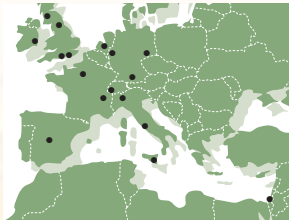


Worldwide Locations

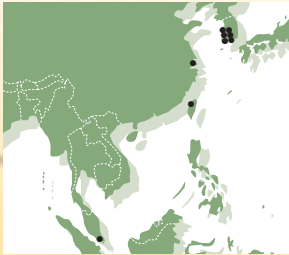
(Customers' on-site offices included)



North America



Europe



Asia/Pacific



Japan



Tokyo Electron Texas, Inc., shown with Tokyo Electron America, Inc.'s head office and parts and training center in the background, produces advanced CLEAN TRACK coater/developers.

Semiconductor Production Equipment

In 1998, the market for semiconductor production equipment suffered the most severe decline since 1986, due to restrained investment brought about mainly by an oversupply of DRAMs. The market contracted sharply compared to the previous fiscal year, as very few new fabs were constructed to increase production capacity. Most investment was limited to replacing equipment in existing fabs for chip shrinkage.

These trends affected Tokyo Electron, with orders dropping steadily over the first three quarters of the fiscal year. As a result, consolidated net sales of the Semiconductor Production Equipment (SPE) division decreased 36.3 percent year-on-year to ¥242,240 million. Orders bottomed out in the third quarter and began a modest recovery.

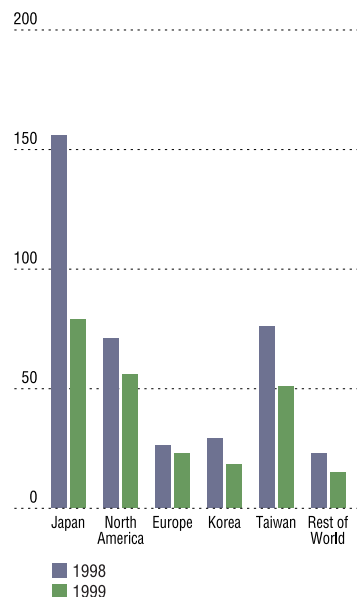
Review by Geographic Region

Tokyo Electron is one of only a few equipment suppliers in the world with a truly global infrastructure. In 1994, we started rapid expansion of direct operations, and in the past five years, have dramatically raised the ratio of our overseas sales to total sales. As a result, we were able to soften the impact of the decline in the Japanese market — the largest decline of any region — with penetration into the U.S. logic market and other areas. By region, net sales in Japan, Korea and Taiwan fell sharply due to excess manufacturing capacity and a decline in DRAM prices, while net sales in the United States and Europe dropped slightly. However, we are now seeing signs of growth in each of these markets, as outlined below.

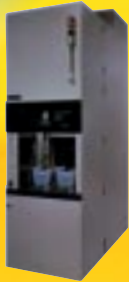
In Japan, chip makers have already finished reviewing their product strategies and are starting to move toward product mix manufacturing, including System LSIs. We expect this shift to stimulate capital spending in the future. In the United States, while there has been some shift toward foundries, the logic market continues to grow steadily. Tokyo Electron's penetration into the U.S. market is proceeding smoothly, and our presence there is increasing annually. In Europe, investment from local European and U.S. chip manufacturers has become brisk. We will continue to focus on this market, as many of the world's leading chip manufacturers have production facilities in this region. In Korea, chip makers resumed making large investments in next-generation DRAMs from the beginning of 1999, and Tokyo Electron's orders have started to increase accordingly. In Taiwan, factory utilization rates have recovered, and foundries have started to invest aggressively. In addition, Taiwanese LCD manufacturers have been boosting orders from the end of 1998 in response to a predicted supply shortage in TFT-LCD panels. Tokyo Electron will benefit from these trends as we have already built a firm position in this market.

SPE Sales by Geographic Region

(¥ Billions)



Sales of third-party products imported into Japan are included in Japan sales.



ALPHA (α)-BSE series vertical diffusion/oxidation and LP-CVD systems are designed to meet process requirements for 0.18 micron device technologies.



UNITY®-CVD metal CVD systems offer a very low particle level and long maintenance cycle through the use of plasma-less cleaning for Ti, TiN and Ta₂O₅ processes.



UNITY® Ver. IIe series etch systems meet the requirements of 0.18 micron and below production lines, and can be configured with various plasma sources for poly/oxide etching.



The UW200-Z carrierless cleaning system enhances the reliability of carrierless wafer handling. It features reduced size and energy consumption.

Review by Product

As a result of cutbacks in investment in the semiconductor industry worldwide, almost every product category was negatively affected. However, sales of advanced type models for finer geometry were favorable, and sales of products introduced to new markets should contribute to results in coming years.

