electro scientific industries

annual report

2001

About the Company

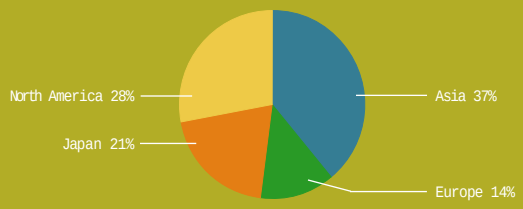
Electro Scientific Industries, Inc. (ESI) supplies high-value, high-technology production equipment to the global electronics market. Our equipment is used in the manufacture of semiconductors, passive components and electronic packages, which in turn are used in computers, communications products, automobiles, and a wide range of other consumer and industrial products.

ESI's growth has come from expansion of the markets where we participate, development of new products and technologies based on our core expertise and from acquisitions. To continue that growth, our strategy has two key components:

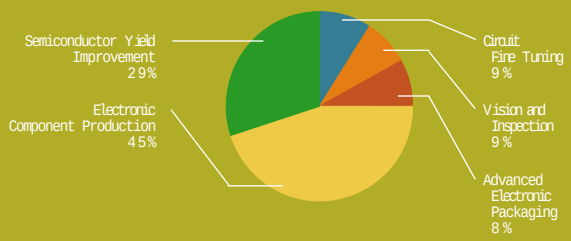
- Continued focus on businesses where we have a strong position, including
  - processing systems for semiconductor yield improvement
  - precision, high-speed production equipment for surface-mount passive components
  - advanced laser systems for the fine tuning of electronic circuits and assemblies, and
- Development of new businesses based upon our strengths, including
  - microvia drilling systems to create advanced high-density electronic interconnections, and
  - machine vision products and systems for the semiconductor and electronics manufacturing industries.

ESI was founded in 1944 and is headquartered in Portland, Oregon. At the end of fiscal 2001 we had over 1300 employees, and we have offices throughout the world.

Because of ESI's breadth and strong market positions, almost any computer, cellular telephone, personal digital assistant, automobile, home entertainment system and a host of other electronic products are likely to include components manufactured with ESI products. The pictures in this annual report are intended to demonstrate the scope and breadth, both geographically and by product, of the products touched by ESI equipment.



FY 2001 REVENUE DISTRIBUTION BY GEOGRAPHY



FY 2001 REVENUE DISTRIBUTION BY BUSINESS

To our shareholders:

Fiscal year 2001 was a year of dramatic growth and significant accomplishments for ESI. Our revenues reached nearly $500 million, more than double the level of just two years ago and up 57 percent over last year. Earnings were at all time record levels. We introduced important new products across our entire product line and maintained our leading position in established markets. In addition, we continued to build our presence in new markets.

Sales for the year were $496 million with earnings of $100 million or $3.58 per diluted share. This compares with sales of $317 million and earnings of $41 million or $1.49 per diluted share for fiscal year 2000. We continued to strengthen the balance sheet and ended the year with $163 million in cash and securities – and no debt.

David F. Bolender

Donald R. VanLuvanee

Demand for both passive component production equipment and semiconductor yield improvement systems was especially strong during the year. Sales for these product lines – our two largest – were up 88 percent and 78 percent respectively over fiscal year 2000. These sales increases were driven by the unprecedented capacity requirements of our customers and the increased capability of new products provided by ESI.

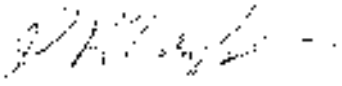
In fiscal year 2001, over 70 percent of net sales were to customers outside of the United States with shipments to Asia, including Japan, of 58 percent. To support our increased international sales activity, we opened direct sales offices in Singapore, Korea, and China — adding to our existing presence in Taiwan, Japan and Europe. We have extended our ability to reach customers directly through ESI employees. At the end of fiscal year 2001, over 90 percent of our sales were made through ESI offices. In comparison, approximately 50 percent of sales were through representatives handling our products two years ago.

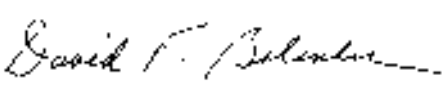
In addition, we have expanded our operations by completing a state-of-the-art manufacturing facility in Klamath Falls, Oregon. This factory opened in early March 2001 and shipped its first products to customers in April.

Also, we are pleased to report that in May 2001 we received payment of over $15 million as final judgment for a patent litigation suit initiated in 1996. This suit involved one of our revolutionary new technologies for advanced Semiconductor Yield Improvement. This victory is a clear statement of the value of ESI's intellectual property strategy. More importantly, it reflects the success of our strategy to use technology to add value to our customers' manufacturing processes.

Although fiscal year 2001 was a record year by all standards, towards the end of the year we began to see significant slackening in demand due to the global slowdown in electronics manufacturing. Fourth quarter sales were down significantly from prior quarters and we expect further decline going into fiscal year 2002. We expect fiscal year 2002 to test ESI, our customers and our competitors. We enter the new year with excellent margins, solid competitive positions in all of our markets and a history of profitability and aggressive product development through downcycles. Despite the broad electronics industry weakness, ESI is well positioned to expand the capability of our products and deliver the solutions that our leading-edge customers need to return to profitable growth.

During fiscal year 2001, many people joined the ESI team. We would like to take this opportunity to thank the ESI employees worldwide, both veterans and new team members, for the tremendous effort to drive the company to new levels of sales and profitability. With the power of the ESI team and the financial strength of the company, we approach the current industry uncertainty with enthusiasm and optimism and look forward to reporting on our progress during the next year.





Donald R. VanLuvanee
Chief Executive Officer and President

David F. Bolender
Chairman of the Board

The ESI Story

ESI supplies high-technology, high-value manufacturing equipment to the global electronics market. Based on a history and tradition of innovation that extends over more than 50 years, we design and develop a broad range of products and systems for the markets we serve. These offerings are described in the following pages.

Our success as a company is based on a foundation of core principles and competencies: financial strength, global reach, people values and technology. These are our history and our future.

Our revenues are now almost ten times larger than they were a decade ago, capped by growth of over 50% in each of the last two years. We've been consistently profitable through recent industry cycles, with superior returns and operating margins. Our balance sheet is solid with no debt and ample cash reserves. Along with providing long-term returns for our shareholders, our financial position and profitability assure our customers that we can provide ongoing innovation and support for equipment that is vital to their production processes.

From this base, we reach out to markets worldwide. We have successfully transitioned to a 90% direct sales and support operation from the 50% level two years ago. Today, ESI serves customers in all the world's major electronics markets — including North America, Europe, Japan, Taiwan, Korea, Singapore and China — from our own local offices. Our truly global range provides a healthy geographic balance to our business while delivering outstanding service to our customers.

We are keenly aware that people are the fuel and the spark of all our initiatives. ESI actively cultivates a culture of growth and empowerment for all our employees. To nurture their ongoing professional development, we provide broad support for continuing education and the development of a global perspective. And to ensure their ability to make timely and effective business decisions, we foster an environment where initiative is rewarded and ingenuity bests bureaucracy.

ESI has achieved extraordinary advances in technology through the dedicated research and development work of our engineering team, including many who are pioneers in the field of microelectronics production equipment. In addition to deep knowledge in our core technologies of laser and material interaction, we have accumulated a wealth of experience in precision-driven small parts handling and machine vision. We proudly hold 80 U.S. patents for groundbreaking discoveries, which deliver real value to our customers through innovative new products and systems.

Our core principles and competencies support product development in our five business units, which serve manufacturers of semiconductors, passive components and electronic products. The products made by our customers drive the daily life of today's consumers. Given the diversity of our products and our leadership position in many of our markets, ESI equipment likely touches most electronic devices and consumer products in use today, including personal computers and laptops, personal digital assistants, cellular telephones, automobiles, electronic games and entertainment devices. We play an essential role in enabling the electronics miniaturization so central to today's world. In a very real way, our work turns technology into value for our customers.

Teams of ESI engineers and marketers design for the global market-place using computer and communications equipment that includes memory, passive components and electronic packaging, which in turn were manufactured with ESI s equipment.

Semiconductor Yield Improvement

Electronic Component Production

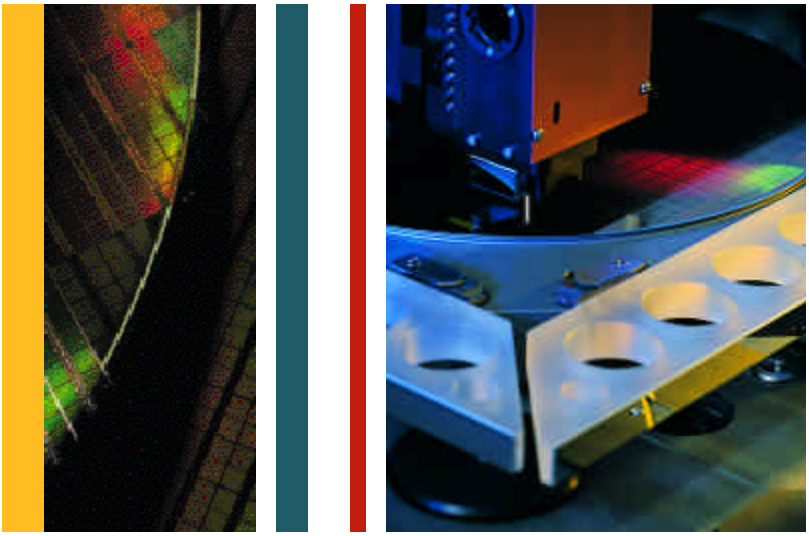
Advanced Electronic Packaging

Vision and Inspection

Circuit Fine Tuning

Semiconductor Yield Improvement is a well-established ESI business addressing the need to increase manufacturing yield for memory manufacturers as their markets demand the creation of higher-density chips. ESI tools are crucial to achieving the yields that manufacturers require, and our equipment is used by every major memory maker in the world.

As densities have increased, manufacturers have built redundant cells into their memory designs and connected them with small links on the surface of the device. During the manufacturing process, wafers containing hundreds of individual memory chips are tested, identifying defective cells. ESI laser systems are then used to cut links to disconnect the defective portion and replace it with one of the redundant cells.



ESI's memory yield improvement systems, including the 9800 (above, right), are used by every major manufacturer in the world to produce computer memory for a wide range of applications, including mobile computers.

In the traditional discrete memory market, we believe the demand for link cutting will continue to accelerate as density, links per chip and unit production increase. At the same time, demand for ESI products — in particular the ESI 9800, which earned the Editors' Choice Best Product 2000 Award from Semiconductor International — is being driven by the industry's transition from 200 mm wafers to 300 mm wafers. With a close eye to their return on investment, customers are increasingly motivated to purchase tools with 300 mm capability. In July 2001, we introduced the ESI 9820, our second-generation 300 mm tool to provide further production capability and growth to our customers.

In addition to our solid customer base in the discrete memory market, we are expanding into non-traditional markets, including embedded memory for logic devices and other link processing applications, such as voltage regulators and power ICs. These markets are growing as logic device manufacturers increasingly incorporate redundancy into their designs to provide larger on-chip memory to support higher performance requirements.

Our strategy is to maintain laser link cutting as the process of choice, and ESI as the vendor of choice in this market where the company is the clear leader. To support these aims, ESI will continue to develop and protect our intellectual property while exceeding the requirements of the industry roadmap. The modular platform of the 9800 series is designed to evolve with the changing demands of memory manufacturers in order to protect their capital investment.

Electronic Component Production

Advanced Electronic Packaging

Vision and Inspection

Circuit Fine Tuning


NYC
WALL ST
NASSAU ST

Electronic Component Production

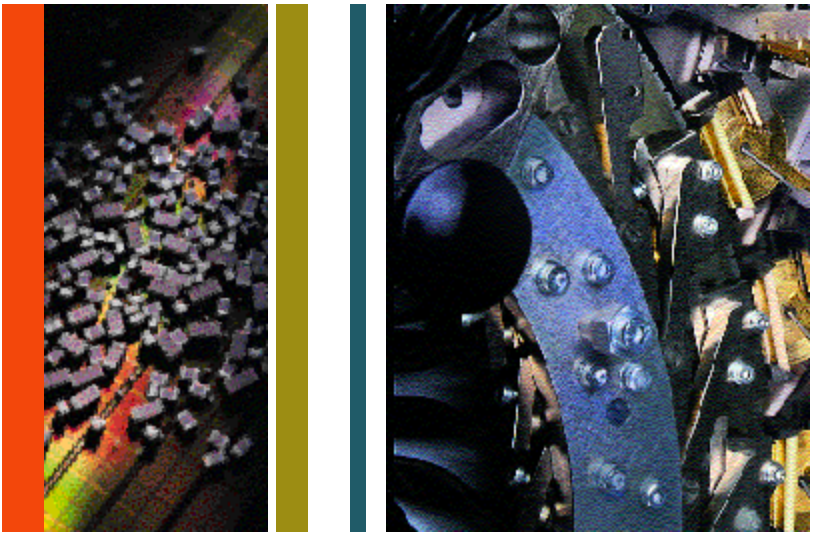
ESI continues to build on its leadership position in the business of testing and terminating multi-layer ceramic capacitors (MLCCs) and other passive components, including arrays, inductors and varistors. These components are used in large quantities in every electronic product made today. Over 500 billion MLCCs were used in electronic products in the year 2000. As component sizes have shrunk and the pressure to reduce costs has increased, manufacturers are required to invest in new equipment to meet the requirements of their markets.

