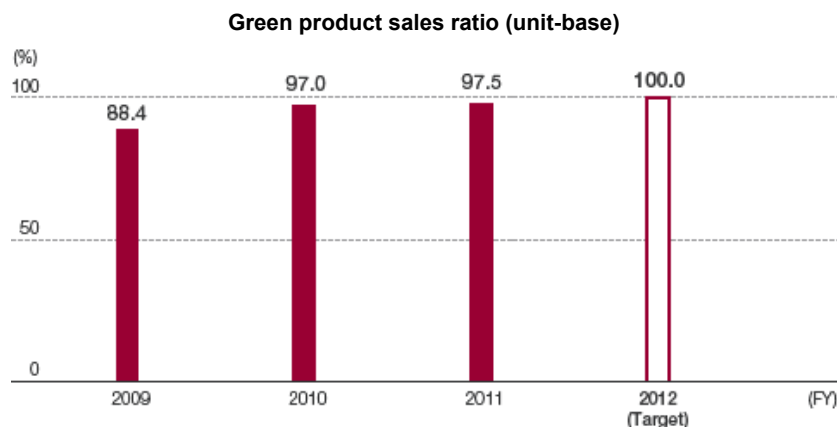
Fiscal 2011 results

Since fiscal 2010, the Group has established an annual green product sales ratio target (unit-base). Compared to the fiscal 2011 green product sales ratio target of 95%, we achieved a ratio of 97.5%. As a result, we were granted an Eco-VC (Value Creation) Initiative award by a major Japanese semiconductor manufacturer.

In addition, as steps to improve our corporate image, we have added Eco Labels to the product photographs contained on our website to indicate that the applicable products are green certified products and assist customers in selecting green products, and we have also clearly stated environmental footprint reduction data on product presentation materials.

Although there are plans to sell some non-green certified products (used products) during fiscal 2012, we will take steps to ensure that our green product sales ratio is as close as possible to 100% and continue to promote other new programs as we aim to reduce our environmental footprint, including the reuse of High Fidelity Tester Access Fixtures (HIFIX) and the use of returnable packaging materials.

* VC:Value Creation



Advantest's Statement on the EU-RoHS Directive

CSR Report 2012

Advantest's Statement on the EU-RoHS Directive

Advantest is in compliance with environmental laws and regulations, is eliminating hazardous materials and strives for energy saving. Our focus is on resource conservation and environmental protection.

Especially regarding hazardous materials elimination, Advantest has been researching and eliminating hazardous materials, and restricting inclusion thereof by cooperating with our suppliers since September 2003.

We are in compliance with the European RoHS Directive*. Advantest's semiconductor testers and handlers are classified as Large Scale Industrial Equipment (LSIT) and are out of scope of the EU RoHS directive (2011/65/EC). However, to enforce environmental protection with our products, we will further promote the elimination of hazardous materials where it is technically feasible without reducing quality.

* : The European Union Directive 2011/65/EC on the restriction of the use of certain hazardous substances (RoHS) currently restricts the use of six substances in electrical and electronic products:

- Lead (Pb)
- Mercury (Hg)
- Cadmium (Cd)
- Hexavalent chromium (Cr VI)
- Polybrominated biphenyl (PBB)
- Polybrominated diphenyl ether (PBDE)

Initiatives with Business Partners

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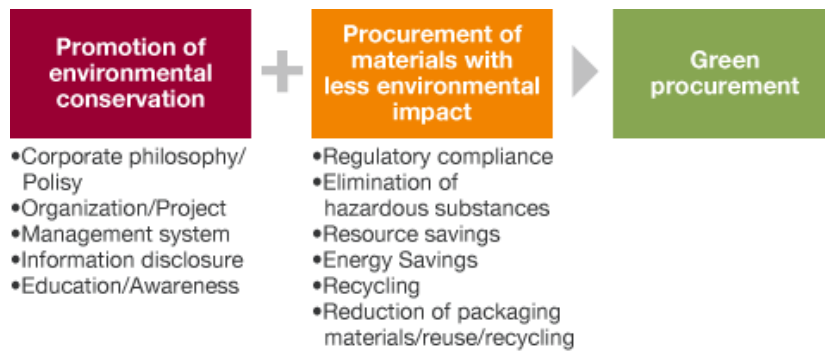
Green procurement/Initiatives related to regulations for chemical substances contained in products

At the Advantest Group, our intention is to reduce environmental impact at all stages of production, including those caused by suppliers and assembly and processing companies, in our quest to develop green products. We engage in communication with our business partners, and formulated the Advantest Green Procurement Guidelines in fiscal 2002 to facilitate this process. We operate according to these guidelines in order to give consideration to the environmental aspects in addition to quality, cost, and delivery throughout the whole process of production, including the purchasing of the components and materials that are used for our products.

We have created a database from the environmental information we received from our suppliers, and are utilizing it to promote eco-friendly product manufacturing, along with the implementation of product environmental assessments.

▶ [Advantest Green Procurement Guidelines](#) (PDF:169KB)

The Basic Principles of Green Procurement



Component Registration in Green Procurement

Regarding component registration, we are conducting environmental studies of the procured components, with the cooperation of our suppliers. We investigate the components to find out if they contain chemical substances that can burden the environment, and promote green procurement initiatives to reduce environmental impact.

Banned and Restricted Substances

The Group designates and manages chemical substances that may not be included in our products or are subject to restricted use. Criteria for banning or restricting substances are based on the JIG-101 standard (IEC 62474 International Standard to be adopted within fiscal 2012).

Hazardous substance survey support for suppliers

Accompanying the revision in the RoHS Directive in July 2011 and the addition of electrical and electronic products-related regulations in the Joint Industry Guide (JIG), the Advantest Group has revised its hazardous substance questionnaire. In order to help our suppliers submit accurate and quick responses to our hazardous substance questionnaire, we have held meetings to explain the details of the questionnaire, attracting 100 participants in total. Thanks to these efforts, as well as to suppliers' cooperation, we were able to reduce the time taken to complete a parts environmental assessment by more than 20%. In addition to favorable feedback from suppliers, such as "the meeting helped me to understand the hazardous substance questionnaire" and "the examples of how to fill in the questionnaire were easy to understand", we also received some suggestion for improvements regarding the submission method. Based on this feedback, we will continue to reinforce systems for suppliers to encourage cooperation with such questionnaires.



Hazardous substance questionnaire meeting

Product Recycling

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Basic stance

It is the Advantest Group's basic policy to take active steps to ensure that the products it sells are reused and recycled after they are retired, and to buy back products that are not expected to be reused so that the resources are recycled.

Recycling policy

1. Realize 100% collection of recyclables through manual disassembly.
2. Make clear to whom recycling is to be commissioned, and secure traceability.
3. Promote the conservation of the global environment in collaboration with customers.

Fiscal 2011 results

During fiscal 2011, the Group recycled 16 retired products for a total of 44 tons of recycled resources, achieving 100% collection of recyclables. In addition, the Group has established recycling traceability for each system. This was made possible through the cooperation of customers, intermediaries, and waste disposal businesses across the country. We will further improve work efficiency, reduce the burden on customers, and encourage environmental preservation.

Product recycling flow



Global Warming Prevention

CSR Report 2012

Basic stance

The Advantest Group regards the halt of global warming as an important corporate mission, and works vigorously to reduce greenhouse gas emissions through the delivery of green products and the introduction of innovative business processes.

