

Operations and Strategies

Automated Test Equipment

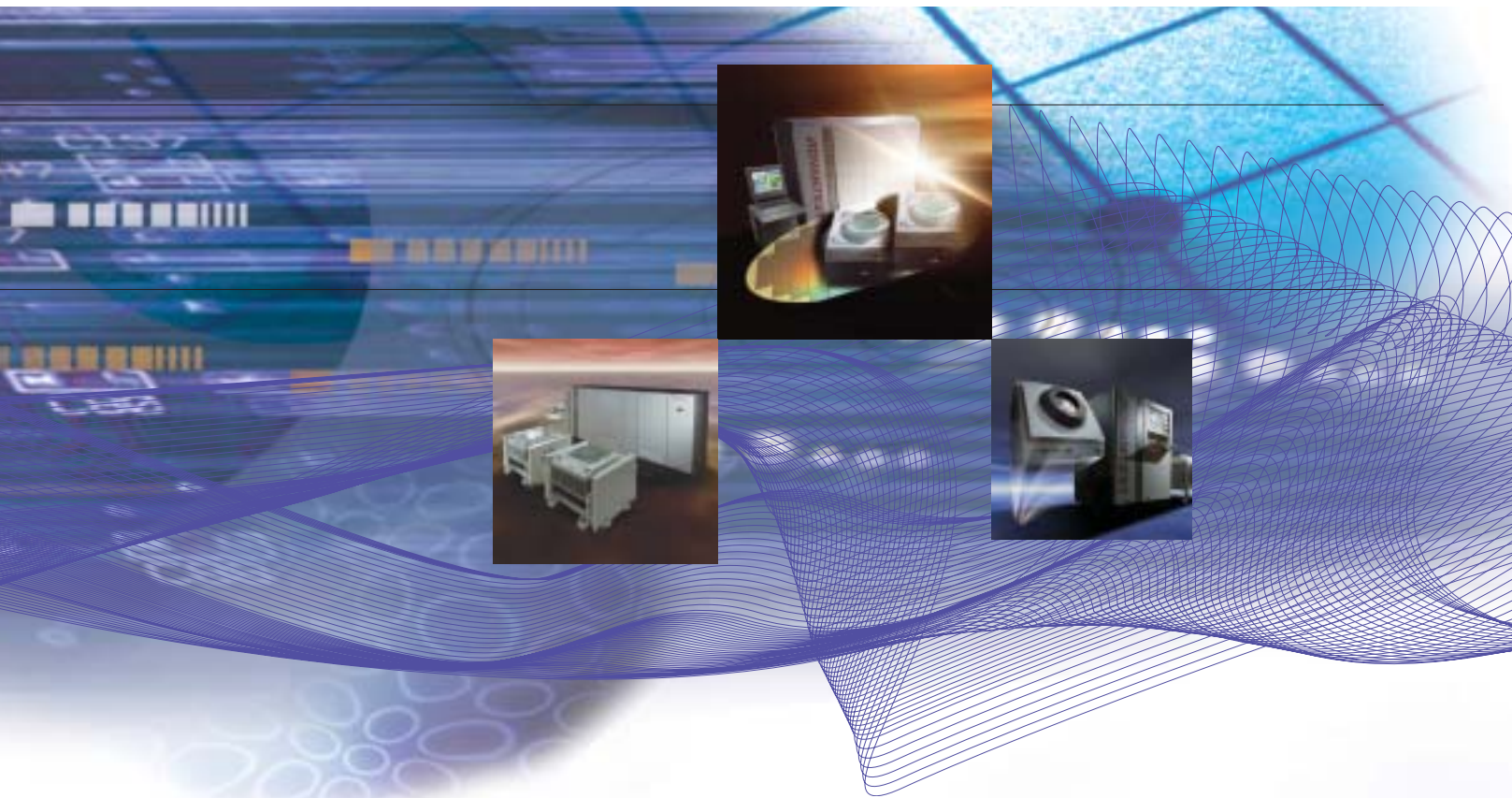
Riding above the waves

Capturing Share of the Growing SoC Semiconductor Test Systems Market

Advantest's strategy in the automated test equipment segment is to maintain and strengthen its market position in memory semiconductor test systems and to strengthen and grow its SoC semiconductor test systems business. SoC semiconductors combine logic, memory, and various other functions on a single chip. We believe that SoC technology will become ever more important because of the increasingly widespread adoption of high-speed Internet connections, advances in wireless communication, and the growing popularity of digital consumer electronics products, such as DVDs and digital televisions.