We posted excellent results in fiscal 2001, demonstrating our ability to meet the challenge of peak demand. Explosive growth in the cell phone industry spurred a 100% increase in factory output. Demand for equipment declined in the second half of the fiscal year, but the need for tooling and other consumable parts of our systems has helped to moderate this cyclical sales decline. Despite the recent decline, we expect long-term growth in demand for MLCCs and the equipment used to make them.

A key element in our success in the last year was the performance of our 3300 series of MLCC testers. This product has not only been successful with our traditional MLCC customers, but also with key manufacturers in Japan who historically have built their own test and termination equipment.

Laying the groundwork to supply even greater demand in this and other markets, ESI built a new plant in Klamath Falls, Oregon. The plant opened in April to enthusiastic community support, and is now manufacturing carrier plates, its first products, for electronic component production equipment.

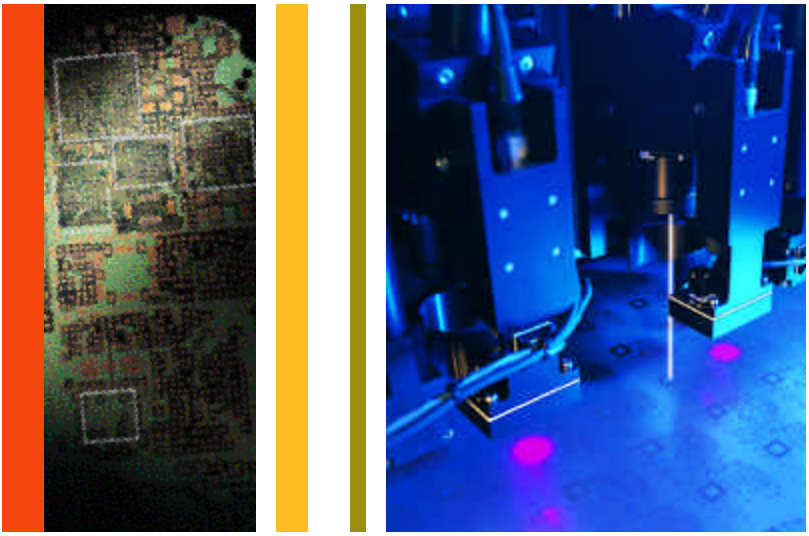
In addition to miniaturization, another trend in the passive component industry is the integration of multiple discreet components into arrays of two or more elements. ESI has become the recognized leader in the termination and testing of these array components, in addition to our traditional discreet component business. We are also expanding our available markets with the development of systems that combine ESI's competencies in vision, small parts handling and automation, as well as systems that process other passive components such as varistors and inductors. We are excited about these trends towards further miniaturization, integration and higher performance because they play to our strengths and are an ideal avenue for our continued growth and success.



ESI is the market leader in the production of test and termination equipment, such as the 3300 series (above, right), which is used to test miniature ceramic capacitors that, in turn, are used in virtually all electronic products, including mobile telephones and personal digital assistants.


雪峰高山茶

Building on our core expertise, ESI has developed a wide array of advanced electronic packaging equipment for High Density Interconnect (HDI) circuit boards and advanced integrated circuit packages. Our UV and CO_2 laser drills meet the demanding production requirements of this industry while our mechanical drills provide leading-edge capability for high-volume multilayer drilling.



ESI's mechanical and laser drills, including the new dual-head 5400 UV laser system (above, right), drill the microscopic vias in circuit boards that are necessary for today's miniature communication devices and personal entertainment systems.

The continued consumer demand for smaller and lighter cell phones, PDAs and other electronic devices requires manufacturers to produce boards and packages that are more densely packed, with tighter tolerances and smaller vias (holes). Our drills are aimed at meeting this growing need for miniaturization.

We continue to focus development in the areas of higher productivity drills. In this fiscal year we introduced ESI's first CO_2 laser drill, the 5380, which is the fastest single-head drilling system in the market. We also introduced the 5400 dual-head series, which incorporates a patented compound beam positioner, giving customers greater throughput and accuracy. Finally, we introduced new production autoloaders for our 5300 and 5400 series, offering complete automation.

Our standard-setting technology roadmap addresses the future trends in our customers' business. With its outline of projected requirements for accuracy, throughput and via diameter, and descriptions of defined upgrade paths designed to meet those needs, our roadmap and the associated products help protect customers' investments. While such plans are common in the semiconductor world, they have not existed for drilling; here, our roadmap is truly groundbreaking.

We are pursuing an aggressive strategy to capture capacity expansion in China while increasing our share of the IC packaging market in Japan and focusing on sales wins throughout Asia. With our expertise in laser drilling and our innovations in mechanical drills, we are well positioned to provide customers with the leading edge products they need today and to continue to support their future needs.

Vision and Inspection

Machine vision is a critical enabler in the processing and packaging of semiconductors and other electronic components. As microelectronics manufacturers move towards smaller, more compact devices, they are facing challenges in alignment and inspection of these shrinking components and packages with tighter tolerances. ESI's Vision products are customized to enable customers with a competitive edge by providing the latest technologies, faster time to market and lower cost of ownership.

ESI s 892 inspection system (above, right) and its original equipment vision systems (above, left) are key elements in the production of a range of electronic equipment, including cellular telephones and digital cameras.

Our OEM machine vision provides the "eyes" to help guide the device through the entire packaging process. These subsystems are sold to electronic and semiconductor equipment manufacturers who are looking for industry-leading solutions for wafer identification, alignment, guidance and inspection as well as component insertion. ESI entered the OEM vision business because we had developed significant expertise in machine vision to support our systems businesses. Today we use our OEM vision capabilities throughout our product lines, as well as selling to major electronic system companies worldwide.

Our vision-based inspection equipment is the key to automated process control and package inspection for the semiconductor industry. In 2001, we introduced the Model 892, a tube-based leadless inspection system that delivers device mark and pad inspection at high levels of speed and accuracy. This product offers customers a more advanced solution for leadless device inspection.

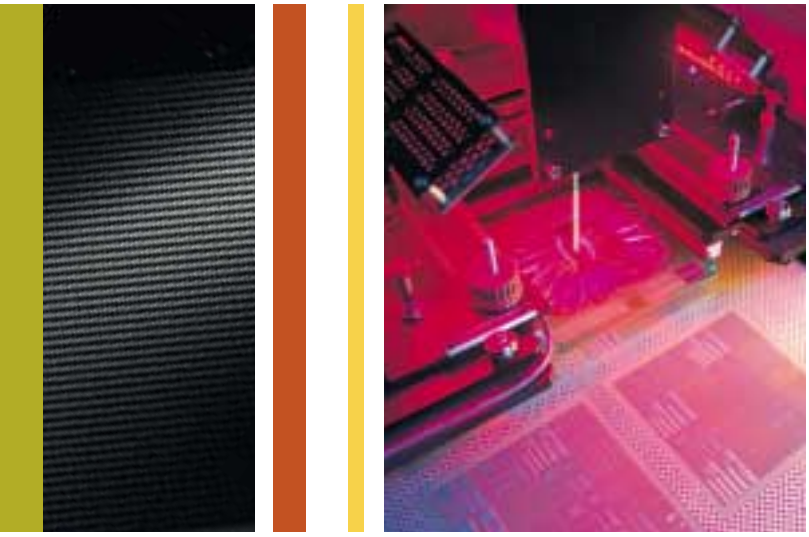
Looking forward, we will continue to strategically focus on long-term growth in the back-end market for package inspection by developing new products targeted at expanding our applications and core technologies. These are the areas where ESI sees the greatest opportunities for growth, and where we will invest our engineering resources in pursuit of market share leadership.

In addition, we will aggressively pursue new accounts globally through programs aimed at key customers and the introduction of new products and technologies. Our objective is market share leadership through the delivery of best-of-class vision products to our customers.

Circuit Fine Tuning

Circuit Fine Tuning is ESI's original laser-based business. For more than 30 years we have helped electronic device manufacturers tune devices to precise electrical tolerances. Our long-standing expertise in lasers and laser/material interaction has created a solid core business while generating other growth markets for ESI.

Our core business continues to be in the trimming of thick-film hybrid circuits. These circuits are used in a wide variety of electronic devices. Automotive applications have continued to expand with the increased use of electronics and sensors in all cars, and we have begun to address emerging applications such as the manufacture of Bluetooth-enabled products.



The value of electronics now exceeds the value of the steel used in automobile production. ESI s circuit fine tuning equipment is used to trim thick-film ceramic devices that populate a range of automotive components. In addition, circuit fine tuning produces chip resistor trimming systems, micromachining systems, and innovative embedded passive trimming systems, such as the new model 4700 (above, right).

ESI maintains a healthy market share in this area. In recent years, we have built on our solid position in thick-film trimming to expand into chip resistor trimming, where we have also become the market leader.

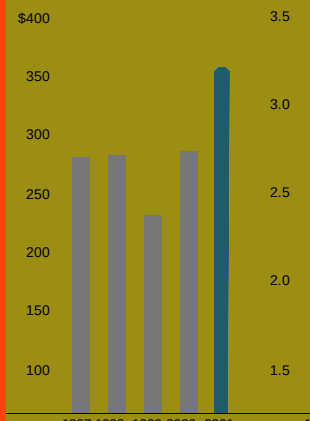
Today, we are taking our core expertise into additional new markets. We have developed the first product designed to support the trimming of passive components that have been embedded into circuit boards, a new technology trend. This results in more precision, faster processing and better utilization of space on the circuit board.

We are also investing in products to serve emerging markets for micromachining equipment. This area has major growth potential, as lasers will provide the answer to the challenge of manufacturing smaller and smaller devices that traditional mechanical tools can no longer effectively produce. To meet this need, ESI has introduced early micromachining products for the production of both opto-electric and gallium arsenide components, with positive initial customer response.

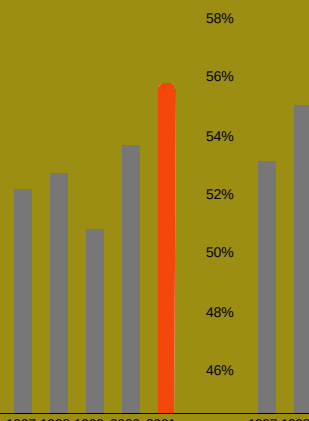
Circuit Fine Tuning embodies many of the key elements of ESI's history and strategy. It began with innovative developments in close collaboration with key customers, and we have continued to build and strengthen that original market. It has also been the source of new innovations that have generated new markets and opportunities for acquisitions for ESI, including the semiconductor yield improvement and advanced packaging businesses. Now we are expanding into new markets by using our core expertise and innovating to provide real customer value and significant potential growth.



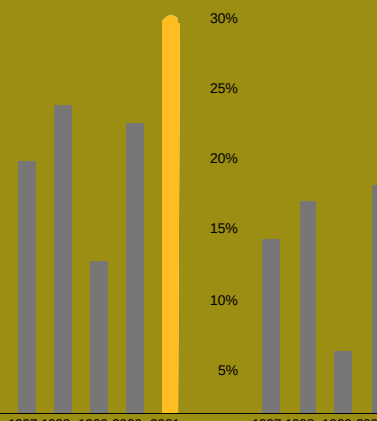




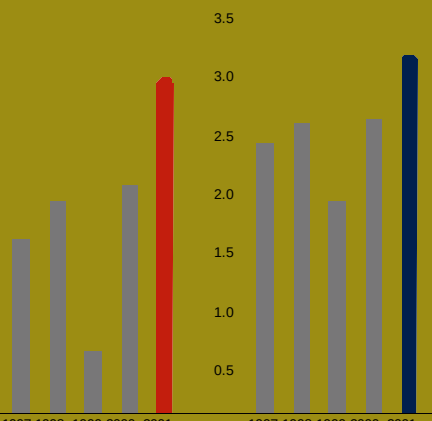
SALES PER EMPLOYEE
(IN THOUSANDS)



SALES/OPERATING EXPENSE RATIO
(IN THOUSANDS, EXCLUDING NON-REOCCURRING ITEMS)

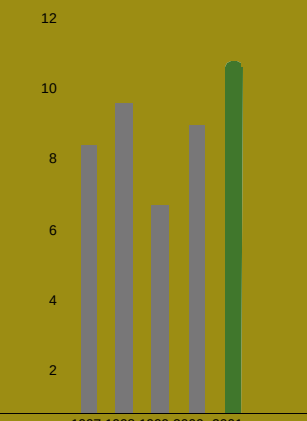


GROSS MARGIN



OPERATING MARGIN
(EXCLUDING NON-REOCCURRING ITEMS)

INVENTORY TURNOVER RATIO



SALES/NET PROPERTY AND EQUIPMENT RATIO






UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 10-K
ANNUAL REPORT

(Mark One)

(X) Annual report pursuant to section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended June 2, 2001 or

( ) Transition report pursuant to section 13 or 15(d) of the Securities Exchange Act of 1934 for the transition period from _____ to _____

Commission File Number: 0-12853

ELECTRO SCIENTIFIC INDUSTRIES, INC.
(Exact name of registrant as specified in its charter)

Oregon (State or other jurisdiction of incorporation or organization)	93-0370304 (I.R.S. Employer Identification No.)
13900 NW Science Park Drive Portland, Oregon (Address of principal executive offices)	97229 (Zip Code)

Registrant's telephone number, including area code: (503) 641-4141

Securities registered pursuant to Section 12(b) of the Act:
None

Securities registered pursuant to Section 12(g) of the Act:
Common Stock, without par value
Preferred Stock Purchase Rights

Indicate by check mark whether the Registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes X No __

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. X

The aggregate market value of voting and non-voting Common Stock held by nonaffiliates of the Registrant at June 29, 2001: $ 1,036,825,929 .