The Advantest Group is implementing medium to long-term energy conservation measures in alignment with the Japanese government's medium-term goal of reducing greenhouse effect gas emissions by 25% from the 1990 level by 2020. More urgently, the Group is working to develop a system that meets the revised Act on the Rational Use of Energy ordinances and implement energy conservation measures.

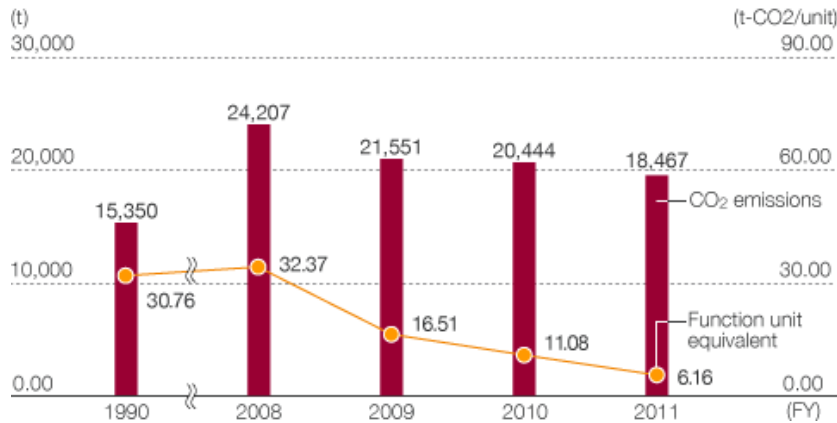
Under the Fifth Advantest Group Environmental Action Plan, the entire Group is working together to implement various activities mainly under the initiative of the Global Warming Prevention Committee to achieve the goal of reducing CO₂ emissions per unit of production* from business locations in Japan by 75% compared to fiscal 1990. Specifically, the Group is working towards improving production efficiency, and reducing waste to achieve both energy savings and cost reductions. In addition, the Group is promoting proper operational control of air conditioning, upgrading of outdated facilities into more energy-efficient models, and the adoption of more environmentally-friendly lighting and LEDs. As a key initiative during fiscal 2011, we succeeded in reducing lead times by half for some of our products. We also reduced power consumption of air conditioners at four business locations by about 220 MWh annually, through updated facilities and proper operational control.

Thanks to these activities, total CO₂ emissions at Advantest in fiscal 2011 decreased from 20,444 tons in fiscal 2010 to 18,467 tons, despite an increase in production volume. In terms of per unit production, our CO₂ emissions were 6.2 tons per unit, a reduction of 80% compared to fiscal 1990.

We will continue with initiatives aimed at reducing waste to achieve energy savings and cost reductions, as well as initiatives aimed at reducing CO₂ emissions.

* Because a 64% reduction was achieved for fiscal 2010, the target was changed from 35% to 75%.

CO₂ emissions per unit of production



ECOCH — employees' CO₂ reduction activities

ECOCH is a program that was started in July 2010 aimed at encouraging employees across the Advantest Group to take the "Eco Challenge," and actively seek what they can do in their daily lives to support environmental conservation.

We have adopted a point system for employees that participate in ECOCH, in which points are awarded and saved based on initiatives including CO₂ reductions, activity reports, and event participation.

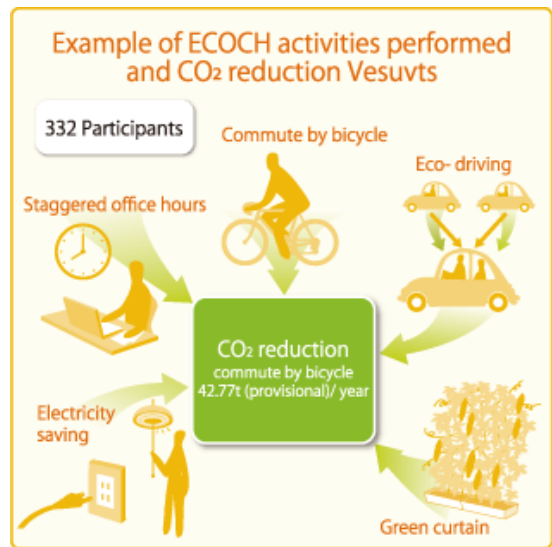
As a result of employee efforts, CO₂ emissions have been reduced by a total of 42.8 tons since the program was launched as of the end of March 2011. When thinking in terms of trees, these emissions are equivalent to the amount that is absorbed by a five hectare forest of 80-year old cedar trees.



ECOCH Green Curtain Contest winner

A Green Curtain Contest was held as an energy conservation contest during the summer and winter of fiscal 2011, and as a result a large number of our employees were able to enjoy participating in environment conservation activities. The goal of ECOCH is for each and every employee of the Advantest Group to be able to proudly say

that they are helping conserve the environment. As we work towards this goal, we will encourage active participation in activities and events through fiscal 2012 as well.



Reducing the amount of energy used in production by shortening tester lead time

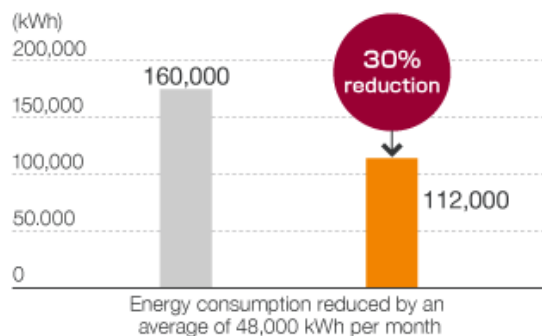
The Advantest Group commenced activities in October 2011 aimed at reducing its environmental footprint in production activities while strictly adhering to deadlines and reducing inventory assets.

As the key measures in these activities, we have worked to identify the causes of delays in each part of the production process and studied measures to eliminate these delays. For the integrated test process, we worked to streamline the number of times the automatic testing program is executed and conducted measures to guarantee 100% all necessary members.

As a result of these efforts, a 30% reduction in lead time in the integrated test process was achieved for three types of mass production testers, and power consumption in production was reduced by a monthly average of 48,000 kWh.

During fiscal 2012, we will work to apply these successes to other models, in line with plans aimed at reducing lead times by an additional 20%.

Graph of energy consumption reduction due to reduced lead times in mass production



Activities aimed at strictly adhering to deadlines in handler production

With the goal of strictly adhering to deadlines in handler production, the Advantest Group conducted activities aimed at ensuring a manufacturing-led approach for the M4841 Dynamic Test Handler, as an initiative for reducing lead times. Because these initiatives encourage streamlining in all parts of the production process, we started off by reconsidering the work unit.

Because in some cases one work unit required multiple work units in the past, indirect man-hours have been required for activities such as looking for parts. We conducted studies on whether the work units were reasonable, and if it was determined they were not, we considered what could be done to condense these work units into one work unit. By ensuring that each and every work unit is a reasonable work unit in this manner, we have enabled parts preparation and assembly work for only the required amount when necessary. We also focused on the effect of packaging and unpacking on the parts picking process, and with the aim of eliminating wasteful packaging and time spent on unpacking, we began studying the purchase of parts sets from April 2011, an initiative that would also contribute to a reduction in our environmental footprint.

Based on an action plan that was prepared based on these studies, we launched parts sets purchasing with the aim of strictly adhering to deadlines, particularly in the handler production division, while contributing to a reduction in our environmental footprint. Parts sets purchasing consists of buying a set of parts for each work unit instead of purchasing individual parts. Based on the work units optimized through the initiatives aimed at the construction of a manufacturing-based framework, for certain parts varieties (cables) a shift has been made to parts sets purchasing for 38% of individual parts purchases.