Expand share of the automated test equipment market

In 2001, Advantest had a majority share, over 60%, of the memory semiconductor test systems market, while its share of the non-memory semiconductor test systems market, including SoC semiconductor test systems, was approximately 11%. We believe the high growth prospects in the SoC market present an important business opportunity for the near future. Advantest is aggressively working to increase sales of its SoC semiconductor test systems in the near future.



Expand product offerings to include a full range of SoC semiconductor test systems

Advantest is focused on offering a full range of SoC semiconductor test system products, from high-end models that can be used in the development of next-generation SoC semiconductors to price-competitive, low-end models. In addition, we are developing test systems compatible with DFT (Design-for-Test) technology, which reduces testing time and costs by incorporating test circuits in semiconductors at the design stage. Also, Advantest has developed in its U.S. R&D center an event-driven tester that can efficiently test the proper functioning of prototype chips under development. Advantest plans to commence sales of this tester in the near future.

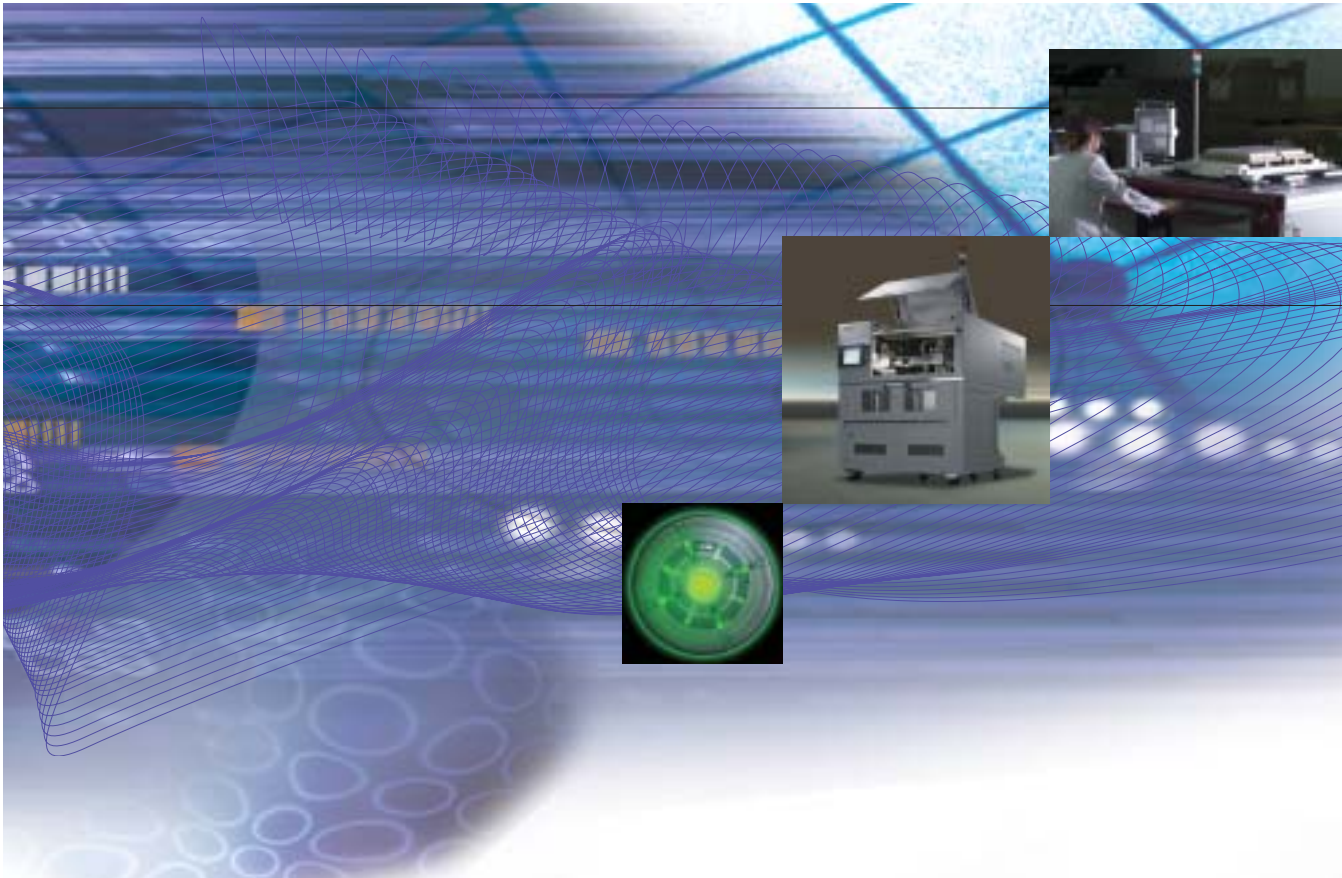
Implement strategies to maintain profitability