The number of shares of Common Stock outstanding at June 29, 2001: 27,213,279

Documents Incorporated by Reference

Document	Part of Form 10-K into which is incorporated
Proxy Statement for 2001 Annual Meeting of Shareholders	Part III

Items of Form 10-K

PART I

ITEM 1: BUSINESS

This form 10-K contains forward-looking statements subject to risks and uncertainties. Actual results may differ materially from the forward-looking statements. Factors that could cause or contribute to such differences include, but are not limited to, those set forth under the caption "Factors That May Affect Future Results" under "Item 7: Management's Discussion and Analysis of Financial Condition and Results of Operations".

BUSINESS OVERVIEW

Electro Scientific Industries, Inc. and its subsidiaries ("ESI" or "The Company") provide electronics manufacturers with equipment necessary to produce key components and circuitry used in wireless communications, computers, automotive electronics and many other electronic products. Our equipment enables these manufacturers to reduce production costs, increase yields, and improve the quality of their products. We believe we are the leading supplier of advanced laser systems used to improve the production yield of semiconductor devices, high-speed test and termination equipment used in the high-volume production of miniature passive electronic components, and advanced laser systems used to fine tune electronic circuitry. Additionally, we produce a family of mechanical and laser drilling systems for production of high-density interconnect (HDI) circuit boards and advanced electronic packaging, as well as machine vision products for manufacturers of semiconductors and other electronic products.

ELECTRONICS INDUSTRY OVERVIEW

The electronic content of common items, such as communication products, automobiles and computers, continues to increase. For example, automobile manufacturers now routinely include electronic ignition, anti-lock brakes, electronic fuel injection and other electronic systems in place of components that in the past were predominantly mechanical. In addition, markets for consumer-oriented electronic products, such as wireless telephones, fax machines, pagers, digital cameras and computers have developed rapidly as increasingly affordable products have been introduced that are smaller, lighter and more easily portable.

The increasing demand for electronic products has been accompanied by the need for faster, smaller, more complex, less expensive and higher quality electronic devices and circuits. To achieve these higher performance attributes and smaller device sizes, electronic device manufacturers are increasing the circuit densities in these devices and tuning them to precise electrical values. Manufacturers of wireless telephones, for example, must use miniaturized circuits to accommodate the size limitations of their finished products. These circuits must also be tuned to operate within precise frequency specifications, enabling the existing wireless frequency bands to accommodate more users without interchannel interference.

Smaller and lighter requirements also decrease the physical dimensions used in electronic interconnections within the electronic device, its surrounding package and the HDI circuit board on which it is mounted. Higher operating speeds of computers and communications products also require more input and output channels within these packages and between the packages and the HDI circuit board.

The highly competitive consumer markets for electronic products drive the need for increasingly less expensive devices and components. Electronic devices and components are produced in large unit volumes and their production and testing is highly automated, utilizing a variety of manufacturing equipment. Manufacturers continuously seek to achieve reduced costs by improving the throughput, yield and quality of device and component production.

For example, semiconductor device manufacturers are transitioning from the use of 200mm and smaller silicon wafers to 300mm wafers. This enables manufacturers to fit significantly more electronic devices on a single silicon wafer. In addition, decreasing circuit densities enable more devices to be produced on a silicon wafer by reducing the size of each device on the wafer. The use of larger wafers and the design of smaller devices increases the throughput and capacity of electronic device manufacturing facilities, or fabs. The increasing circuit densities also require the use of newer materials, such as copper, to create these miniaturized electronic circuits.

To improve production yield, or the number of acceptable devices produced per silicon wafer, device manufacturers are utilizing advanced yield improvement systems, such as memory repair, in the manufacture of memory devices such as Dynamic Random Access Memory, or DRAM, and non-memory devices such as logic with embedded memory, digital signal processors (DSPs) and high-end electronic game chips.

As semiconductor manufacturers move toward higher densities and more complex architectures, machine vision has also emerged as a critical technology. By allowing manufacturers to achieve greater precision, increased equipment speed and fewer errors, machine vision is enabling technology in the semiconductor manufacturing process, from wafer production through final assembly and packaging. In addition, the manufacture and placement of components in the surface mount assembly area requires the high-speed and accuracy that can be obtained through integrated machine vision solutions.

OUR SOLUTION

We believe our products address the needs of electronic component manufacturers by providing them with measurable production benefits, including improved yield, increased throughput, greater reliability and enhanced flexibility, resulting in a high return on investment. Our production systems are designed to be upgraded to accommodate the next generation of technology, providing customers the flexibility to add capacity or improve product performance at a reasonable incremental cost.

Our customers serve a wide range of electronic applications. The largest end-market applications for electronic devices and circuits that are produced using our systems are:

- Computers and home entertainment devices;
- Wireless telephones;
- Pagers and personal digital assistants; and
- Automotive electronics.

We design and manufacture products that target several markets within the electronics industry. Our products include:

Semiconductor Yield Improvement Systems

Our yield improvement product line is designed and developed to cost-effectively meet the production challenges faced by semiconductor manufacturers, including shrinking circuit sizes, material changes and increased wafer sizes. Our yield improvement products also have enabling technology allowing them to be adapted for use with next generation devices.

Electronic Component Manufacturing Systems

We design and manufacture automated test, production, handling and visual inspection equipment used in the manufacture of miniature multi-layer ceramic capacitors, or MLCCs, and other passive components including arrays, inductors and varistors, which are used in very large numbers in nearly all types of electronic circuits.

Advanced Electronic Packaging Equipment

Our laser and mechanical drilling products enable manufacturers to make electronic products smaller, lighter and faster. Our products are designed to provide a cost-effective method for increasing the density of vias, or holes, used to create electrical connections between layers in high density circuit boards and electronic packages in a wide variety of materials, including traditional glass reinforced circuit boards, copper and new organic compounds.

Vision and Inspection Systems

We provide semiconductor and electronics manufacturers with machine vision solutions for automated process control and visual inspection for the handling and assembly of semiconductors, printed wiring boards (PWBs) and discrete electronic components. Our semiconductor automation and inspection product line includes turnkey wafer handling and inspection systems and device package handling and inspection systems.

Circuit Fine Tuning Systems

Our circuit fine tuning systems tune the operating parameters of electronic circuits. These laser-tuning systems precisely adjust the frequency in wireless communication devices and in numerous automotive electronics assemblies such as engine control circuits. Our product line also incorporates our overall strength in precise laser machining/trimming and very high speed handling to offer cost-effective solutions for specialized micro machining applications and trimming of passive components embedded in circuit boards. Historically, our circuit fine tuning business has served as an incubator for our new businesses, including our semiconductor yield improvement and advanced packaging systems businesses.

OUR STRATEGY

• **Focus on businesses where we are a market leader.** We intend to expand the application of our existing technology to grow our overall market opportunity in those markets in which we maintain a leadership position. We also intend to maintain our market leadership by developing new products with greater speed and capabilities.

• **Develop new high-value businesses.** We plan to utilize our core competencies in technology innovation, global operations, multiple technology integration and customer collaboration to develop innovative solutions that will enable us to grow into attractive new markets. Our advanced electronic packaging equipment is an example of a new business developed from these resources.

• **Continue to invest in research and development to maintain our technological leadership.** We intend to further develop our technology leadership by maintaining a significant level of investment in research and development. Our key technological capabilities include laser/material interaction, image processing and optical character recognition, motion control capabilities and small parts handling. We consider our continuing ability to develop intellectual property to be an important component of our future success.

• **Expand our business by acquisitions.** We intend to continue to acquire businesses and technologies that complement our existing businesses to enhance our current product line and to enter new markets. In the last 10 years we have completed nine acquisitions.

• **Increase the value of our products to our customers.** We are focused on improving the yield, throughput and productivity of our customers by utilizing our technology, global infrastructure, superior customer service and our ability to integrate multiple technologies.

OUR PRODUCTS

Semiconductor Yield Improvement Systems. As circuit densities in semiconductor memory devices such as DRAM have increased, manufacturers have built redundant cells into their memory designs and connected them with small links on the device surface. During the manufacturing process, wafers with hundreds of individual memory devices are tested and defective cells are identified. Our laser systems are then used to cut links to disconnect the defective portion and to replace it with one of the redundant cells.

- Our 9200 and 9300 Series systems address the yield improvement needs of semiconductor manufacturers that utilize 200mm wafers.
- Our 9800 Series systems are designed specifically for the 300mm wafer market. This series can be installed to initially process 200mm wafers and can be later converted to 300mm wafer processing.

Electronic Component Manufacturing Systems. We design and manufacture products that combine high-speed, small parts handling technology with microprocessor-based systems to provide highly automated, cost-effective solutions for MLCC manufacturers. MLCCs are used in circuits that process analog and digital signals or operate at high frequencies in products such as computers, video equipment and communication products.

- Test Systems: These products employ high-speed handling and positioning techniques to precisely load, test and sort MLCCs based on their electrical energy storage capacity, or capacitance, and their electrical energy leakage, or dissipation factor.

- Termination Systems: These products apply a conductive material to the ends of ceramic capacitors permitting connection of the device in a circuit on a high-density PWB.
- Visual Inspection Systems: These products perform six-sided automated inspection of MLCCs and arrays for dimensional criteria and defects.
- Consumable Products: We also produce consumables such as carrier plates and termination belts, that are used to hold capacitors while conductive material is applied.

Advanced Electronic Packaging Systems. Our products are targeted at small via applications requiring the highest accuracy and smallest hole dimensions, allowing manufacturers to produce vias as small as 25 microns. By comparison, a human hair is approximately 100 microns in diameter. We offer drilling and routing technology to address the rapidly changing applications in integrated circuit (IC) packages, multi-chip modules and HDI circuit boards. Our laser-based systems utilize either ultraviolet or CO_2 laser technology and come in single-head or dual-head configurations depending on customer requirements.

- Our 5300 Series single-head laser drills utilize lasers to drill via holes as small as 25 microns in a wide variety of materials, including epoxy, resins, resin-coated copper and fiber reinforced FR4.
- Our 5400 Series laser drills perform the same function as our 5300 Series, but operate at a significantly higher throughput rate due to the simultaneous operation of two drill heads.
- We also manufacture a line of mechanical drills that achieve high accuracy and throughput in drilling holes as small as 75 microns.

Vision and Inspection Systems. Our products include both machine vision subsystems sold to original equipment manufacturers (OEMs) and multi-function, stand-alone inspection systems sold to end users. In the OEM marketplace, we have concentrated our efforts on selling complete vision solutions and integration expertise to suppliers of semiconductor and electronics equipment. We have also developed and acquired new products to provide complete, stand-alone inspection systems for semiconductor wafer sorting, inspection and defect review and for integrated circuit mark and lead inspection.

We offer machine vision solutions that reduce application development time and shorten time-to-market for producers of equipment used to manufacture semiconductors and electronics. Products include patented specialized lighting, wafer alignment and identification products and application specific solutions for the surface mount industry.

- Our machine vision systems are customer-specific solutions used to perform pick and place, wire bonding and other functions. They consist of:
  - Computer architecture;
  - Camera technology;
  - Advanced lighting and optics; and
  - Application-specific software modules.

Our semiconductor automation and inspection product line includes turnkey wafer handling and inspection systems and IC package handling and inspection systems. Semiconductor wafer fabricators use our equipment to sort and inspect wafers throughout all phases of processing. These modular systems combine multiple handling and inspection functions onto single platforms. Device manufacturers and contract packaging houses use our equipment for mark and lead inspection and tape and reel packaging. Our systems inspect traditional leaded devices as well as newer leadless devices.

- Our semiconductor automation and inspection product line includes our 800 Series package inspection systems used in the test, assembly and packaging phase of semiconductor production.