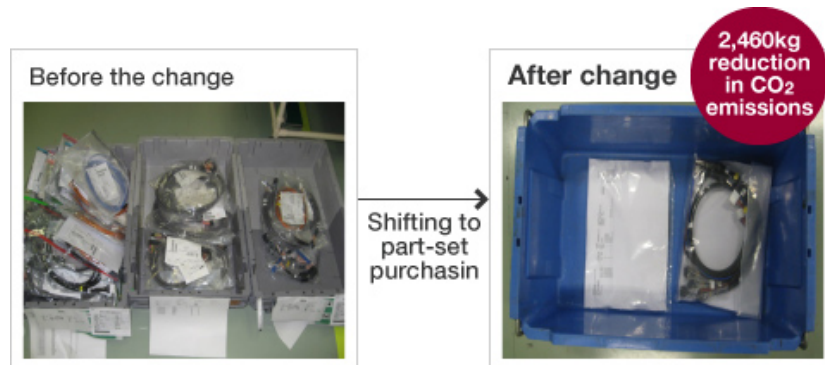
As a result of shifting to parts sets purchasing for 38% of individual parts purchases for certain parts varieties (cables), a 34% reduction in the number of deliveries was achieved. As one of the benefits of this development, based on the fact that we have produced 58 M4841 units since this change was adopted, thanks to the reductions in the time spent in receiving parts, stocking parts, and picking work in the distribution division, a cumulative reduction of approximately 490 man-hours has been achieved.

In addition, introducing the purchase of parts sets has resulted in a cumulative reduction of approximately 330 man-hours for the production division thanks to the reductions in the time spent looking for parts, unpacking parts, and disposing of packaging materials.

The results of these activities are equivalent to a 2,460 kg reduction in CO₂ emissions.

In the future, we will consider rolling these initiatives out for new products and other products in line with our plan to continue with activities that contribute to reducing our environmental footprint while improving product quality and strictly adhering to deadlines.

Cutting lead times in handler production



Improving procurement in insulation materials purchases

Thanks to an improvement in the procurement of materials, the purchasing division achieved a reduction in the man-hours associated with these tasks. For one of the materials (Kaowool) used as an insulation material for our products, because the size and shape varies depending on the use location, a part number was applied to each item and orders were placed by part number unit, even if the use and material were the same. For example, if an insulation material with 24 part numbers was to be used as one unit, we had to issue 24 purchase order forms, regardless of the fact that we would be using the 24 parts as a set.

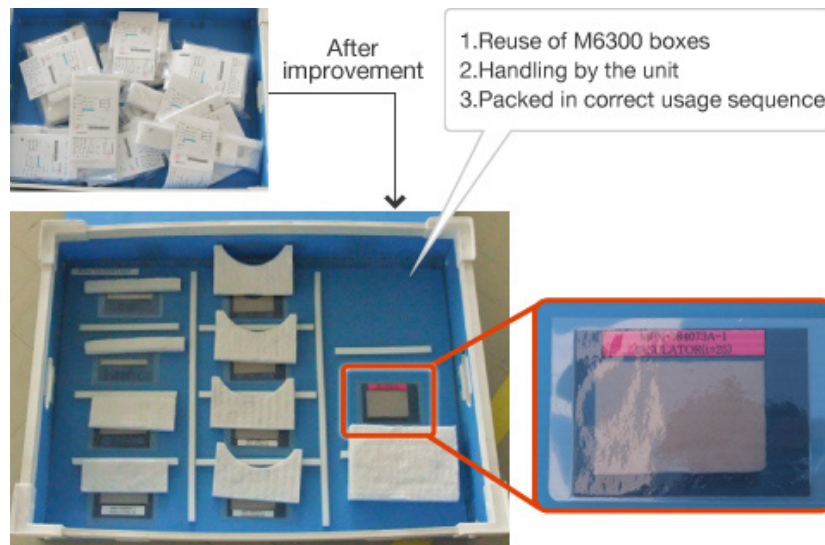
Those 24 parts would have to be individually accepted and put into storage. Afterwards picking would be conducted for each part; the parts would be sorted together as one unit, and then once again put into storage at the intermediate product warehouse. Because system batch processing is required for these two loading and unloading tasks, at the minimum it took two days from initial parts acceptance to dispatching to the production site. In this manner insulation materials are dispatched to the production site. While the materials were dispatched in the form of units, because there were insulation materials of similar size and form mixed in the plastic container, workers had to search for the required materials from this mix.

In response to this situation, suppliers and the Advantest Group worked together to study improvement measures and decided on a system in which batch orders would be placed by unit rather than part number. To make batch orders by unit possible, we changed the delivery form from individual packages to returnable containers. For these returnable containers, photos of the contents were applied and the parts were provided in a set based on the order they would be used at the production site. As a result of this initiative, 85 parts were sorted into 8 units. Because this initiative has allowed deliveries from suppliers to be dispatched to the production site as is, the man-hours required for loading and unloading tasks has been reduced from the 7 hours for 85 parts to 0.75 hours.

In addition, making the initial purchases as a unit has reduced the number of storage batch processes from two times to one time, and the number of days required from parts acceptance to dispatching has been reduced from two days to one day.

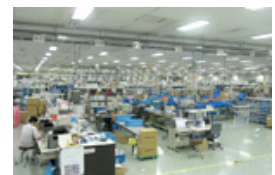
In addition to the reduction in man-hours and time, there is no longer any waste generated by unpacking. Because the parts are provided in a set based on the order that they are used at the production site, workers are no longer burdened with looking for the proper parts. This initiative has also benefited suppliers, as they are no longer burdened with packaging and they have been saved the costs of plastic bags used by individual package.

Delivery form of packaging materials (design)



Reduction of man-hours through improvements in the working environment

To reduce production lead time and man-hours, it is essential to construct a system capable of prompt inspection of the arrival shipped materials, warehouse stocking, and if required, immediate dispatching to the production site. In response to these requirements, the Group has reviewed the layout of its production locations, including deliveries entrances, and improved the working environment. Through this review, we have optimized the flow lines from receiving to warehouse storage and provided a working environment that ensures that there are no bottlenecks. In addition, thanks to initiatives aimed at improving work efficiency including the standardization of receiving and acceptance inspections, and the standardization of the placement of equipment on working desks and stocks of consumable supplies, the number of man-hours used in parts acceptance has been reduced by 20%.