Oxidation/Diffusion Furnaces & LP-CVD Systems

Although chip makers scaled back capacity investment in the past fiscal year, ALPHA(α)-BSE sales grew steadily, supported by the adoption of the Fast Thermal Processing System (FTPS). Tokyo Electron is the sole supplier of FTPS, a system with unique performance characteristics. This product is slated to be adopted on many advanced production lines using next-generation processes such as ultra-thin gate oxide, and demand for this product should increase when new lines start to be added.

Metal CVD Systems Tokyo Electron focuses on Front End of Line (FEOL) processes, where equipment suppliers must keep pace with the speed of technological innovation as process technology changes greatly every generation. The UNITY®-CVD for depositing Ti/TiN films has been adopted by almost every DRAM maker in the world. Furthermore, we have completed development of and launched an advanced process for Ta₂O₅ film, which is critical in 0.18μm and below devices.

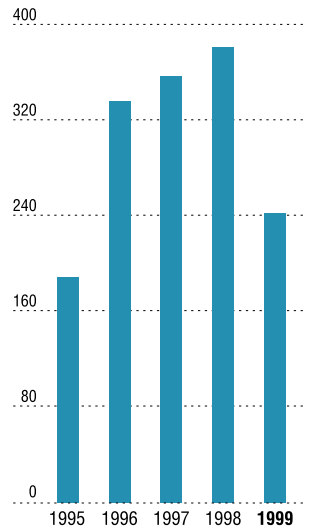
Coater/Developer Systems Scanner-type steppers using a deep UV light source, usage of which grew rapidly during the past year, require coater/developers that use a chemically amplified resist. Responding to this demand, Tokyo Electron launched a reduced-footprint, reduced-resist version of the CLEAN TRACK ACT™8 ahead of others. This product is now used by most major chip makers around the world. Success in raising market share in the United States helped Tokyo Electron further strengthen its leading position in the global coater/developer market.

Etch Systems As design rules have become even more precise, the oxide etcher UNITY® Ver. IIe series, featuring self-align contact and high aspect ratio contact, has been evaluated highly for its ability to meet demands for critical etching, and has maintained its leading share in the market. We have launched an advanced oxide etch system suitable for next-generation 0.13μm processes and formally entered the market for gate film etchers. Traditionally strong in the DRAM market, we also made substantial inroads into the logic market during the past fiscal year.

Cleaning Systems Last year, Tokyo Electron announced the UWZ series, which further improves on the high productivity of the existing UW8000. The UWZ series incorporates a new platform that substantially improves cost of ownership while reducing delivery time. We have already built a product lineup focused on FEOL, and are now keenly aware of the necessity to provide Back End of Line (BEOL) wet solutions in response to strong requests from customers.

Fully Automatic Wafer Probers Working closely with logic and System LSI customers resulted in increased share in the United States and Europe. In particular, our focus on applications for high-end markets including RISC devices has given us a competitive advantage. Furthermore, the future launch of a wafer-level burn-in system that combines wafer and burn-in testing will enable the world's semiconductor manufacturers to meet their objective of reducing total testing costs.

SPE Sales
(¥ Billions)





The P-8XL fully automatic wafer prober meets needs for high-speed and multi-pin testing.



Tokyo Electron distributes an array of imported equipment in Japan. From top: SpeedFam-IPEC, Inc.'s AVANTGAARD 776, Rudolph Technologies, Inc.'s Spectra LASER 200/200XL and Micron Corp.'s Micron C3D-200.



GenRad Inc.'s combination test station is one of the many value-added computer system products Tokyo Electron distributes.

LCD Production Equipment Supply and demand tightened in the TFT-LCD panel market during the second half of 1998, resulting in firm sales of LCD production equipment in the beginning of 1999. The outstanding reliability and process performance of our LCD coater/developers helped Tokyo Electron maintain its dominant share in this market. In addition, we launched a new LCD etcher/asher using a newly developed plasma source that permits multilayer etching, and maintained a majority share in the etcher/asher market as well.

Spin-on Deposition Systems In the past fiscal year, we introduced the *CLEAN TRACK ACT™8 SOD*, which applies interlayer dielectric films. This system incorporates the same platform as our *CLEAN TRACK ACT™8* coater/developer and uses a spin-on method to apply low-k materials required for multilayer interconnects. A large market for this product is expected, and initial shipments for R&D have been favorable.

Global Infrastructure

Providing excellent service and support through global infrastructure is just as important as supplying outstanding equipment, and providing such service is one of Tokyo Electron's greatest strengths. In the past fiscal year, we continued to build on our capabilities in procuring necessary parts on a timely basis and in dispatching highly skilled service personnel. These efforts included adding field engineering stations in Roseville, California and Eugene, Oregon in the United States and establishing Tokyo Electron Ireland Limited in Europe. We now have over 50 sales and service bases worldwide.