Circuit Fine Tuning Systems. We design and manufacture application-specific laser systems that adjust the electrical performance of a product or assembly containing many circuits by removing a precise amount of material from one or more components in the circuit. This is done to achieve the desired

electrical specification for the product. This process is called “functional trimming” and is performed while the product or assembly is under power. For example, in wireless phones, laser trimming of a few selected components in the product is used to tune the product to the desired frequency.

Our circuit fine tuning systems also adjust the resistance value of discrete resistors manufactured on ceramic substrates for use in surface mount technology end products. Typically, these discrete devices are produced at resistance values 30% below nominal levels and need to be trimmed to resistance value with very high accuracy. Our systems meet the demands for high-volume, high-accuracy miniature resistor trimming through precise positioning of the laser beam and high-speed measurement capability.

Our circuit fine tuning systems include:

- Our Model 2300 Trimming Systems which trim chip resistors;
- Our 4000 Series Laser Trimming Systems which trim thick- and thin-film hybrid circuits on ceramic and organic substrates; and
- Our recently introduced 2700 Series laser processor which is used in multiple applications, including the micromachining of disk heads, optoelectronic components and other electronic circuits.

CUSTOMERS

Our top twelve customers by revenue for the three-year period ended June 2, 2001 listed alphabetically, were:

AVX	Kemet	Samsung
Canon	Kulicke & Soffa	Taiyo Yuden
Hyundai	Kyocera	Texas Instruments
IBM	Phillips (Phycomp)	Winbond Electronics

In fiscal years 2001, 2000 and 1999, no customer exceeded 10% of sales. Sales outside the U.S. accounted for 72.2%, 72.3% and 55.9% of our net sales for fiscal years 2001, 2000 and 1999, respectively. The most significant sales outside the U.S. were to Taiwan, Japan and Europe, which represented 22.1%, 20.5%, and 12.9% of our net sales for fiscal 2001, respectively.

SALES, MARKETING AND SERVICE

We sell our products worldwide through direct sales and service offices located in or near: Ann Arbor; Boston; Minneapolis; Portland (Oregon); Austin; San Diego; Los Angeles; Tokyo, Oita, and Nagoya, Japan; Seoul, Korea; Taipei and Chungli, Taiwan; Singapore; Guangzhou and Shanghai, China; Munich, Germany; West Sussex, England and Paris, France. We serve customers in additional countries through manufacturers' representatives.

We have a substantial base of installed products in use by leading worldwide electronics manufacturers. We emphasize strong working relationships with these customers to meet their needs for additional systems and to facilitate the successful development and sale of new products to these customers.

We maintain service personnel wherever we have a significant installed base. New systems are tested prior to delivery to ensure they meet our product specifications and requirements. We offer a variety of maintenance contracts and parts replacement programs.

BACKLOG

Backlog consists of written purchase orders for products, spare parts and service which we expect to ship within twelve months. Backlog was $56.8 million at June 2, 2001, versus $168.7 million at June 3, 2000 and $22.9 million at May 31, 1999.

RESEARCH, DEVELOPMENT AND TECHNOLOGY

We believe that our ability to compete effectively depends, in part, on our ability to maintain and expand our expertise in core technologies and product applications. The primary emphasis of our research and development is to advance our capabilities in:

- Lasers and laser/material interaction;
- High-speed, micron-level motion control systems;
- Precision optics;
- High-speed, small parts handling;
- Image processing and optical character recognition;
- Real-time production line electronic measurement;
- Real-time operating systems; and
- Systems integration.

Our research and development expenditures for fiscal years 2001, 2000, and 1999 were $51.3 million (10.3% of net sales), $35.1 million (11.1% of net sales), and $31.3 million (15.2% of net sales), respectively.

COMPETITION

Our markets are dynamic and highly competitive. The principal competitive factors in our markets are product performance, reliability, service, technical support, product improvement, price, established relationships with customers and product familiarity. We believe that our products compete favorably with respect to these factors. Some of our competitors have greater financial, engineering and manufacturing resources and larger distribution networks than we do. Some of our customers develop, or have the ability to develop, similar manufacturing equipment. Competition in our markets may intensify and our technological advantages may be reduced or lost as a result of technological advances by competitors or customers, or changes in electronic device processing technology.

Our principal competitor for semiconductor yield improvement systems is GSI Lumonics. For electronic component manufacturing equipment, our competitors include Tokyo Weld, Kanebo and Humo in Japan, as well as manufacturers that develop systems for internal use. Our advanced electronic packaging systems compete with mechanical drills manufactured by companies such as Hitachi Via Mechanics, Excellon and Pluritec and laser systems provided by GSI Lumonics, Sumitomo, Mitsubishi and Hitachi Via Mechanics. Our vision products compete with vision suppliers such as Cognex, ICOS Systems, and Robotic Vision Systems. There are also numerous other vision companies and captive vendors in Japan, North America and Europe. Major competitors for circuit fine tuning systems include NEC and GSI Lumonics.

MANUFACTURING AND SUPPLY

Our largest production facilities are located in Portland, Oregon, Klamath Falls, Oregon, and San Diego, California. Portland's manufacturing operations consist of electronic subassembly and final system assembly for semiconductor yield improvement, advanced electronic packaging, and circuit fine tuning product lines. Electronic component manufacturing products are produced in our facilities in San Diego, California, and Klamath Falls, Oregon. Our vision systems are manufactured in our facilities in Ann Arbor, Michigan, and Minneapolis, Minnesota.

We use qualified manufacturers to supply many components of our products. Our systems use high performance computers, peripherals, lasers and other components from suppliers. Some of the components we use are obtained from a single source or a limited group of suppliers. An interruption in the supply of a particular component could require substitutions that would have a temporary adverse impact on us. We believe our relationships with our suppliers are good.

EMPLOYEES

As of June 2, 2001, we employed 1,383 people, including 306 in engineering, research and development, 557 in manufacturing and 520 in marketing, sales, technical support, customer service and administration. Many of our employees are highly skilled, and our success will depend in part upon our ability to attract

and retain such employees, who are in great demand. We have never had a work stoppage or strike and no employees are represented by a labor union or covered by a collective bargaining agreement. We consider our employee relations to be good.

ITEM 2: PROPERTIES

PATENTS AND OTHER INTELLECTUAL PROPERTY

We have a policy of seeking patents, when appropriate, on inventions relating to new products and improvements which are discovered or developed as part of our ongoing research, development and manufacturing activities. We own 80 United States patents and 102 patents issued outside of the United States. During fiscal 2001, we applied for 19 new patents in the United States and 37 new patents outside of the United States. Additionally, as of June 2, 2001 we had 16 patent applications pending in the United States and 130 patent applications pending outside of the United States. Although our patents are important, we believe that the success of our business depends to a greater degree on the technical competence and innovation of our employees.

We rely on copyright protection for our proprietary software. We also rely upon trade secret protection for our confidential and proprietary information. There can be no assurance that others will not independently develop substantially equivalent proprietary information and techniques, or that we can meaningfully protect our trade secrets.

PROPERTIES

Our executive and administrative offices, as well as a manufacturing facility, are located in a three-building complex located on 15 acres in Portland, Oregon. We own the buildings, which contain 196,500 square feet of space. In June 2001 we began construction of a 62,000 square foot corporate headquarters building in Portland, Oregon. We plan to complete construction in September 2002. We also own a 60,000 square foot plant on 10 acres of land in Escondido, California, a 29,000 square foot building on 3 acres of land near Minneapolis, Minnesota and a 53,000 square foot plant on 31 acres of land in Klamath Falls, Oregon.

In addition, we lease 14,875 square feet of industrial space in Canton, Massachusetts; 9,900 square feet of office and industrial space in Santa Ana, California; 13,905 square feet of office and industrial space in San Marcos, California; 21,945 square feet of office and industrial space in Ann Arbor, Michigan; and other office and service space in several additional locations in the United States, and in eight foreign countries.

We believe the productive capacity of these facilities to be adequate and suitable for the requirements of our business.

ITEM 3: LEGAL PROCEEDINGS

On February 14, 2001, Cognex Corporation (Cognex) filed a lawsuit in the United States District Court for the District of Massachusetts (Cognex Corporation v. Electro Scientific Industries, Inc., No. 01-10287 RCL). The lawsuit alleges that our CorrectPlace ver. 5.0 product infringes United States Patent 5,371,690, which is owned by Cognex. The patent concerns the inspection of surface mount devices that are attached to the surface of an electronic circuit board. Cognex seeks injunctive relief, damages, costs and attorneys' fees. We believe we have meritorious defenses to the action and intend to pursue them vigorously. Discovery has commenced in this case. Additionally, certain of our customers have notified us that, in the event it is subsequently determined that their use of CorrectPlace ver. 5.0 infringes any patent, they may seek indemnification from us for damages or expenses resulting from this matter.

We initiated litigation against Dynamic Details, Inc. and GSI Lumonics, Inc. for patent infringement in March 2000 in the U.S. District Court for the Central District of California (Electro Scientific Industries v. Dynamic Details, Inc. and GSI Lumonics, Inc., No. SACV00-272 AHS (ANx)). We believe that

Dynamic Details and GSI Lumonics are violating our U.S. patent 5,847,960 entitled "Multi-tool Positioning System". The complaint alleges that Dynamic Details infringes our patent 5,847,960 and that GSI Lumonics has actively induced infringement of, and contributorily infringed, our patent 5,847,960. The complaint seeks injunctive relief and monetary damages. Dynamic Details, Inc. and GSI Lumonics, Inc. have filed a counterclaim for a declaratory judgment of non-infringement and invalidity of our patent 5,847,960.

We initiated litigation against General Scanning, Inc. for patent infringement in December 1996 in the U.S District Court for the Northern District of California (Electro Scientific Industries, Inc. v. General Scanning, Inc. No. C-96-4268 SBA). On April 2, 1999 a federal court jury issued a verdict upholding the validity of our link blowing patent, U.S. patent 5,265,114 entitled "System and Method for Selectively Laser Processing a Target Structure of One or More Materials of a Multimaterial, Multilayer Device". The jury found our U.S. patent 5,473,624 entitled "Laser System and Method for Selectively Severing Links" invalid. On April 8, 1999, the same jury awarded us $13.1 million in damages, and also concluded that General Scanning's infringement was willful. On July 8, 1999 the court entered a permanent injunction, prohibiting General Scanning from making, using, selling, or offering for sale in the United States memory repair systems and upgrade kits equipped with 1.3 micron lasers. This judgment was affirmed by the United States Court of Appeals for the Federal Circuit on April 18, 2001. On May 24, 2001, GSI Lumonics, Inc., the successor to General Scanning, paid us $15.3 million in satisfaction of the judgment, including interest.

Separately, the U.S. Patent and Trademark Office has issued an order granting a request by General Scanning to re-examine our patent 5,265,114. On July 27, 2000 the Patent Office issued a non-final first office action in its re-examination of our patent 5,265,114 stating that some of the claims of the 5,265,114 patent were unpatentable. On May 30, 2001 the U.S. Patent and Trademark Office issued a Notice of Intent to Issue a Reexamination Certificate indicating the claims of the 5,265,114 are patentable and confirmed. We expect a final office action to issue from the U.S. Patent and Trademark Office that allows all of the claims of the 5,265,114 patent before the end of fiscal 2002.

Numerous users of our products have received notice of patent infringement from the Lemelson Medical, Educational & Research Foundation Limited Partnership ("Partnership") alleging that their use of our products infringes certain patents transferred to the Partnership by the late Jerome H. Lemelson. Certain of these users have notified us that, in the event it is subsequently determined that their use of our products infringes any of the Partnership's patents, they may seek indemnification from us for damages or expenses resulting from this matter.

ITEM 4: SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS

No matters were submitted to a vote of our security holders during the fourth quarter ended June 2, 2001.

EXECUTIVE OFFICERS

Our executive officers, and their ages and positions as of June 29, 2001, are as follows:

Name	Age	Position
Donald R. VanLuvanee	56	Chief Executive Officer, President and Director
Robert E. Belter	60	Vice President
James T. Dooley	47	Vice President, Chief Financial Officer
Barry A. Glasgow	55	Vice President
Julia A. Harper	42	Vice President
Gary M. Kapral	45	Vice President
John R. Kurdock	56	Vice President
Kevin T. Longe	42	Vice President
Joseph L. Reinhart	42	Vice President and Corporate Secretary

Mr. VanLuvanee joined us in 1992 as Chief Executive Officer, President and a director. From 1991 to 1992, Mr. VanLuvanee was President, Chief Executive Officer and a Director at Mechanical Technology, Inc., a supplier of contract research and development services and a manufacturer of technologically advanced equipment. From 1990 to 1991, he was President and Chief Executive Officer of BCT Spectrum, Inc., a supplier of vacuum deposition systems. From 1984 to 1990, he was President, Chief Operating Officer and a director of Kulicke and Soffa Industries, a supplier of capital equipment and consumables to the microelectronics industry. Mr. VanLuvanee is also a director of Micro Component Technology, Inc., a leading manufacturer of automated test handling equipment, and FEI Company, which designs, manufactures and markets focused ion beam workstations and both ion and electron emitter and focusing column components.