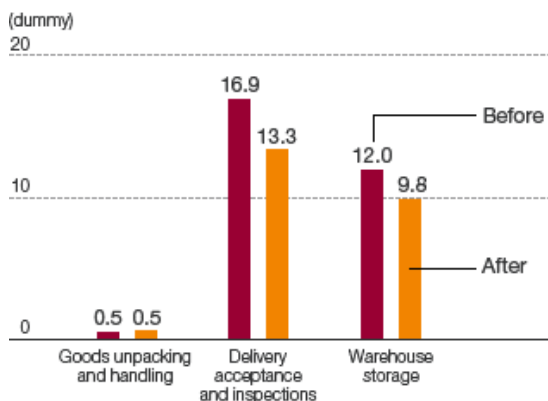


Before the change



After change

Improvement of lead time in each process (600 cases per day)



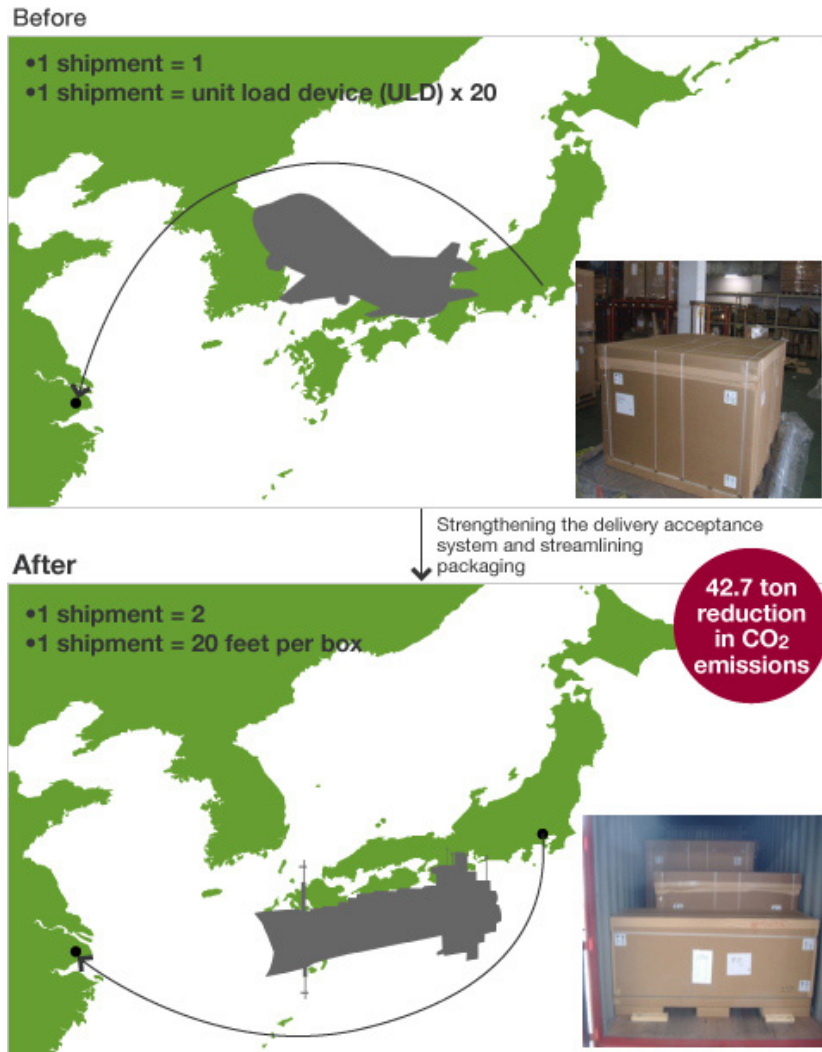
Initiatives to reduce CO₂ emissions in logistics activities

From February 2011, the Advantest Group began shipping over 10,000 components overseas for some of our handler models, which is one of the main products for assembly wiring at local production sites.

Initially goods were shipped by air, with a short transport lead time. However, through enhancements in the local acceptance system and improvements in packaging methods, shipping of the components could be changed from one system per shipment to two systems per shipment. Therefore, we have been able to use container ships with a longer transport lead time.

This change has allowed a reduction from 6.5 tons to 4.4 tons of CO₂ emissions per shipment, resulting in a cumulative reduction of 42.7 tons of CO₂ emissions as of May 2012.

CO₂ reduction in logistics



Efficient Use of Resources

CSR Report 2012

Basic policy

The Advantest Group promotes the "Three Rs" (reduce, reuse, and recycle) with the aim of realizing a recycling-based society. In addition, the Group is strengthening parts separation initiatives that were launched in fiscal 2009, promoting the recovery of valuable materials from waste while ensuring full compliance with all relevant laws and regulations, and conducting proper management and disposal of wastes produced by its business activities.



Recycling disposed-of hard disks through disassembly

From December 2011, the Advantest Group shifted from melting to disassembly as the means of processing disposed hard disks. In the previous processing method, aluminum was the only recyclable material. In contrast, the new method has enabled the recovery of gold, silver, copper, palladium and other precious metals, as well as rare earths such as neodymium magnet. This change has increased the value of disposed-of hard disks in terms of valuable materials, as well as preventing the generation of smoke that is caused by melting, allowing the Group to reduce its environmental footprint.



Disassembly of disposed-of hard disk

We will continue to process disposed-of hard disks through disassembly in the future, while prioritizing the prevention of confidential information leakage.

Waste reductions through the improvement of packaging from suppliers

The parts warehouse division is working on improvements aimed at its must-achieve target of promptly and accurately supplying the production division with the required parts.



Packaging materials (before improvement)



Packaging materials (after improvement)

As a waste reduction initiative, we make proposals as needed to parts suppliers on packaging improvements in order to eliminate wasteful packaging, while taking into consideration the inventory turnover rate of parts and how the parts are stored. During fiscal 2011, we proposed deliveries using returnable containers based on the precondition of no quality issues being caused. By eliminating cardboard and plastic bags, we achieved a 50% reduction in man-hours spent removing and inserting parts, a reduction in wastes, and a reduction in packaging costs for suppliers.

We will continue to make improvements with the cooperation of parts suppliers in the future that are beneficial both in terms of the environment and costs.

Initiatives to reduce packaging materials in logistics activities

From February 2011, the Group began shipping production components to overseas production bases. In the beginning, one shipment was made per shipment to improve productivity at local production bases, and over 10,000 components were shipped as separately packaged units. Load efficiency was very poor under this system, and we used approximately 40 reinforced cardboard sleeve boxes sized 120 cm x 200 cm x 130 cm and approximately 140 cardboard boxes sized 70 cm x 43 cm x 34 cm (total use was about 1,173 m²) for one shipment.

Packaging improvements were made in response to this issue, in which packaging boxes best suited to the sizes of components were created, and an original system using a bar code reader was adopted to make it easy to conduct searches to identify which components are contained in each outer box and cardboard box and what system the components would be used for.

As a result, packaging by unit is no longer necessary and it is possible to use efficient boxes that match the sizes of components. This initiative has reduced the number of reinforced cardboard sleeve boxes per shipment from 40 boxes to 10 boxes, and reduced the number of subdivided cardboard boxes from 140 boxes to 40 boxes, as a result reducing the amount of cardboard used per shipment from 1,173 m² to 314 m². As of May 2012 we have achieved a total cardboard reduction of 18,000 m².

Initiatives to reduce packaging materials

Before



- 1 package = 1 unit
- Alignment at a set size not possible due to varying box shapes
- Poor load efficiency due to many irregularly-shaped boxes

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After



- 1 package = multiple unit
- Increased use of fixed-size boxes
- Shift made from irregularly-shaped outer covers to fixed-shaped covers for improved load efficiency

New design and system established for packaging materials

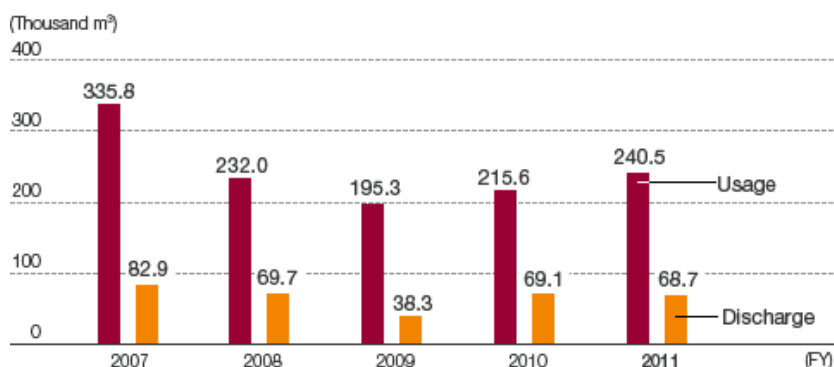
Effective utilization of water resources

The Group's production process consists mainly of assembly, adjustment, and inspection, and does not require as much water as typical manufacturing processes. The majority of the water used at the company is for air conditioners, kitchens, toilets, and consumption.