Profitability is an important consideration as Advantest works to expand its semiconductor test systems business. Concurrent with its efforts to grow its market shares, Advantest plans to significantly reduce costs by standardizing parts and components and improving efficiency in the

manufacturing process. In addition to our existing hardware business, we are exploring business modules in such areas of business as contract testing, the sale of software applications, and equipment leasing. In order to provide the best solutions to its customers, Advantest plans to increase the hiring of system engineers both within Japan and overseas and to work closely with customers to identify their needs.

Strengthen memory semiconductor test systems business

In recent years, semiconductor manufacturers have increasingly shifted their testing requirements toward front-end testing in an effort to reduce costs. Advantest is focused on capitalizing on this trend by strategically developing and marketing front-end flash memory test systems. We are also seeking to increase sales by introducing test systems that can be used for both the back-end testing of flash memory and front-end testing of DRAM semiconductors. Through these efforts, Advantest hopes to maintain and increase its market position in memory semiconductor test systems both within Japan and overseas.



FA and DI businesses

Advantest is focused on developing and marketing new products in its factory automation (FA) and device interface (DI) businesses. The FA business provides test handlers that automatically convey semiconductor devices being tested to the test systems. The DI business provides device interfaces that connect the semiconductor devices with the test systems.

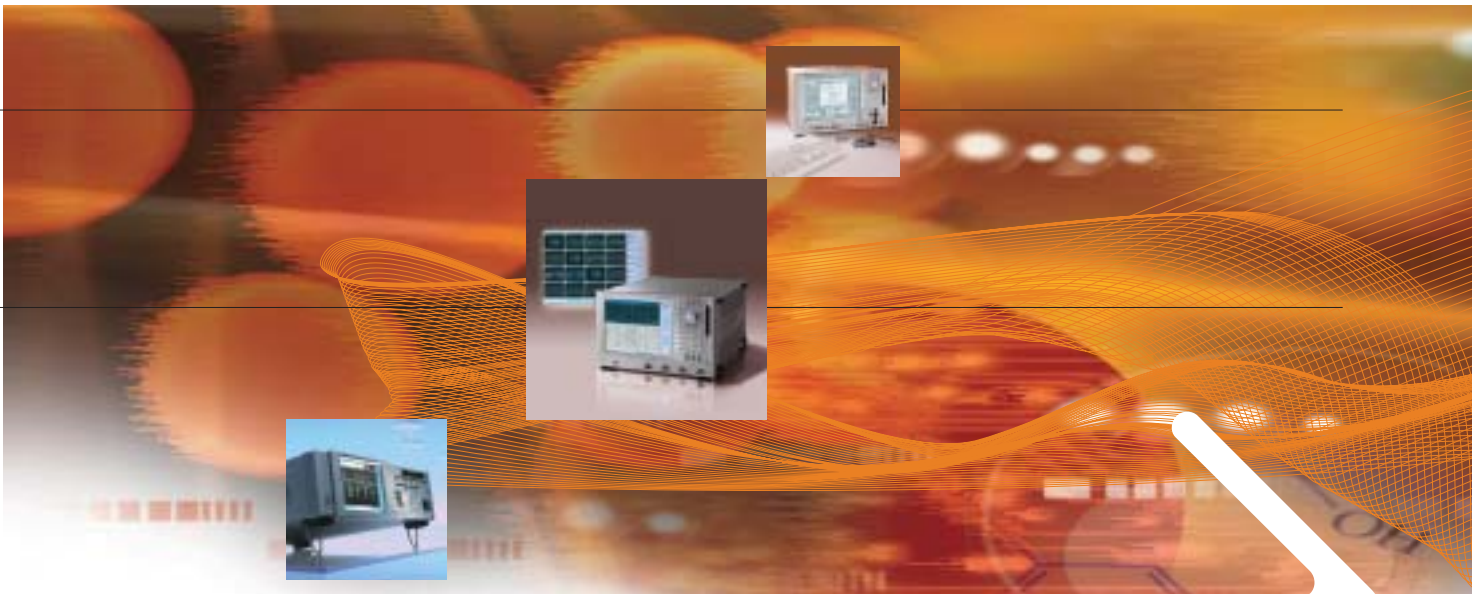
Advantest seeks to differentiate itself from its competitors in the test handler business by addressing the highly specialized needs of its customers. Advantest has introduced memory test handler models capable of handling the high throughput of 7,200 devices per hour. Advantest has also introduced non-memory test handler models that can function at high- and low-temperature settings during testing.