Mr. Belter joined us in May 1997 as a Vice President and General Manager of our Electronic Components Systems business. Prior to joining us, Mr. Belter served as a consultant to us in marketing and product development for one year. Mr. Belter has extensive prior experience in the electronic component industry, including four years as President and General Manager of Johanson Dielectrics, and ten years as President and General Manager of Kyocera Northwest, North American Electronic Components.

Mr. Dooley was elected Vice President and Chief Financial Officer in June 2000. He joined us in 1992 as the Controller of Electronic Component Systems business and was named Corporate Controller in 1994. In 1996 he was named Director of Portland Manufacturing. Prior to joining us he held various financial management positions at IRT Corporation, Eli Lilly and Company, INTERMEDICS, Inc., and Johnson and Johnson, Inc.

Mr. Glasgow joined us in June 1998 as Vice President of Sales. Prior to joining us, Mr. Glasgow worked for ADE as Vice President of Worldwide Sales and Customer Support, where he was responsible for all sales and service activities. In addition, Mr. Glasgow previously worked for us, and a company we acquired, XRL, Inc., from 1987 to 1997 in various sales positions including Director of Worldwide Sales for semiconductor products from 1995 to 1997.

Ms. Harper joined us in May 1997 as Treasury and SEC Reporting Manager, was named Corporate Controller in 1998 and Vice President of Finance in April 1999. From 1995 to 1997, Ms. Harper was Accounting Manager at Instromedix Incorporated, a medical electronics manufacturer. She held a number of management positions with ARCO Oil and Gas Company from 1980 to 1991.

Mr. Kapral joined us in May 2000 as Vice President responsible for our vision-based businesses. Prior to joining us, Mr. Kapral was both a corporate vice president and a business unit president of SGL Carbon Group, a major supplier to semiconductor manufacturers, with responsibility for SGL's semiconductor activities in North America and Europe.

Mr. Kurdock joined us in February 1997 as Vice President and General Manager of Portland Operations. During the five years prior to joining us, Mr. Kurdock served as Vice President of the Surface Mount Division for Universal Instruments and previously held senior operating positions with the Silicon Valley Group and Perkin Elmer.

Mr. Longe joined us in October 2000 as Corporate Vice President. In May 2001 he was named Vice President of Worldwide Sales. From 1992 until he joined ESI, he was with Evapco, Inc., where he was Vice President and Managing Director of Asia-Pacific operations and, prior to that, Vice President of the Industrial Products Group. His earlier experience included senior management positions with IMECO, a subsidiary of York International.

Mr. Reinhart joined us in 1993 as Communications and Contracts Manager and was named Director of Business Development in April 1995. Mr. Reinhart was elected a Vice President in September 1996 and was elected Corporate Secretary in June 1998. His experience includes finance, venture funding, mergers and acquisitions and administration in high-technology businesses.

PART II

ITEM 5: MARKET FOR THE REGISTRANT'S COMMON EQUITY AND RELATED SHAREHOLDER MATTERS

COMMON STOCK PRICES/DIVIDENDS

Our common stock trades on the Nasdaq National Market under the symbol ESIO. The following table shows, for the fiscal quarters indicated, the high, low and closing sales prices for the common stock as reported on the Nasdaq National Market.

	2001			2000		
Fiscal Quarter	**High**	**Low**	**Closing**	**High**	**Low**	**Closing**
1st Quarter	$55.50	$30.63	$42.00	$22.44	$17.09	$20.00
2nd Quarter	$41.31	$23.88	$24.69	$32.31	$19.75	$30.00
3rd Quarter	$38.31	$22.13	$29.41	$59.00	$28.25	$55.00
4th Quarter	$41.36	$25.50	$36.97	$69.13	$41.88	$52.69

We have not paid any cash dividends on our common stock during the last five fiscal years. We currently intend to retain our earnings for our business and do not anticipate paying any cash dividends on our common stock in the foreseeable future.

The number of shareholders of record at June 2, 2001 was 780.

ITEM 6: SELECTED FINANCIAL DATA

Fiscal Years Ended: (Thousands of dollars expect per share)	June 2 2001	June 3 2000	May 31 1999	May 31 1998	May 31 1997
Net Sales	$ 496,172	$ 316,925	$ 206,242	$ 258,639	$ 193,325
Net income	99,933	40,860	7,528	22,347	16,519
Net income per share - basic	3.71	1.55	0.29	0.89	0.69
Net income per share - diluted	3.58	1.49	0.28	0.86	0.67
Proforma net income [1,2,3]	91,503	40,860	10,399	33,260	16,519
Proforma net income per share - basic [1,2,3]	3.39	1.55	0.40	1.32	0.69
Proforma net income per share - diluted [1,2,3]	3.28	1.49	0.39	1.28	0.67
Working capital	264,644	204,800	153,139	144,840	120,483
Net property, plant and equipment	54,946	36,017	33,462	30,373	22,088
Total assets	407,073	291,641	221,823	209,131	176,003
Long-term debt	–	–	–	–	–
Shareholders' equity	$ 363,049	$ 256,141	$ 201,261	$ 188,094	$ 148,762

[1] Fiscal 1998 excludes a pretax charge of $14.6 million in merger-related expenses associated with the acquisitions of Chip Star, Inc. ("Chip Star"), Dynamotion Corporation ("Dynamotion") and Applied Intelligence Systems, Inc. ("AISI").

[2] Fiscal 1999 excludes a pretax charges of $2.8 million in merger-related expenses associated with the acquisitions of Testec, Inc. ("Testec"), and MicroVision Corp. ("MicroVision") and $1.4 million in trial-related, non-recurring litigation expenses.

[3] Fiscal 2001 excludes a pre-tax gain of $13.9 million in connection with the litigation award from GSI Lumonics, net of $2.5 million of legal fees and expenses directly related to the award, and $1.4 million of interest received.

ITEM 7: MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

FISCAL YEAR ENDED JUNE 2, 2001 COMPARED TO FISCAL YEAR ENDED JUNE 3, 2000

Revenue for fiscal 2001 was $496.2 million, which was 56.6% or $179.2 million higher than for fiscal 2000. The increase was due to higher sales of electronic component systems, semiconductor yield improvement systems and circuit fine tuning systems. These increases were partially offset by slightly lower sales of vision and inspection systems. Advanced electronic packaging equipment sales remained relatively

flat. For both fiscal 2001 and 2000, electronic component systems represented the largest percentage of revenues at 44.6% and 37.2%, respectively.

Gross margin for fiscal 2001 was 58.0%, up from 54.6% in the prior fiscal year. This increase in gross margin as a percentage of net sales was due primarily to increased capacity utilization resulting from higher unit volume, as well as faster growth of higher margin product revenue.

Selling, service and administrative expenses were $106.1 million, an increase of $ 25.5 million or 31.6% from fiscal 2000. The increase in fiscal 2001, as compared to fiscal 2000, was primarily due to increases in our selling and marketing infrastructure, higher commission expenses and higher costs of incentive and benefit programs. Selling, service and administrative expenses decreased as a percentage of sales from 25.4% to 21.4%, primarily due to higher net sales.

Our future operating results depend to a considerable extent on our ability to maintain a competitive advantage in the products and services we provide. We continue to make substantial investments in our research and development efforts. Accordingly, research, development and engineering expenses for fiscal 2001 increased to $51.3 million from $35.1 million for the prior year. As a percentage of sales, research, development and engineering expenses decreased from 11.1% for fiscal 2000 to 10.3% for 2001. The decrease as a percentage of net sales was due to higher net sales for fiscal 2001.

Non-recurring operating income consisted of a $13.9 million gain in connection with the GSI Lumonics litigation award net of $2.5 million of legal fees and other expenses directly related to the award settlement.

Interest income rose to $9.8 million, an increase of $7.1 million from fiscal 2000. The increase is due to increased cash and related investments as a result of a significant increase in earnings as well as $1.4 million of interest received related to the GSI Lumonics litigation award.

The effective tax rate of 33.3% for fiscal 2001 is higher than the fiscal 2000 effective rate as a result of relatively lower foreign sales corporation benefit on significantly higher earnings and a lower utilization of net operating losses in fiscal 2001. The lower effective tax rate as compared to the statutory federal tax rate is largely a result of the benefit of our foreign sales corporation.

Net income for the year ended June 2, 2001 was $99.9 million, equaling $3.71 per basic share or $3.58 per diluted share. Net income for the year ended June 3, 2000 was $40.9 million, equaling $1.55 per basic share or $1.49 per diluted share. Excluding the non-recurring GSI litigation award settlement, fiscal 2001 net income was $91.5 million, equaling $ 3.39 per basic share or $3.28 per diluted share.

FISCAL YEAR ENDED JUNE 3, 2000 COMPARED TO FISCAL YEAR ENDED MAY 31, 1999

Revenue for fiscal 2000 was $316.9 million, which was 53.7% or $110.7 million higher than for fiscal 1999. The increase was due to higher sales of electronic component systems, vision and inspection systems, semiconductor yield improvement systems and circuit fine tuning systems. These increases were partially offset by lower sales of advanced electronic packaging equipment. For fiscal 2000, electronic component systems represented the largest percentage of revenues at 37.2%. Semiconductor yield improvement systems contributed the highest revenues for fiscal 1999 at 31.5% of sales.

Gross margin for the year ended June 3, 2000 was 54.6%, up from 49.9% in the prior fiscal year. This increase in margin from the prior fiscal year is driven by changes in product mix, higher average selling prices due to strong industry demand, and increased overhead absorption due to higher unit volumes.

Selling, service and administrative expenses were $80.6 million, an increase of $22.9 million or 39.8% from fiscal 1999. Selling, service and administrative expenses decreased as a percentage of sales from 27.9% to 25.4%. The absolute dollar increase is attributable to higher commission expenses and an increase in the profit sharing and bonus accruals associated with increased sales volume and profits.

Research, development and engineering expenses for the year ended June 3, 2000 increased to $35.1 million from $31.3 million for the prior year. Research, development and engineering expenses decreased as a percentage of sales to 11.1% for 2000 from 15.2% for the prior year due to increased sales.

Fiscal 1999 includes non-recurring expenses of $4.2 million, including $2.8 million in merger-related expenses for professional service fees and expenses associated with consolidating operations, and $1.4 million for incremental legal fees and trial expenses for intellectual property litigation.

The effective tax rate of 31.8% for the year ended June 3, 2000 was essentially flat compared to fiscal 1999. The lower effective tax rate as compared to the statutory federal tax rate is largely a result of the benefit of our foreign sales corporation.

Net income for the year ended June 3, 2000 was $40.9 million, equaling $1.55 per basic share or $1.49 per diluted share. Net income for the year ending May 31, 1999 was $7.5 million, equaling $0.29 per basic share or $0.28 per diluted share. Excluding non-recurring expenses, fiscal 1999 net income was $10.4 million, equaling $0.40 per basic share or $0.39 per diluted share.

FINANCIAL CONDITION AND LIQUIDITY

Our principal sources of liquidity at June 2, 2001 are: existing cash, cash equivalents and marketable securities of $163.1 million, accounts receivable of $86.5 million and a $7.0 million line of credit, none of which was outstanding at June 2, 2001. We have no long-term debt and a current ratio of 7.0:1. Working capital increased to $264.6 million at June 2, 2001, from $204.8 million at June 3, 2000.

We may acquire or invest in complementary businesses, product lines or technologies. These acquisitions or investments may require additional debt or equity capital to fund such activities. A summary of cash flow activities follows:

(In thousands)	June 2 2001	June 3 2000	May 31 1999
Cash flows provide by (used in):			
Operating activities	$ 89,161	$ 72,583	$ 1,952
Investing activities[1]	(60,510)	(54,148)	(7,186)
Financing activities	4,995	8,648	2,993
Increase (decrease) in cash and cash equivalents[2]	$ 33,646	$ 27,083	$ (2,241)

[1] Reflects net purchase of $30.3 million in marketable securities during fiscal 2001 and net purchase of $38.8 million of marketable securities during fiscal 2000.

[2] Total cash and marketable securities increased from $98.4 million on June 3, 2000 to $163.1 million on June 2, 2001.

Operating Activities: Operating cash flows were $89.1 million in 2001 largely due to higher net income and partially offset by net changes in working capital accounts. Trade receivables increased $15.1 million due to increased sales in comparison to last fiscal year. Inventory increased by $17.3 million from June 3, 2000 as a result of increased sales causing need for larger inventories. Increases in raw materials and finished goods were directly related to increased sales. Current liabilities increased $11.7 million due to higher compensation accruals, which resulted from higher volume of business and increased profitability.

Investing Activities: Net cash of $60.5 million was used in investing activities. We made net purchases in marketable securities of $30.3 million and purchases in the amount of $27.8 million for construction of our Klamath Falls facility, to upgrade computing and manufacturing capabilities, and to renovate and improve utilization of office and manufacturing space.

Financing Activities: Net cash of $5.0 million was generated by stock option exercises and sales under the employee stock purchase plan.