During fiscal 2011, we prioritized energy saving measures as one of our most important environmental activities due to the power shortages caused by the Great East Japan Earthquake. In line with this priority, we sprinkled water on roofs and walls during the summer in an initiative aimed at making it possible to spend a cool and comfortable summer using less electric power. When water is sprinkled on roofs, heat vaporization causes the indoor temperature to decrease in the rooms directly under the roofs on top floors. As a result of this initiative the amount of water consumption increased 12% year on year to 240.5 thousands m³ for fiscal 2011.

We plan to use water in the same manner in fiscal 2012 in order to save energy. We will consider initiatives that will allow us to use water as efficiently as possible, such as reviewing air-conditioning operations and promoting water conservation activities that each and every one of our employees can participate in.

Water consumption and discharge



Environmental Risk and Chemical Substance Management

CSR Report 2012

Basic policy for environmental risk management

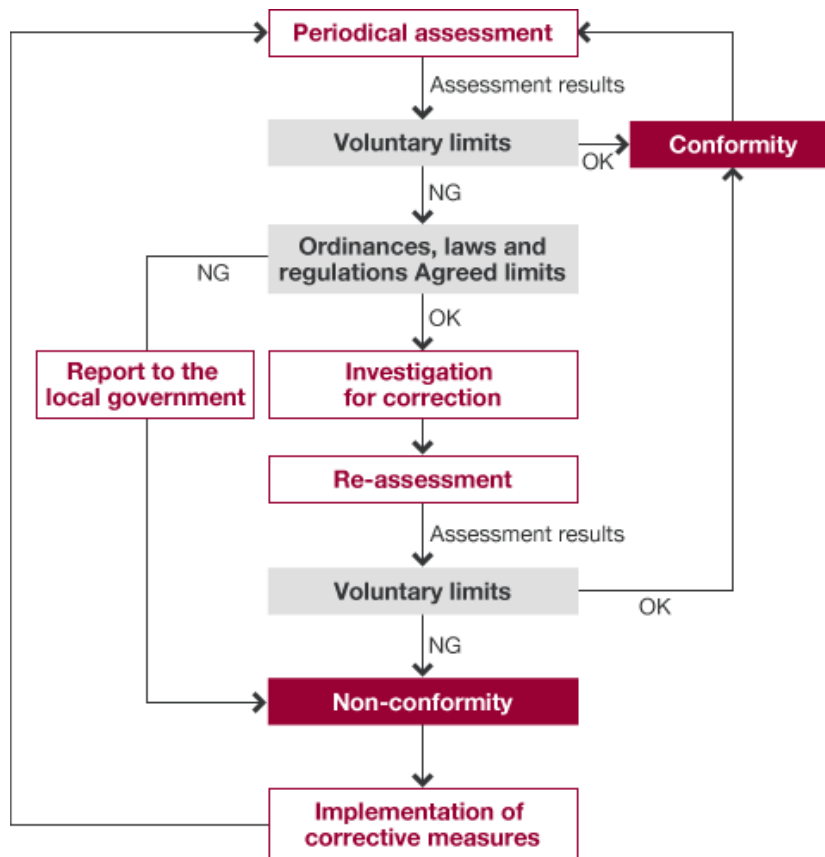
One of our corporate responsibilities is reducing our environmental footprint and preventing environmental pollution or other environmental risks. At Advantest Group, we operate, and monitor and assess the environmental impact of, equipment that may affect the environment based on our own voluntary limits, which are tougher than the legal requirements.

In addition, to ensure prompt responses to accidents, we have developed rules and a management system to respond to environmental risks. These include operation manuals for equipment and chemical substance emergency procedures.

Moreover, for employees and contractors engaged in particularly high risk operations, we regularly provide special training and emergency drills so that they can act quickly in emergency situations.

As a result of these initiatives, we had no environmental accidents or complaints during fiscal 2011.

Business location compliance management



Emergency drills and test scenarios

The Advantest Group prepares and follows operational manuals for equipment and tasks with high environmental risks. As of March 2012, no major accidents have occurred.

During fiscal 2011 at the Gunma R&D Center, emergency drills and test scenarios that include drill time targets were prepared with the aim of responding even more promptly in response to environmental risks. For example, if mistakes are made when oil is supplied to underground tanks and an oil leak results, there is the risk of the leaked oil flowing into the drainage structure and polluting the environment outside our business premises. To prevent an increase in environmental pollution, effective countermeasures must be put into place before the leaked oil flows into the drainage structure. To address this issue, in addition to our standard emergency drills, we have conducted tests to see whether these countermeasures are actually effective. First, in a test using water in place of oil, the time until the liquid flows into the drainage structure and the time it takes for the countermeasures to become effective were measured to establish the amount of time required for accident prevention. Afterwards, it was verified where the emergency response device should be installed to ensure prompt completion of the countermeasures, and emergency drills and test scenarios were conducted with the shortest routes and target times clearly defined.



Emergency drill

We plan to roll out this initiative to domestic business locations during fiscal 2012 as we work to strengthen risk management.

Basic policy for chemical substance management

We are working to ensure safety management and compliance with laws and regulations in the use and storage of chemical substances used at business locations at the Advantest Group.

To this end, we have adopted a chemical substance management system. Based on this system, chemical substances are registered, safety reviews are conducted, design that supports input/output control and laws and regulations is adopted, and the material safety data sheets (MSDS) that are necessary for the safe handling of chemical substance have been made available for inspection at any time.

In addition, for strengthened risk management and chemicals substance management, we are constructing a safety training system, and conducting audits and providing guidance through the corporate chemical management division to ensure the safety of stored chemical substances to further enhance our safety control system.

Furthermore, we plan to build up our global management system as we aim to achieve the same level of risk management overseas as in Japan.

Strengthened chemical substance management

Our chemical substance management system is capable of container-by-container control of chemicals, as well as flexible control in accordance with the control level required for each substance by various laws, such as the Pollutant Release and Transfer Registers (PRTR Act), Poisonous and Deleterious Substances Control Act, and Industrial Safety and Health Act. We also provided safety training to all relevant personnel including employees who handle chemical substances on a daily basis. The training provides basic knowledge on the hazards and toxicity associated with each chemical substance, using Material Safety Data Sheets (MSDS) and visual aids developed specifically for chemical substance management training. This extensive safety training has resulted in increased safety awareness among users and intensified management at each site.



Strict chemical management



Container-by-container management

Advantest introduced a new chemical substance management system based on hazard levels in fiscal 2011 to tighten and enhance the efficiency of controls for chemical substance safety. Chemical substances are classified into four categories depending on the degree of danger and hazard they pose, and managed according to the new standards revised for each level (such as locked storage, input/output control, periodical inventory control).