In the DI business, Advantest plans to increase market share by developing products for next-generation semiconductors that require increased precision and speed in testing. Towards this end, Advantest launched its new DI Business Group in November 2001, which has since commenced marketing efforts to receive orders from around the world.

Software

Advantest develops general-purpose and customized software for its automated test equipment. Advantest developed an operating system called "Viewpoint" for its Unix-based SoC automated test equipment. When used in combination with other application software, Viewpoint can generate a variety of test programs and perform the simulated testing of semiconductors at the design stage. We are also developing application software that works with semiconductors incorporating self-test technology. Self-test technology is expected to become more widely adopted in the near future.

Drawing on its technological strengths and strong reputation, Advantest hopes to achieve further growth and profitability in its automated test equipment business by expanding its market share, not only in SoC semiconductor test systems, but also in memory semiconductor test systems and test handlers, DI, and other test equipment-related businesses.



Electronic Measuring Instruments

Riding above the waves

A Customer-Oriented Approach to New Product Development

As communication technologies continue to evolve at a dizzying pace, customers are seeking systematic answers to measuring instrument requirements and solutions that address their advancing technological needs. To meet these demands and expand sales, Advantest is devoting its resources to serving the fiber-optic and wireless communications industries and continuing to develop products based on its WMT system. In order to target its marketing efforts more closely on customers in North America, Advantest has opened a design center in Oregon and commenced the establishment of its North American sales network.

The advantages of the WMT system

Measuring instrument systems based on the WMT concept are comprised of component modules that perform various measuring functions and a platform for installing those modules. This systematic platform allows expansions or upgrades to be made to a measuring instrument by simply adding or replacing expansion modules. By using the WMT system, we