Capital Commitments: We have capital commitments of approximately $12.0 million for construction of a 62,000 square foot corporate headquarters building located on the Portland, Oregon campus. We expect that the facility will be completed in September 2002. In Taiwan, Asia we have capital commitments of $7.0 million for construction of a 17,000 square foot sales office and demonstration center, which we expect to be completed August 2002.

FACTORS THAT MAY AFFECT FUTURE RESULTS

The statements contained in this report that are not statements of historical fact, including without limitation statements containing the words "believes", "expects", and similar words, constitute forward-looking statements that are subject to a number of risks and uncertainties. From time to time we may issue other forward-looking statements. We caution investors that such forward-looking statements are subject to an inherent risk that actual results may materially differ. The following information highlights factors that could cause actual results to differ materially from the results expressed or implied by our forward-looking statements. Forward-looking statements should be considered in light of these factors. Factors that may result in such variances include, but are not limited to, the following:

Industry Volatility

Our business depends in large part upon the capital expenditures of manufacturers of electronic devices, including miniature capacitors, semiconductor memory devices and circuits used in wireless communications equipment, including pagers and wireless phones, automotive electronics and computers. The markets for products manufactured by our customers are cyclical and have historically experienced periodic downturns, which have had a negative effect on the demand for capital equipment.

Customer Concentration

Ten large multinational electronics companies constituted 30.7% of our fiscal 2001 sales and therefore the loss of any of these customers would be significant.

Technological Change and Competition

The market for our products is characterized by rapidly changing technology and evolving industry standards. We believe that our future success will depend on our ability to develop and manufacture new products and product enhancements, and to introduce them successfully into the market. Failure to do so in a timely fashion could harm our competitive position. The announcements or introductions of new products by our competitors or us may adversely affect our operating results, since these announcements may cause customers to defer ordering products from our existing product lines.

International Trade and Economic Conditions

International shipments accounted for 72.2% of sales for fiscal 2001 compared to 72.3 % of sales for fiscal 2000. About 58.0% of our fiscal 2001 product sales are to customers in Asia versus 62.3% for fiscal year 2000. A substantial number of orders that we received from Asia were secured by letters of credit. We expect that international shipments will continue to represent a significant percentage of net sales in the future. A continued or additional decline in the economies of any of the countries in which we do business would negatively affect our operating results because of our significant dependence on international revenues. Other risks involved with international trade include changes in demand resulting from fluctuations in interest and currency exchange rates, as well as factors such as government financed competition, changes in trade policies, tariff regulations, difficulties in obtaining United States export licenses and the difficulties of staffing and managing foreign operations.

Most of our sales are transacted in dollars and all of our products are made in the United States. Many Japanese customers pay in yen; therefore, we hedge these sales transactions to mitigate currency risk. Our European and Asian sales subsidiaries' operating expenses are denominated in their respective local currencies. These transactions represent approximately 10.8% of fiscal 2001 consolidated operating expenses and are split 43.5% and 56.5% respectively between Europe and Asia. Changes in the value of the local currency, as measured in US dollars, will commensurately increase or decrease operating expenses.

Euro Conversion

Our information technology systems will allow for transactions to take place in both local currencies and the Euro, with the eventual elimination of the local currency. We plan on converting our European subsidiaries' local currencies to Euro during fiscal 2002. We do not believe that the introduction of the Euro has or will have a material adverse affect on our results of operations.

Foreign Sales Corporation Benefit

In February 2000, the World Trade Organization (WTO) ruled that Foreign Sales Corporation (FSC) provisions violated U.S. obligations under the General Agreement on Tariffs and Trade (GATT). As a result, Congress repealed the FSC rules effective October 1, 2000, subject to certain transition rules. Congress then enacted legislation for an alternative to the FSC. In June 2001, the WTO ruled that these new provisions also violated U.S. obligations under GAAT. The legislation creating an FSC alternative remains law, and barring its repeal, we believe that this legislation will result in a tax benefit similar to that under the FSC rules and that there should be no material effect on our effective tax rate or on our financial statements.

Acquisitions

We have made, and may in the future make, acquisitions of, or significant investments in, businesses with complementary products, services or technologies. Acquisitions involve numerous risks, including management assimilation and costs in connection with integration of the operations, technologies, and products of the acquired companies, possible impairment of acquired intangible assets, and the potential loss of key employees of the acquired companies. In addition, the Financial Accounting Standards Board has disallowed the pooling-of-interests method of acquisition accounting. This could result is significant charges resulting from amortization of intangible assets recorded in connection with future acquisitions, and may alter our acquisition strategy. The inability to manage these risks effectively could materially affect our financial condition and results of operations.

Key Suppliers

We use numerous vendors to supply materials used in production. Although we make reasonable efforts to ensure that parts are available from multiple suppliers, some key parts are available only from a single supplier or a limited group of suppliers. If we do not receive parts for production in a timely and cost effective manner, our results of operations may be materially and adversely affected.

Manufacturing Delays or Interruptions

We depend on manufacturing flexibility to meet the changing demands of our customers. Any significant delay or interruption of manufacturing operations as a result of software deficiencies, natural disasters, or other causes could result in ineffective manufacturing capabilities or delayed product deliveries, any or all of which could materially and adversely affect our results of operations and financial condition.

Capacity Expansion

We have completed a 53,000 square-foot manufacturing facility on a 31-acre parcel in Klamath Falls, Oregon. In June 2001, we began construction of a 62,000 square foot corporate headquarters building in Portland, Oregon. Both projects have been funded with existing capital resources and internally generated funds. Our capacity expansion involves risks. For example, the electronics industry has historically been cyclical and subject to significant economic downturns characterized by over-capacity and diminished demand for products of the type manufactured by us. Unfavorable economic conditions affecting the electronics industry in general, or any of the our major customers, may affect our ability to successfully utilize our additional manufacturing capacity in an effective manner, which could adversely affect our operating results.

Direct Sales in Asia

ESI has established direct sales and service organizations in China, Taiwan, Korea, and Singapore. Previously, we sold our products through a network of commission-based sales representatives in these countries. Our shift to a direct sales model in these regions involves risks. For example, we may encounter labor shortages or disputes that could inhibit our ability to effectively sell and market our products. ESI is also subject to compliance with the labor laws and other laws governing employers in these countries and we will incur additional costs to comply with these regulatory schemes. Additionally, we will incur new fixed operating expenses associated with the direct sales organizations; in particular, payroll related costs and lease expenses. If amounts saved on commission payments formerly paid to our sales representatives do not decrease sufficiently to offset these expenses, our operating results may be harmed.

Patent Infringement

Our business is characterized by continual technological change, with frequent introductions of new products and technologies. As a result, companies often design and develop similar products to those introduced by others, increasing the risk that their products and processes may give rise to claims that they infringe on the intellectual property rights of others. This inherent risk of infringement could cause us to incur significant litigation costs or other expenses. For more information, see "Item 3: Legal Proceedings."

Stock Market Volatility

The market price of our common stock could be subject to wide fluctuations in response to quarterly variations in operating results, announcements of new products by us or our competitors, market conditions generally affecting companies in our industry, changes in financial estimates by securities analysts or other events or factors, many of which are beyond our control.

The stock market and specifically the stock prices of technology companies have been very volatile. This volatility is often not related to the operating performance of these companies. This broad market and industry volatility may reduce or increase the price of our common stock, without regard to our operating performance. Due to this volatility, the market price of our common stock could significantly decrease.

ITEM 7A: QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Interest Rate Risk

As of June 2, 2001, our investment portfolio includes marketable debt securities of $94.6 million. These securities are subject to interest rate risk, and will decline in value if interest rates increase. These securities are classified as Securities Available for Sale; therefore, the impact of interest rate changes is reflected as a separate component of shareholder's equity. Due to the duration of our investment portfolio, an immediate 10% increase in interest rates would not have a material effect on our financial condition or the results of our operations.

Foreign Currency Exchange Rate Risk

We have limited involvement with derivative financial instruments and do not use them for trading purposes. Derivatives are used to manage well-defined foreign currency risks. We enter into forward exchange contracts to hedge the value of accounts receivable denominated in Japanese yen. The impact of exchange rates on the forward contracts will be substantially offset by the impact of such changes on the underlying transactions. The effect of an immediate 10% change in exchange rates on the forward exchange contracts and the underlying hedged positions, denominated in Japanese yen, would not be material to our financial position or the results of our operations.

CONSOLIDATED BALANCE SHEETS
(in thousands)

	YEAR ENDED	
	June 2, 2001	June 3, 2000
ASSETS		
Current Assets:		
Cash and cash equivalents	$ 68,522	$ 34,876
Securities available for sale	68,735	63,522
Total cash and securities	137,257	98,398
Trade receivables, less allowance for doubtful accounts of $1,524 at 2001 and $1,953 at 2000	86,508	73,346
Income tax refund receivable	–	2,091
Inventories:		
Finished goods	20,288	14,511
Work-in-process	14,183	12,844
Raw materials and purchased parts	38,855	28,979
Total inventories	73,326	56,334
Deferred income taxes	9,580	8,171
Other current assets	1,997	1,534
Total current assets	308,668	239,874
Long-term Securities Available for Sale	25,849	–
Property, Plant and Equipment, at Cost	94,553	79,161
Less accumulated depreciation	(39,607)	(43,144)
Net property, plant and equipment	54,946	36,017
Deferred Income Taxes	656	–
Other Assets	16,954	15,750
	$ 407,073	$ 291,641
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current Liabilities:		
Accounts payable	$ 7,048	$ 13,061
Accrued liabilities:		
Payroll related	25,669	13,820
Commissions	1,221	3,214
Warranty	4,216	2,513
Income taxes payable	1,602	–
Other	2,883	1,798
Total accrued liabilities	35,591	21,345
Deferred revenue	1,385	668
Total current liabilities	44,024	35,074
Deferred Income Taxes	–	426
Shareholders' Equity		
Preferred stock, without par value;		
1,000 shares authorized; no shares issued	–	–
Common stock, without par value; 100,000 shares authorized;		
27,101 and 26,855 shares issued and outstanding at		
June 2, 2001and June 3, 2000, respectively.	125,997	120,140
Retained earnings	237,338	137,405
Accumulated other comprehensive loss	(286)	(1,404)
Total shareholders' equity	363,049	256,141
	$ 407,073	$ 291,641

The accompanying notes are an integral part of these statements.

CONSOLIDATED STATEMENTS OF INCOME

(in thousands except per share data)

	YEAR ENDED		
	June 2, 2001	June 3, 2000	May 31, 1999
Net Sales	$ 496,172	$ 316,925	$ 206,242
Cost of Sales	208,612	143,894	103,392
Gross margin	287,560	173,031	102,850
Operating expenses:			
Selling, service and administrative	106,091	80,597	57,659
Research, development and engineering	51,346	35,145	31,267
Non-recurring operating items	(11,394)	–	4,180
Total operating expenses	146,043	115,742	93,106
Operating income	141,517	57,289	9,744
Interest income	9,832	2,695	1,147
Other income (expense), net	(1,419)	(112)	89
Income before income taxes	149,930	59,872	10,980
Provision for income taxes	49,997	19,012	3,452
Net income	$ 99,933	$ 40,860	$ 7,528
Net income per share - basic	$ 3.71	$ 1.55	$ 0.29
Net income per share - diluted	$ 3.58	$ 1.49	$ 0.28
Weighted average number of shares - basic	26,959	26,357	25,854
Weighted average number of shares - diluted	27,884	27,357	26,480

The accompanying notes are an integral part of these statements.

CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY
(in thousands)

	COMMON STOCK				
	Number of shares	Amount	Retained earnings	Other Comprehensive income (loss)	Total
Balance at May 31, 1998	25,695	$101,734	$ 89,590	$(3,230)	$188,094
Stock plans:					
Employee stock plans	399	3,566	–	–	3,566
Tax benefit of stock options exercised	–	1,906	–	–	1,906
Distribution to S-corp shareholders of pooled acquisitions	–	–	(573)	–	(573)
Comprehensive income:					
Net income	–	–	7,528	–	7,528
Cumulative translation adjustment	–	–	–	740	740
Comprehensive income	–	–	–	–	8,268
Balance at May 31, 1999	26,094	$107,206	$ 96,545	$(2,490)	$201,261
Stock plans:					
Employee stock plans	761	8,648	–	–	8,648
Tax benefit of stock options exercised	–	4,286	–	–	4,286
Comprehensive income:					
Net income	–	–	40,860	–	40,860
Unrealized loss on securities held for sale	–	–	–	(151)	(151)
Cumulative translation adjustment	–	–	–	1,237	1,237
Comprehensive income	–	–	–	–	41,946
Balance at June 3, 2000	26,855	$120,140	$137,405	$(1,404)	$256,141
Stock plans:					
Employee stock plans	246	4,995	–	–	4,995
Tax benefit of stock options exercised	–	862	–	–	862
Comprehensive income:					
Net income	–	–	99,933	–	99,933
Unrealized loss on securities held for sale	–	–	–	804	804
Cumulative translation adjustment	–	–	–	314	314
Comprehensive income	–	–	–	–	101,051
Balance at June 2, 2001	27,101	$125,997	$237,338	$ (286)	$363,049

The accompanying notes are an integral part of these statements.