We also unified labeling of stored chemical substances so that they can be identified clearly at a glance.

In addition, the safety management system was enhanced. Specifically, operations chiefs and other qualified personnel have been deployed, and the safety training system has been upgraded. In particular, staff members at departments in which highly dangerous and hazardous chemical substances are handled are required to receive special training based on the specific manner in which the chemical substances are used. We will continue to strengthen our safety control system by conducting audits and providing guidance through the corporate chemical management division to ensure the safety of stored chemical substances.

Control levels of chemical substances

Level	Description	Locked storage	Input/output control	Inventory control
4	Substances that need to be registered with the government when handled due to their extremely high toxicity and impact on society Examples: narcotics, stimulants	○	○	As per laws and regulations
3	Substances that need to be reported when lost due to their extremely high toxicity Examples: poisonous and deleterious substances	○	○	Monthly
2	Combustible, corrosive, or chronically toxic substances Examples: organic solvents, acid, alkali substances	○	○	Semiannually
1	Substances with no hazards specified above Examples: solder, fluorinert, adhesives available on the market, lubricants	-	○	-

Utilizing disposal methods of chemical substances based on the business location

At R&D Centers and other locations where the volume of chemical substances used is not so large, waste chemical substances are stored at each department, and handed over to specialized firms semiannually for disposal after confirmation of the class and volume.

Meanwhile, the large volume of low-risk waste chemical substances generated after use in production at factories are stored together under the control of the chemical substance manager and waste manager of each factory in waste storage facilities and disposed of after a fixed period of time.



Separate management of waste chemical substance

Materials and Waste

CSR Report 2012

Materials and waste

Materials and waste (FY2011)

Japan facilities

INPUT			
Energy	443,187,826 MJ	Raw materials	
•Electricity	41,910 MWh	•Steel	754.7 t
•Heavy oil	436.9 kl	•Aluminum	203.5 t
•Gas	390,520 m ³	•Copper	93.2 t
		•Resins	104.7 t
		•Others	101.7 t
Packing materials		Others	
•Wood/plywood	0.1 t	•Water	240,467 m ³
•Cardboard	382 t	•PRTR-listed chemical substances	2.1 t
•Others	44.8 t		

Research/development/desing	Materials procurement	Assembly/adjustment/inspection	Packaging/logistics	Sales & Customer-support
Focus activities •Developing environmentally friendly products	Focus activities •Green procurement with environmental laws and regulations (RoHS Directive, REACH requirements)	Focus activities •Reducing waste •Energy efficiency •Preventing water pollution •Environmental risk management	Focus activities •Reducing packaging materials •Shift to forms of transport with a lighter •More efficient distribution environmental impact	Focus activities •Reducing packaging materials •Raising proportion of low-emissions vehicles in company car fleet •Providing a product recycling system

OUTPUT			
Waste		Greenhouse gases	
•Total waste	250.0 t	•CO ₂	18,467.2 t-CO ₂
•Permanent disposal	1.7 t	•NO _x	1.3 t
•Recycling rate	99 %	•SO _x	0.8 t
Products		Others	
•Total sales	141 billion yen	•Wastewater	68,690 m ³
•No. of units of green products sold	902	•PRTR-listed chemical substances	1.6 t
		•BOD	0.6 t
		•COD	0.3 t

Overseas subsidiaries

INPUT			
•Energy	199,524,914 MJ	•Water	15,754.6 m ³
		•Office-use paper	6.0 t

OUTPUT			
•CO ₂	8,905.4 t-CO ₂	•Recycling rate	75.3 %
•Total waste	46.6 t		

Environmental Accounting Results

CSR Report 2012

Japan

Environmental conservation costs

Scope: All business locations in Japan; period: April 2011 to March 2012; Unit: ¥1,000

Category	Major activities	Capital investment		Costs	
		FY2010	FY2011	FY2010	FY2011
1. Business area costs					
(1) Pollution prevention costs	Installation, repair, environmental assessment, and maintenance of pollution prevention facilities	0	0	123,534	122,282
(2) Global environmental conservation costs	Installation of energy-efficient equipment and facilities	10,000	16,820	144,638	121,524
(3) Resource circulation costs	Disposal and recycling of waste; construction of water supply facilities	0	0	64,131	73,293
2. Upstream / downstream costs					
	Green procurement and purchasing; introduction and development of recycled packaging materials	0	0	0	0
3. Administrative costs					
	Operation of Environmental Management System; management of the biotope; disclosure of environmental information	1,169	0	225,171	221,847
4. R&D costs					
	R&D of environmentally friendly products and production technologies	0	0	9,641	6,471
5. Social activity costs					
	Tree-planting in the surrounding areas	0	0	4,050	2,225
6. Environmental remediation costs					
	Environmental remediation; penalties or litigations concerning environmental conservation	0	0	0	0
Total		11,169	16,820	571,165	547,642

Environmental conservation benefits

Economic benefits

Scope: All business locations in Japan; period: April 2011 to March 2012; Unit: ¥1,000

Category	Major activities	Benefit amount	
		FY2010	FY2011
1. Energy cost savings	Installation of energy-efficient equipment and facilities; implementation of energy-saving measures	69,782	65,924
2. Revenue from sale of recycled materials	Sale of recovered metals, etc.	33,601	40,394
3. Packaging material cost savings	Introduction of reusable packaging materials and returnable containers	--	--
4. Waste disposal cost savings due to reduced waste volumes	Reduction of wastewater disposal costs through the use of wastewater treatment facilities	46,350	40,885
5. Publicity benefits from media coverage	Coverage by newspapers	15,375	6,054
Total		165,108	153,257

Physical benefits

Scope: All business locations in Japan; period: April 2011 to March 2012

Category	Major activities	Volume reduced / effectively used	
		FY2010	FY2011
1. Power consumption reduction	Installation of energy-efficient equipment and facilities	1,829(MWh)	1,554(MWh)
2. Heavy oil consumption reduction	Installation of energy-efficient equipment and facilities	354(kl)	364(kl)
3. City gas consumption reduction	Installation of energy-efficient equipment and facilities	307,000(m ³)	307,000(m ³)
4. Energy consumption reduction	Installation of energy-efficient equipment and facilities	45,829,674(MJ)	43,479,958(MJ)
5. CO ₂ emission reduction	Installation of energy-efficient equipment and facilities	2,346(t-CO ₂)	2,268(t-CO ₂)
6. Effective utilization of resources	The total quantity of metals, paper, waste plastics, and other resources recycled	539(t)	366(t)
7. Effective utilization of waste	The percentage of waste recycled to the total volume of waste generated at sites	97(%)	99(%)
8. Reduction of the quantity of purchased packaging materials	Introduction of reusable packaging materials and returnable containers	–	–

Customer benefits

- FY2011 No. of units green products sold : 902

Overseas

Environmental conservation costs

Scope: 10 overseas affiliates; period: April 2011 to March 2012; Unit: ¥1,000

Category	Major activities	Costs
		FY2011
1. Global environmental conservation	Installation of energy-efficient equipment and facilities; improvement of facilities	11,172
2. Resource recycling costs	Disposal of waste	1,810
3. Administrative costs	Operating environmental management; environment-related seminars	2,699
4. Social activity costs	Clean-up activities in the surrounding areas; donations to civil society organizations	1,513
Total		17,194

Environmental conservation benefits

Economic benefits

Scope: All business locations in Japan; period: April 2011 to March 2012; Unit: ¥1,000