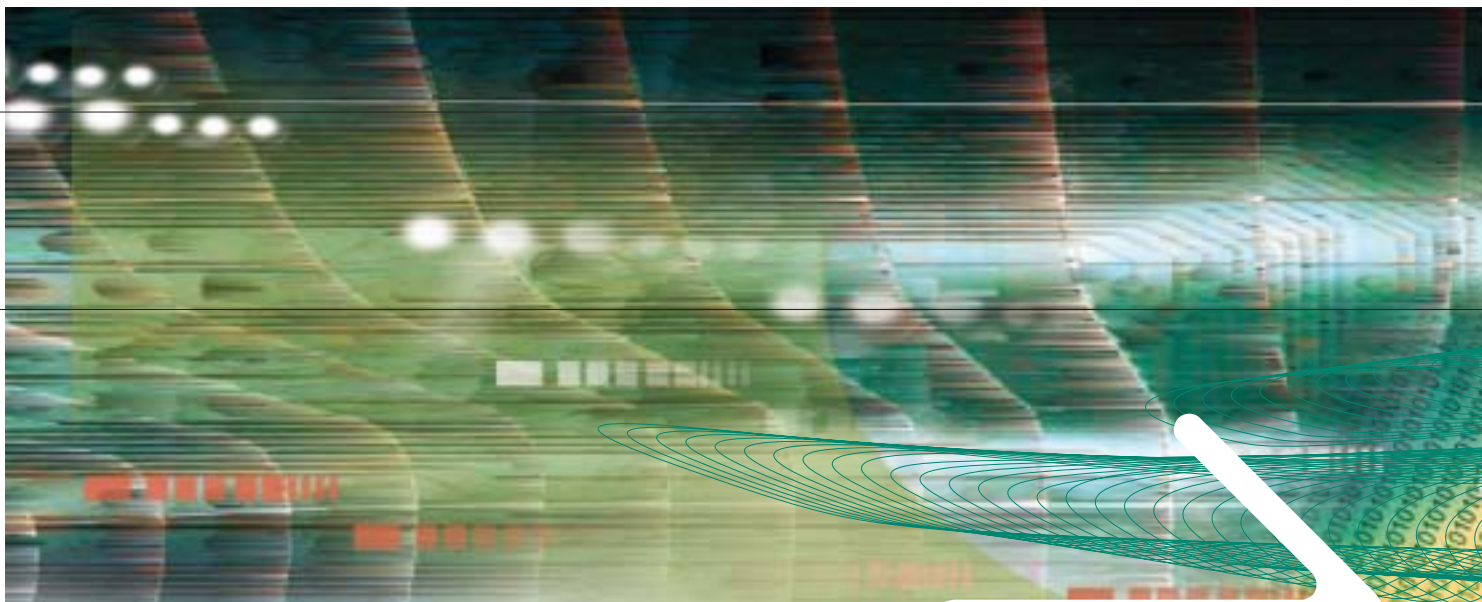
can reduce development and manufacturing costs and shorten delivery times while reducing upgrade costs to our customers and allowing us to respond quickly to customers' needs.

Advantest has incorporated the WMT system into both its radio frequency (RF) component measuring instrument, which boasts the world's fastest measuring speed, and its *Bluetooth™-compatible tester. Advantest commenced sales of both products in the second half of fiscal 2001.

* Bluetooth™ is a trademark of Telefonaktibolaget LM Ericsson in Sweden.

Advantest America Measuring Solutions, Inc.

In April 2002, Advantest established a wholly owned subsidiary, Advantest Measuring Solutions, Inc., in Edison, New Jersey, to serve as a base for the sale of measuring instruments in the United States. Through this subsidiary, Advantest will launch its own distribution channel in the United States to enable itself to respond quickly to a full range of customer needs and provide comprehensive measuring solutions, thereby improving customer satisfaction.



Research and Development

Riding above the waves

Aggressive, Continuing Investment in R&D

It has been Advantest's goal since its foundation to support the development of cutting-edge technology. We believe that research and development plays the most important role in driving the future growth of the Company.

Advantest maintained its spending on research and development in fiscal 2001, even as it implemented restructuring measures and significant cost cuts in response to reduced sales during that period. Advantest's research and development expenses were ¥28.5 billion (equivalent to 10% of net sales) in fiscal 2000 and ¥26.7 billion (equivalent to 28% of net sales) in fiscal 2001. Advantest plans to maintain its commitment to research and development in the future.