CONSOLIDATED STATEMENTS OF CASH FLOWS
(in thousands)

	YEAR ENDED		
	June 2, 2001	June 3, 2000	May 31, 1999
CASH FLOWS FROM OPERATING ACTIVITIES			
Net income	$99,933	$40,860	$ 7,528
Adjustments to reconcile net income to cash provided by operating activities:			
Non-recurring operating expenses	–	–	4,180
Depreciation and amortization	9,883	8,808	6,772
Non-cash charges (credits)	130	78	(297)
Deferred income taxes	(2,605)	1,409	(1,674)
Tax benefit of stock options exercised	862	4,286	1,906
Changes in operating accounts:			
(Increase) decrease in trade receivables	(15,115)	6,857	(12,773)
(Increase) decrease in inventories	(17,299)	(4,274)	1,670
(Increase) decrease in other current assets	1,628	631	(417)
Increase (decrease) in current liabilities	11,744	13,928	(4,943)
Net cash provided by operating activities	89,161	72,583	1,952
CASH FLOWS FROM INVESTING ACTIVITIES			
Purchase of property, plant and equipment	(27,849)	(10,004)	(9,625)
Proceeds from sales of property, plant and equipment	–	132	1,410
Purchase of securities	(70,304)	(66,169)	(16,809)
Proceeds from sales of securities and maturing securities	40,046	27,361	21,057
Decrease in other assets	(2,403)	(5,468)	(3,219)
Net cash used in investing activities	(60,510)	(54,148)	(7,186)
CASH FLOWS FROM FINANCING ACTIVITIES			
Proceeds from exercise of stock options and stock plans	4,995	8,648	3,566
Distribution to S-corp shareholders of pooled acquisitions	–	–	(573)
Net cash provided by financing activities	4,995	8,648	2,993
NET CHANGE IN CASH AND CASH EQUIVALENTS	33,646	27,083	(2,241)
CASH AND CASH EQUIVALENTS AT BEGINNING OF PERIOD	34,876	7,793	10,034
CASH AND CASH EQUIVALENTS AT END OF PERIOD	$68,522	$34,876	$ 7,793

Cash payments for interest were not significant in 2001, 2000 or 1999.

The accompanying notes are an integral part of these statements.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(in thousands, except share data unless otherwise noted)

BUSINESS ENVIRONMENT

The accompanying consolidated financial statements include the accounts of Electro Scientific Industries, Inc. and its subsidiaries, all of which are wholly owned. We design and manufacture sophisticated products used around the world in electronics manufacturing including: laser manufacturing systems for semiconductor yield improvement, production and test equipment for the manufacture of surface mount ceramic capacitors, laser and mechanical advanced electronic packaging production systems, machine vision systems and circuit fine tuning systems. We serve the global electronics market from our headquarters in Portland, Oregon and through subsidiaries located in the United States, Europe and Asia.

Concentrations of Credit Risk

We use financial instruments that potentially subject us to concentrations of credit risk. Such instruments include cash equivalents, securities held for sale, trade receivables and financial instruments used in hedging activities. We invest our cash in cash deposits, money market funds, commercial paper, certificates of deposit and readily marketable debt securities. We place our investments with high credit quality financial institutions and limit the credit exposure from any one institution or instrument. To date, the amount of losses experienced on these investments have not been material. We sell a significant portion of our products to a small number of large electronics manufacturers: 30.7% of fiscal 2001 revenues were derived from ten customers. Our operating results could be adversely affected if the financial condition and operations of these key customers decline.

Concentrations of Other Risks

Our operations involve a number of other risks and uncertainties including but not limited to the cyclicality of the electronics market, rapidly changing technology, international operations and hedging exposures. Refer to Management's Discussion and Analysis of Financial Conditions and Results of Operations for additional commentary.

SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Principles of Consolidation

All material intercompany accounts and transactions have been eliminated.

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results may differ from those estimates and such differences could be material to the financial statements.

Stock Split

Our Board of Directors approved a two-for-one stock split to shareholders of record at the close of business February 23, 2000, effective February 24, 2000. All per share and shares outstanding data in the Consolidated Financial Statements and Notes to Consolidated Financial Statements have been retroactively restated to reflect the stock split.

Change in Fiscal Year

On September 30, 1999, we elected to change our fiscal quarters to correspond with a four week, five week, four week quarter, which means each quarter will end on a Saturday. Previously, the quarters ended on the last day of the calendar month. The fiscal year now ends on the Saturday following or directly preceding May 31, whichever Saturday is the fewest number of days from May 31.

Reclassifications

Certain reclassifications have been made in the accompanying consolidated financial statements for 1999 and 2000 to conform to the 2001 presentation.

Revenue Recognition

We recognize systems, spare parts and other product revenue when the product has been delivered, risk of loss has passed to the customer and collection of the resulting receivable is probable. We design, market and sell our products as standard configurations. Accordingly, customer acceptance provisions are based on seller-specified criteria, which we demonstrate prior to shipment. Revenue on new products is deferred until we have established a track record of customer acceptance on these new products. When customer-specified objective criteria exist, revenue is deferred until customer acceptance if we can not demonstrate the system meets these specifications prior to shipment.

Revenue associated with service or maintenance contracts is recognized ratably over the life of the contract, which is generally one year. See Recent Accounting Pronouncements for more information.

Product Warranty

We generally warrant our systems for a period of up to 12 months for material and labor to repair and service the system. A provision for the estimated cost related to warranty is recorded upon shipment.

Research and Development

Research and development costs are expensed as incurred.

Taxes on Income

Deferred income taxes have not been provided on unremitted earnings of foreign subsidiaries, as we believe any U.S. tax on such earnings would be substantially offset by associated foreign tax credits.

Comprehensive Income

We have adopted Statement of Financial Accounting Standards No. 130, “Reporting Comprehensive Income” (SFAS 130). SFAS 130 establishes standards for reporting and presentation of comprehensive income and its components in financial statements. Comprehensive income includes net income and “other comprehensive income” which includes charges or credits to equity that are not the result of transactions to shareholders. Our only material components of “other comprehensive income” are cumulative foreign currency translation adjustments and unrealized gain or loss on securities available for sale.

Net Income Per Share

We compute net income per share in accordance with Statement of Financial Accounting Standards No. 128, “Earnings Per Share” (SFAS 128). SFAS 128 requires the dual presentation of basic and diluted earnings per share and other additional disclosures. Basic earnings per share is computed by dividing net income by the weighted average number of shares outstanding. Diluted earnings per share is computed by dividing net income by the weighted average number of shares and share equivalents (stock options) outstanding.

Cash and Cash Equivalents

We consider all highly liquid investments with a maturity of three months or less at date of purchase to be cash equivalents.

Inventories

Inventories are principally valued at standard costs, which approximate the lower of cost (first-in, first-out) or market. Costs utilized for inventory valuation purposes include material, labor and manufacturing overhead.

Depreciation and Capitalization Policies

Depreciation is determined on the straight-line method based on the following useful lives: buildings - 25 to 40 years; building improvements - 5 to 15 years; and machinery and equipment - 3 to 10 years.

Expenditures for maintenance, repairs and minor improvements are charged to expense. Major improvements and additions are capitalized. When property is sold or retired, the cost and related accumulated depreciation are removed from the accounts and the resulting gain or loss is included in other expense.

RECENT ACCOUNTING PRONOUNCEMENTS:

Revenue Recognition

The Securities and Exchange Commission (SEC) issued Staff Accounting Bulletin No. 101 (SAB 101), "Revenue Recognition in Financial Statements", in December 1999. As allowed by SAB 101, we adopted SAB 101 in the fourth fiscal quarter of 2001. Due principally to the fact that we have historically tested our products prior to shipment to ensure they meet seller specified acceptance criteria, the adoption of SAB 101 was not material to our financial statements.

Hedging Activities

The Financial Accounting Standards Board issued "Accounting for Derivative Instruments and Hedging Activities" (SFAS 133) in June 1998. SFAS 133, as amended by SFAS 138, is effective for fiscal years beginning after June 15, 2000. The standard requires ESI to recognize all derivatives on the balance sheet at fair value. Derivatives that are not hedges must be adjusted to fair value through income. If the derivative is a hedge, depending on the nature of the hedge, changes in the fair value of the derivatives will either be offset against the change in fair value of the hedged assets, liabilities, or firm commitments through earnings, or recognized in other comprehensive income until the hedged item is recognized in earnings. The change in the derivative's fair value related to the ineffective portion of a hedge, if any, will be immediately recognized in earnings. We expect to adopt this Standard at the beginning of our fiscal year 2002. The effect of adopting this standard will not have a material effect on our financial position or our results of operations.

Business Combinations, Goodwill and Other Intangible Assets

In July 2001, the Financial Accounting Standards Board issued SFAS No. 141, "Business Combinations", and SFAS No. 142, "Goodwill and Other Intangible Assets". SFAS No. 141 requires that the purchase method of accounting be used for all business combinations initiated after June 30, 2001. Use of the pooling-of-interest method will be prohibited on a prospective basis only. SFAS No. 142 changes the accounting for goodwill from an amortization method to an impairment-only approach. Thus, amortization of goodwill, including goodwill recorded in past business combinations, will cease upon adoption of that Statement, which for ESI will be fiscal 2002. We do not expect that the adoption of either SFAS No. 141 or SFAS No. 142 to have a significant impact on the financial condition or results of operations of ESI.

PROPERTY, PLANT AND EQUIPMENT

Major classes of property, plant and equipment consist of the following:

	June 2, 2001	June 3, 2000
Land	$ 4,754	$ 4,534
Buildings and improvements	33,251	23,990
Machinery and equipment	51,945	48,770
Construction in progress	4,603	1,867
	$ 94,553	$ 79,161

LINE OF CREDIT

We have a short-term revolving line of credit with a large foreign bank totaling $7 million. This line expires in September 2001. We expect to renew the line through 2002. At our option, the interest rate is prime or LIBOR plus 1.25 percent. There were no borrowings outstanding at June 2, 2001 or June 3, 2000.

EMPLOYEE BENEFIT PLANS

We have an employee savings plan under the provisions of section 401(k) of the Internal Revenue Code. We contributed $1,489, $1,123, and $950 to the plan for the years ended June 2, 2001, June 3, 2000, and May 31, 1999, respectively.

INCOME TAXES

We account for income taxes under the asset and liability method as defined by the provisions of Statement of Financial Accounting Standards No. 109, "Accounting for Income Taxes" (SFAS 109). Under this method, deferred income taxes are recognized for the future tax consequences attributable to temporary differences between the financial statement and tax balances of existing assets and liabilities. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. Under SFAS 109, the effect on deferred taxes of a change in tax rates is recognized in income in the period that includes the enactment date.

The net deferred tax asset as of June 2, 2001 and June 3, 2000 consists of the following tax effects relating to temporary differences and carryforwards:

	June 2, 2001	June 3, 2000
Deferred Tax Assets:		
Receivable and inventory valuation	$ 4,029	$ 3,384
Vacation pay	1,307	880
Warranty costs	1,560	930
Accrued commissions	99	135
Payroll related accruals	1,457	1,065
Other accrued liabilities	1,187	988
	9,639	7,382
Tax loss and credit carryforwards	3,879	5,089
Total deferred tax assets	13,518	12,471
Deferred Tax Liabilities:		
Tax in excess of book depreciation	(1,045)	(1,054)
Other deferred tax liabilities	(297)	(597)
Total deferred tax liabilities	(1,342)	(1,651)
Valuation allowance	(1,940)	(3,075)
Net deferred tax asset	$10,236	$ 7,745

At June 2, 2001 there were net operating losses of $10,484 available for U.S. federal income tax purposes. These losses were principally acquired as part of prior acquisitions and expire on various days through 2013. These losses are subject to certain limitations caused by the change in ownership. Accordingly, their utilization in future periods may be restricted. Given these limitations, some of these losses may not be realizable, and accordingly, a valuation allowance has been recorded.

The components of income before income taxes and the provision for income taxes are as follows:

	June 2, 2001	June 3, 2000	May 31, 1999
Income (loss) before income taxes:			
Domestic	$145,976	$58,300	$12,309
Foreign	3,954	1,572	(1,329)
	$ 149,930	$59,872	$10,980
Provision (benefit) for income taxes:			
Current:			
U.S. federal and state	$ 49,591	$11,905	$ 3,209
Foreign	2,035	1,412	11
	$ 51,626	$13,317	$ 3,220
Deferred	(2,491)	1,409	(1,674)
Income tax effect of stock options exercised	862	4,286	1,906
	$ 49,997	$19,012	$ 3,452

The tax benefit related to stock option exercises has been recorded as an increase to common stock rather than a reduction to the provision for income taxes.