Category	Major activities	Benefit amount
		FY2011
1. Power cost reduction	Installation of energy-efficient equipment and facilities; implementation of energy-saving measures	1,307
2. Revenue from sale of recycled materials	Sale of recovered metals, etc.	120

Physical benefits

Scope: All business locations in Japan; period: April 2011 to March 2012

Category	Major activities	Volume reduced
		FY2011
1. Power consumption reduction	Installation of energy-efficient equipment and facilities	133,470kWh
2. CO ₂ emission reduction	Installation of energy-efficient equipment and facilities	33.5t-CO ₂

Environmental Related Data

CSR Report 2012

Environmental accounting results

Japan

- ▶ [Environmental accounting results\(fiscal 2011\)](#)
(PDF: 39KB)
- ▶ [Environmental accounting results\(fiscal 2010\)](#)
(PDF: 45KB)
- ▶ [Environmental accounting results\(fiscal 2009\)](#)
(PDF: 68KB)
- ▶ [Environmental accounting results\(fiscal 2008\)](#)
(PDF: 66KB)
- ▶ [Environmental accounting results\(fiscal 2007\)](#)
(PDF: 66KB)

Overseas

- ▶ [Environmental accounting results\(fiscal 2011\)](#)
(PDF: 35KB)
- ▶ [Environmental accounting results\(fiscal 2010\)](#)
(PDF: 40KB)

Environmental load data

Japan

Scope:Nine major business locations* and business offices

* Gunma R&D Center,Kitakyushu R&D Center,Advantest Laboratories Ltd.,Gunma Factory,Gunma Factory 2,Head Office,Western Japan Office and Kawasaki Office

- ↓ [Electricity consumption](#)
- ↓ [Heavy oil consumption](#)
- ↓ [Gas consumption](#)
- ↓ [Energy consumption](#)
- ↓ [Waste output and recycling rate](#)
- ↓ [Water consumption and discharge](#)
- ↓ [PRTR-listed chemical substances](#)
- ↓ [CO₂ emission and CO₂ emissions per unit of production](#)

Overseas

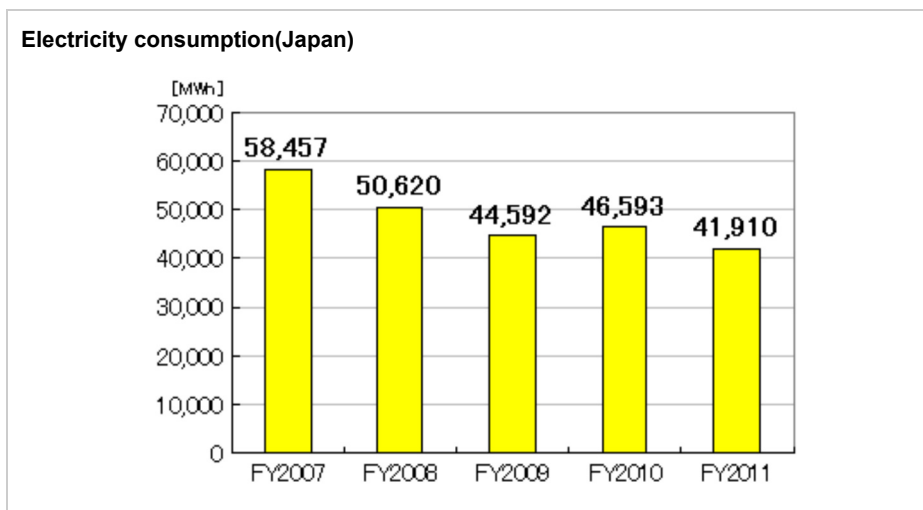
Scope:16 overseas affiliates*

* Advantest America, Inc., Advantest America Corporation, Advantest America R&D Center, Inc., Advantest Europe GmbH, Advantest (Singapore) Pte. Ltd., Advantest (Malaysia) Sdn. Bhd., Advantest Philippines, Inc., Advantest (Thailand) Ltd., Advantest Engineering (M) Sdn. Bhd., Advantest Korea Co., Ltd., Advantest Taiwan Inc., Advantest (Suzhou) Co., Ltd.

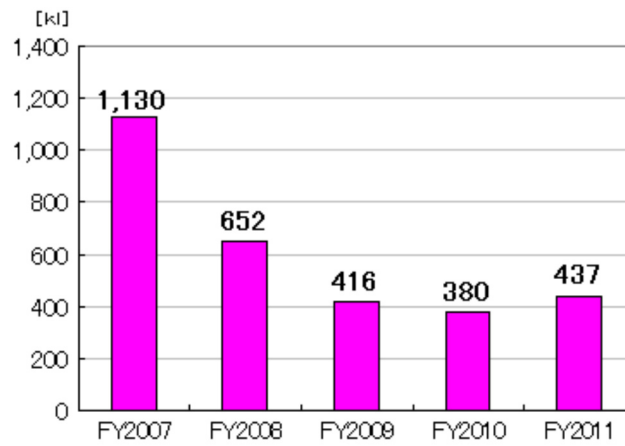
* Impact data of Energy consumption and CO₂ emission is included the former Verigy from fiscal 2011.

- ↓ [Energy consumption](#)
- ↓ [CO₂ emission](#)
- ↓ [Waste output and recycling rate](#)
- ↓ [Water consumption](#)

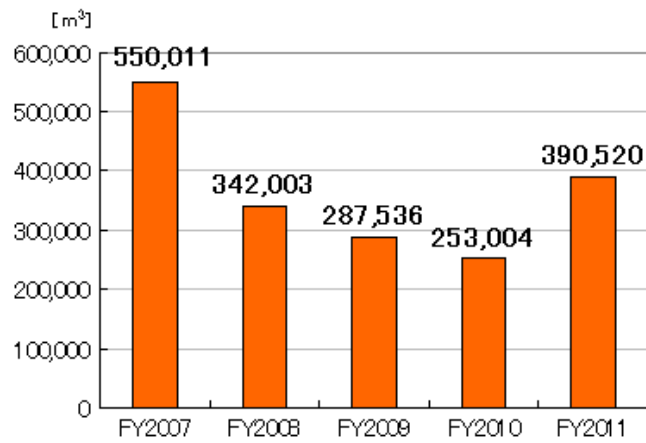
Environmental load graph data



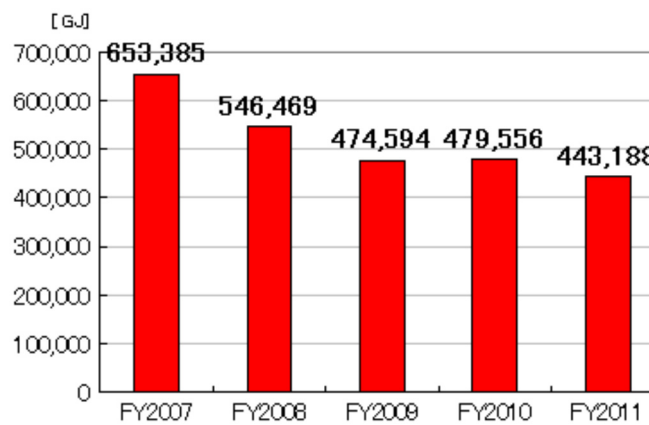
Heavy oil consumption(Japan)