Research and development facilities

In April 2001, Advantest moved its Measuring Instrument Research and Development Group to its Gunma R&D Center, which serves as the center of Advantest's research into and development of automated test equipment. We believe this combination will facilitate the exchange of knowledge



and personnel and foster a dynamic synergy between the two operations.

In June 2002, Advantest launched its Kitakyushu R&D Center. Through this R&D Center, Advantest plans to use the strategic location of Kitakyushu to provide personalized support services for customers in Asia.

In July 2001, Advantest established the Advantest America Design Center, Inc., in Oregon. The Design Center will gather information on the latest technological developments and help Advantest recruit qualified personnel in the United States, which is the world's largest market for measuring instruments. With the addition of this Design Center, Advantest is now able to perform a full range of business functions, from marketing and product planning to research and development and product launching, all within the United States.

Advantest's research and development operations have now expanded to seven facilities worldwide: four in Japan and three overseas.

Research and development in nanotechnology

Advantest is also committed to research and development in nanotechnology.

Advantest's latest electron beam lithography system uses an extremely fine electron beam to etch circuit patterns directly onto a silicon wafer instead of using the expensive masks required by conventional optical exposure equipment. In addition, the system can be used in the development as well as production of next-generation circuitry with line widths of under 0.10 microns. This system is already used in high-speed gallium arsenide communication devices and is expected to find wide application in giant magnetoresistive (GMR) heads used in hard disks.

Advantest will continue its aggressive research and development activities in order to provide state-of-the-art solutions to its customers.



Global Logistics

Riding above the waves

Global Delivery in 48 Hours: Significant Reduction in the Delivery Time of Parts

The ability to swiftly supply our global customers with replacement parts forms a key element of our customer service.

Advantest has thus far focused on providing prompt and immediate access to information by offering category-specific troubleshooting assistance through the Internet and regional call centers. In striving to speed up maintenance support, shortening the period taken for delivery to our international customers has become indispensable.

To this end, we formed a business alliance with FedEx Corporation and have improved the international delivery of replacement parts. As a result of simultaneously outsourcing inventory management and the delivery of replacement parts, we have substantially reduced delivery time, to within 24 hours from the receipt of an order in Asia and within 48 hours in the Americas and Europe. Having established a framework that has cut delivery times by more than half has further allowed us to improve customer service.



Environmental Activities

Riding above the waves

Wide-Ranging Environmental Programs Protect Future Generations

In the environmentally conscious era that is the 21st century, Advantest has been actively implementing environmental conservation measures. In January 1993, we enacted the Advantest Charter on the Global Environment as our guideline. Since then, the Advantest Group has ensured that its business operations are harmonious with the environment and has declared the Group's commitment to furthering environmental conservation measures.

We have undertaken a variety of initiatives that have begun to produce positive results. Initiatives include the implementation of measures to conserve the indigenous Japanese red pine forest at the Advantest Laboratories in Sendai, use of lead-free solders, implementation of environmentally friendly packaging, re-use of plastics and metal scraps, establishment of garbage decomposition sites, use of biotopes at the Gunma R&D Center, and the development of products that are easier to take apart and recycle by applying the results of environmental analysis. In addition, we have put into effect policies within our administrative departments that show our commitment to the environment. These policies include the purchase of environmentally friendly office products and supplies and the usage of hybrid and natural-gas-fuelled vehicles as company cars.

By more efficiently using energy and resources in the manufacturing of our products and spreading environmental awareness throughout our fundamental technology research facilities, we hope to continue our broad involvement in environmental conservation.

Advantest Charter on the Global Environment (an excerpt)

We created the Advantest Charter on the Global Environment in reaffirmation of the principle that business must act in harmony with the environment. This charter is a multifaceted and comprehensive action plan for fulfilling our responsibility as a global corporation.

Environmental Policies

- 1) Reflect concern for the environment in every aspect of our business
- 2) Effectively utilize resources and energy
- 3) Protect the environment through the use of our advanced technologies
- 4) Cooperate with the government and local communities on environmental issues
- 5) Heighten awareness of environmental problems