Tokyo Electron EE Limited

In March 1999, we established Tokyo Electron EE Limited, a new business for increasingly diverse customer needs, to refurbish and upgrade previously sold equipment. Initially focusing on oxidation/diffusion furnaces and LP-CVD systems, Tokyo Electron EE is making preparations to expand into other types of equipment we carry as well. Chip makers have recently diversified their investment approaches, with some choosing to restrain massive new capital outlays in favor of more controlled investment for improving existing equipment. We decided to enter this business aggressively in consideration of such needs.

Acquisition of ISO 14001

Over the past years, Tokyo Electron has made great efforts to acquire ISO 14001 certification, an international environmental management systems standard. Tokyo Electron Limited's Central Research Laboratory, Tokyo Electron Yamanashi's Fujii and Hosaka plants, Tokyo Electron Tohoku's Tohoku and Sagami plants, and Tokyo Electron Kyushu's Saga and Kumamoto plants have all received certification. In addition, Tokyo Electron Kyushu expects to receive certification for its other two plants within a year. With nearly all domestic operations now certified, we are turning additional attention to overseas production bases.

Computer Systems and Electronic Components

Computer Systems

Computer Systems division consolidated net sales decreased 15.6 percent to ¥12,878 million, mainly due to sluggish corporate demand in Japan and lower sales of aerospace products brought about by the completion of a certain government project. This division distributes leading-edge

Tokyo Electron has strengthened its lineup of Fibre Channel products from leading companies to provide advanced IT solutions.



Emulex Corp.
Fibre Channel PCI Host Adapter

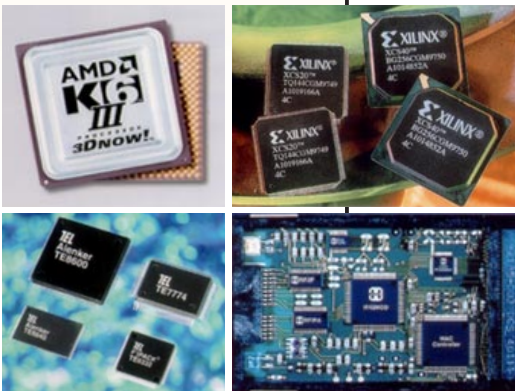


Brocade Communications Systems, Inc.
Fibre Channel Switch



Gadzoox Networks, Inc.
Fibre Channel Hub

Tokyo Electron Device Ltd. offers value-added products from the world's top suppliers.



- AMD is a trademark of Advanced Micro Devices, Inc.
- F1PACK is a registered trademark of Tokyo Electron Limited.

workstations, networking equipment, aerospace products and board test systems in Japan from about 40 different companies.

Although sales declined overall, sales of network-related products from companies such as Extreme Networks and FORE Systems grew steadily, more than doubling since the previous fiscal year. Sales of Extreme Networks' Gigabit Ethernet switches were particularly strong. In addition, sales of Fibre Channel products, which make Storage Area Networks (SANs) possible, increased steadily. SANs are receiving increasing attention as a new model for enterprise storage networks, following WANs and LANs. In order to further strengthen its lineup in this field, the division began distributing products from Mercury Computer Systems and Prisa Networks, in addition to those it already distributes from Gadzoox, Emulex, Brocade and Ciprico.

In October 1998, the division began sales of *Knowledge Center™*, a brand-new information management and analysis software tool developed by Process Dynamics, which complements the weaknesses of conventional Product Data Management systems.

To take advantage of opportunities presented by the Internet, the division is currently expanding its base of customers to include Internet service provider, supply chain management and e-commerce companies.

Electronic Components

Electronic Components division consolidated net sales decreased 4.0 percent year-on-year to ¥57,734 million. Stagnant corporate demand for personal computers in Japan was the principal factor in the decline.

In July 1998, electronic components operations were transferred to wholly owned subsidiary Tokyo Electron Device Limited (TED). This marked the first step in achieving excellence in all areas of this business, including solid relationships with customers, in-depth product knowledge and technical support, and speedy, reliable distribution. A new logistics center opened in the spring of 1998, and an advanced computer network system introduced especially for TED provides strong support to the new organizational structure.

To strengthen our product lineup, we are adding new high-value-added products, focusing on fields with high growth prospects such as telecommunications, digital consumer electronics and networking. In the past fiscal year, we began distributing products from Harris, which has a strong product lineup for telecommunications, including wireless LANs and digital consumer applications, and from Pixelworks, which manufactures image processors for next-generation LCD projectors.

TED is also devoting efforts to developing and marketing Tokyo Electron Original Products (TOPs). A key example is our flash memory controller, which is incorporated in almost all digital still cameras that employ SmartMedia™.

Demand for this product is expected to grow as the range of applications for SmartMedia™ expands.

CS & EC Sales
(¥ Billions)