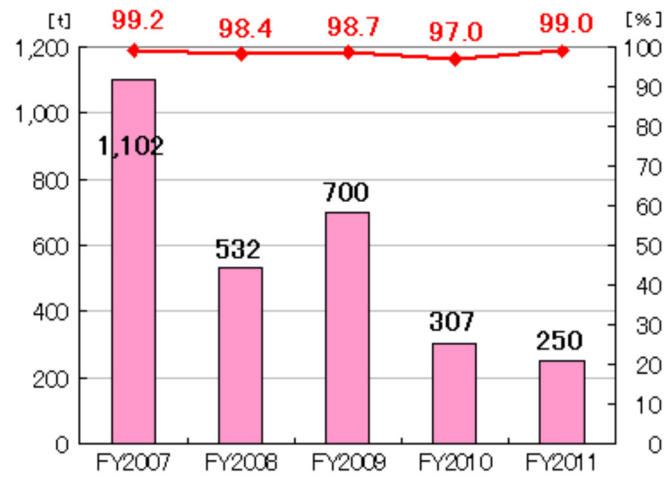
Gas consumption(Japan)



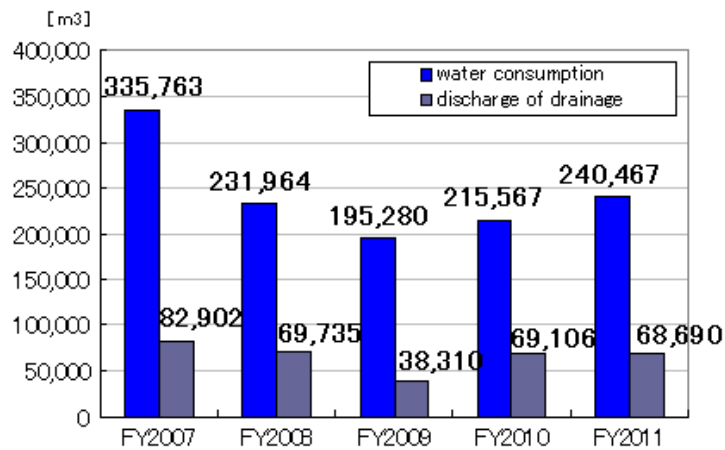
Energy consumption(Japan)



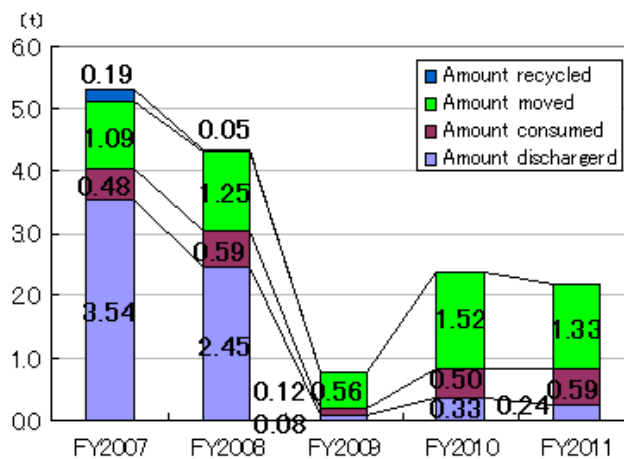
Waste output and recycling rate(Japan)



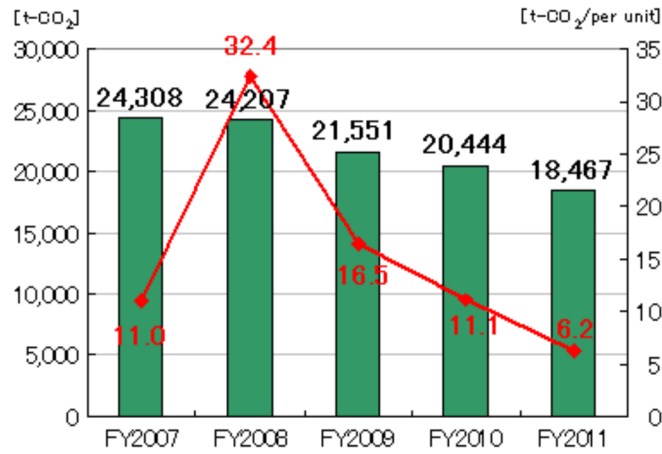
Water consumption and discharge(Japan)



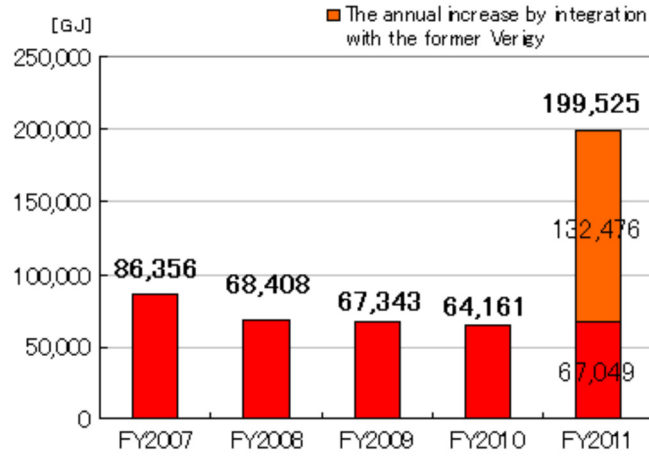
PRTR-listed chemical substances(Japan)



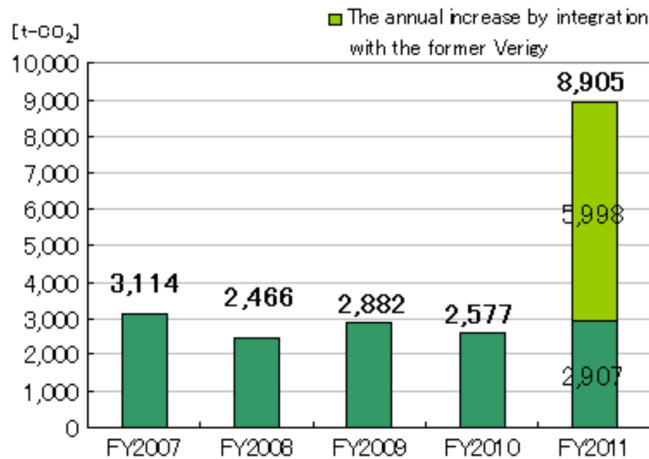
CO₂ emission and CO₂ emissions per unit of production(Japan)



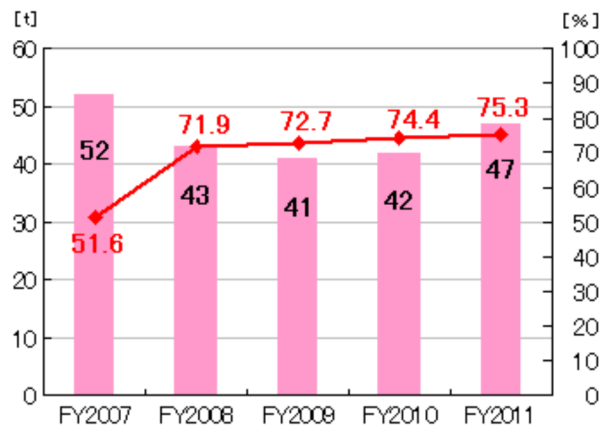
Energy consumption(overseas)



CO₂ emission(overseas)



Waste output and recycling rate(overseas)



Water consumption(overseas)