A reconciliation of the provision for income taxes at the federal statutory income tax rate to the provision for income taxes as reported is as follows:

	June 2, 2001	June 3, 2000	May 31, 1999
Provision computed at federal statutory rate	$52,475	$20,956	$ 3,843
Higher than U.S. tax rates in foreign jurisdictions	992	822	353
Impact of U.S. tax losses and credit carryforwards	(387)	(1,188)	(636)
Impact of state taxes	3,705	1,314	503
Benefit of foreign sales corporation (FSC)	(6,140)	(3,500)	(1,027)
Nondeductible merger related expenses	–	–	487
Impact of pooled subchapter S corporations	–	–	(236)
Other, net	(648)	608	165
	$49,997	$19,012	$ 3,452

Consolidated income tax payments amounted to $47,804, $12,856, and $4,361 for the years ended June 2, 2001, June 3, 2000, and May 31, 1999, respectively.

EARNINGS PER SHARE

We compute net income per share in accordance with Statement of Financial Accounting Standards 128, "Earnings Per Share" (SFAS 128). All earnings per share amounts in the following table are presented to conform to the SFAS 128 requirements.

	June 2, 2001	June 3, 2000	May 31, 1999
Net income	$99,933	$40,860	$ 7,528
Weighted average number of shares of common stock and common stock equivalents outstanding:			
Weighted average number of shares - basic	26,959	26,357	25,854
Dilutive effect of employee stock options	925	1,000	626
Weighted average number of shares - diluted	27,884	27,357	26,480
Net income per share - basic	$ 3.71	$ 1.55	$ 0.29
Net income per share - diluted	$ 3.58	$ 1.49	$ 0.28

The number of options to purchase shares of common stock that were excluded from the table above (as the effect would have been anti-dilutive) were 1,252,048, 1,208,599, and 1,154,116 for the years ended June 2, 2001, June 3, 2000, and May 31, 1999, respectively.

COMMITMENTS AND CONTINGENCIES

We have limited involvement with derivative financial instruments and do not use them for trading purposes. Derivatives are used to manage well-defined foreign currency risks. We enter into forward exchange contracts to hedge the value of accounts receivable denominated in a foreign currency. Foreign exchange contracts have gains and losses that are recognized at the end of each fiscal period. At June 2, 2001 and June 3, 2000, we had forward exchange contracts totaling $27,302 and $35,491, respectively. In general, these contracts mature in approximately one year and the counterparties are large, highly rated, widely recognized banks; therefore, risk of credit loss as a result of nonperformance by the banks is minimal. The use of derivatives does not have a significant effect on our financial position or the results of its operations.

We lease certain equipment, automobiles and office space under operating leases, which are non-cancelable and expire on various dates through 2009. The aggregate minimum commitment for rentals under operating leases beyond June 2, 2001 is as follows:

2002	$1,344
2003	696
2004	388
2005	210
2006	117
Thereafter	11
Total	$2,766

Rental expense for all operating leases was $1,690 in 2001, $1,314 in 2000, and $1,854 in 1999.

LEGAL MATTERS

On February 14, 2001, Cognex Corporation (Cognex) filed a lawsuit in the United States District Court for the District of Massachusetts (Cognex Corporation v. Electro Scientific Industries, Inc., No. 01-10287 RCL). The lawsuit alleges that our CorrectPlace ver. 5.0 product infringes United States Patent 5,371,690, which is owned by Cognex. The patent concerns the inspection of surface mount devices or SMDs that are attached to the surface of an electronic circuit board. Cognex seeks injunctive relief, damages, costs and attorneys' fees. Although neither the extent nor the outcome of this investigation can be determined at this time, ESI does not believe that the outcome will have a material adverse effect on its financial position or results of operations.

EMPLOYMENT COMMITMENT

In June 2001, ESI, in conjunction with our construction of the Klamath Falls facility, entered into a Development Agreement with the State of Oregon, the City of Klamath Falls, Oregon, Klamath County, Oregon, Klamath Community Development Corporation (KCDC) and others. We are required to reimburse KCDC $200,000 plus accrued interest and the State of Oregon $375,000 plus accrued interest in the event that we do not create at least 200 Full-Time Equivalent jobs over 5 years (as defined in the Development Agreement) at our Klamath Falls, Oregon manufacturing facility.

CAPITAL COMMITMENTS

We have capital commitments of approximately $12.0 million for construction of a 62,000 square foot corporate headquarters building located on the Portland, Oregon campus. It is expected that the facility will be completed in September 2002. In Taiwan, Asia, we have capital commitments of approximately $7.0 million for construction of a 17,000 square foot sales office and demonstration center which is expected to be completed in August 2002.

SECURITIES

We classify our marketable debt securities as Securities available for sale in the accompanying Consolidated Balance Sheets. All of our marketable debt securities are invested in high credit quality securities. The amortized cost of these securities approximates fair market value.

During fiscal 2001 and 2000, proceeds of $40,046 and $27,361, respectively, resulted from the sale or maturity of securities. There were no material realized gains or losses associated with these sales or maturities. Unrealized gains or losses are reported in a separate component of shareholders' equity. Information regarding our marketable securities is as follows:

	June 2, 2001	June 3, 2000
Fair market value	$94,584	$63,522
Cost:		
State and local government	32,930	20,938
Federal government	58,122	40,816
Corporate	2,494	2,000
Total	$93,546	$63,754
Maturity information:		
Less than 1 year	$68,735	$63,522
1 to 3 years	$25,849	–

SHAREHOLDER RIGHTS PLAN

We renewed our Shareholder Rights Plan in May 1999 and accordingly declared a dividend distribution of one Right for each outstanding share of common stock, payable to holders of record on June 4, 1999. On March 1, 2001, we amended and restated our Rights Agreement appointing Mellon Investor Services as the Rights Agent, successor to First Chicago Trust Company of New York. Under certain conditions, each Right may be exercised to purchase 1/100 of a share of Series A No Par Preferred Stock at a purchase price of $270, subject to adjustment. The Rights are not presently exercisable and will only become exercisable following the occurrence of certain specified events. Generally the Rights become exercisable after a person or group acquires or commences a tender offer that would result in beneficial ownership of 15 percent or more of our outstanding common stock. In addition, the Rights become exercisable if any party becomes a beneficial owner of 10 percent or more of our outstanding common stock and is determined by the Board of Directors to be an adverse party. If a person or group acquires 15 percent of our outstanding common stock or the Board of Directors declares a person to be an Adverse Person, each Right will be adjusted to entitle its holder to receive, upon exercise, common stock or, in certain circumstances, other assets of ours having a value equal to twice the exercise price of the Right. If, after the Rights become exercisable, we are acquired in a merger or other business combination, each Right will be adjusted to entitle its holder to receive, upon exercise, common stock of the acquiring company having a value equal to twice the exercise price of the Right, depending on the circumstances. The Rights expire on May 7, 2009 and may be redeemed by the Company for $0.001 per Right. The Rights do not have voting or dividend rights, and until they become exercisable have no dilutive effect on our earnings.

STOCK PLANS

In September 1989, the shareholders approved the adoption of the 1989 Stock Option Plan (the "1989 Plan") pursuant to which 1,000,000 shares of our common stock have been reserved for issuance. In September 1998, shareholders approved additional shares under this plan increasing the total available to 4,400,000. In September 2000, the shareholders approved the adoption of the 2000 Stock Option Incentive Plan (the "2000 Incentive Plan") which replaced the 1989 Plan. There are 2,000,000 shares of our common stock reserved for issuance under the 2000 Incentive Plan plus any shares that are available for grant under the 1989 Plan or that may become available for grant under the 1989 Plan through the expiration, termination, forfeiture or cancellation of grants. Options under the 2000 Incentive Plan generally vest 25% per year over a 4 year period from the date of grant, expire ten years from the date of grant, and are exercisable at prices generally not less than the fair market value at the grant date. The 2000 Incentive Plan allows for automatic annual grants to non-employee directors for 6,000 shares of common stock on July 31 of each year, with an option price equal to the closing market price on the date of the grant, a ten-year term and a four-year vesting schedule. The 2000 Incentive Plan allows for grants of incentive stock options, as defined in Section 422 of the Internal Revenue Code of 1986, as amended, or non-statutory stock options. Stock appreciation rights may be granted in connection with options, although no options have been granted which include stock appreciation rights.

In September 1990, the shareholders approved the adoption of the 1990 Employee Stock Purchase Plan (the "ESPP") pursuant to which 300,000 shares of our common stock have been reserved for issuance to participating employees. In September 1998, shareholders approved additional shares under this plan increasing the total available to 900,000. Eligible employees may elect to contribute up to 15 percent of their cash compensation during each pay period. The ESPP provides for one 12-month offering period beginning January 8 of each year. During the offering period, participants accumulate funds in an account via payroll deduction. At the end of the offering period, the purchase price is determined and the accumulated funds are used to automatically purchase shares of our common stock. The purchase price per share is equal to 85% of the lower of the fair market value of the common stock (a) on the enrollment date of the offering period or (b) on the date of purchase.

In September 1996, the shareholders approved the 1996 Stock Incentive Plan (the "1996 Plan") pursuant to which 300,000 shares of our common stock have been reserved for issuance to participating employees. In September 1998, shareholders approved additional shares under this plan increasing the total available to 500,000. The 1996 Plan allows for the grants of stock bonuses, restricted stock or performance-based awards. Our restricted stock grants vest based on certain performance criteria that are tied to our stock price. During fiscal 2001, 2000 and 1999, we recorded $1,372, $2,498 and $499, respectively, of compensation expense related to restricted stock grants.

In April 2000, the Board of Directors approved the adoption of the 2000 Stock Option Plan (the "2000 Plan") pursuant to which 1,000,000 shares of our common stock have been reserved for issuance. The 2000 Plan allows for grants to non-officer employees of non-statutory stock options, stock bonuses or restricted stock. In April 2001, the Board of Directors approved 1,250,000 additional shares under this plan increasing the total shares available to 2,250,000.

We account for our stock option plans and our employee stock purchase plan in accordance with the provisions of the Accounting Principles Board's Opinion No. 25 (APB 25), "Accounting For Stock Issued to Employees". In 1995, the Financial Accounting Standards Board released Statement of Financial Accounting Standard No. 123 (SFAS 123), "Accounting For Stock Based Compensation". SFAS 123 provides an alternative to APB 25. We continue to account for our employee stock plans in accordance with the provisions of APB 25. Accordingly, we have elected to provide pro forma disclosures as required by SFAS 123.

We have computed, for pro forma disclosure purposes, the per share value of all options granted under the stock option plan to be $20.87, $29.19 and $22.36 for 2001, 2000 and 1999, respectively. The pro forma value of options granted under the employee stock purchase plan is immaterial for 2001, 2000 and 1999. These computations were made using the Black-Scholes option-pricing model, as prescribed by SFAS 123, with the following weighted average assumptions for grants in 2001, 2000 and 1999:

	YEAR ENDED		
	June 2, 2001	June 3, 2000	May 31, 1999
Risk-free interest rate	4.60%	5.50%	5.50%
Expected dividend yield	0%	0%	0%
Expected life	5.6 years	6 years	5 years
Expected volatility	87.20%	66.50%	67.40%

The total value of options granted would be amortized on a pro rata basis over the vesting period of the options. Options generally vest equally over four years. If we had accounted for these plans in accordance with SFAS 123, our net income and net income per share would have decreased as reflected in the following pro forma amounts for the fiscal years ended as follows:

	YEAR ENDED		
	June 2, 2001	June 3, 2000	May 31, 1999
Net income:			
As reported	$99,933	$40,860	$7,528
Pro forma	$88,390	$36,373	$3,990
Net income per share:			
As reported - basic	$ 3.71	$ 1.55	$ 0.29
As reported - diluted	$ 3.58	$ 1.49	$ 0.28
Pro forma - basic	$ 3.28	$ 1.38	$ 0.16
Pro forma - diluted	$ 3.28	$ 1.36	$ 0.15

The following table summarizes activity in the stock plans for the years ended June 2, 2001, June 3, 2000, and May 31, 1999.

	Fiscal Year Ended					
	June 2, 2001		June 3, 2000		May 31, 1999	
	Shares (in 000's)	Weighted Average Exer. Price	Shares (in 000's)	Weighted Average Exer. Price	Shares (in 000's)	Weighted Average Exer. Price
Options outstanding at beginning of year	3,273	$30.41	2,566	$14.08	1,886	$10.46
Granted	1,460	28.41	1,593	46.39	1,068	17.83
Exercised	149	13.50	685	10.10	322	8.16
Cancelled	118	34.69	201	17.99	66	12.48
Options outstanding at end of year	4,466	$30.21	3,273	$30.41	2,566	$14.08
Excercisable at end of year	1,433	$22.67	852	$12.53	1,088	$ 9.50
Shares issued under the ESPP	61	$24.97	62	$19.34	75	$14.72

In addition to the options above, we had 72,600, 122,450 and 156,946 of restricted stock grants outstanding as of June 2, 2001, June 3, 2000 and May 31, 1999, respectively, none of which were exercisable.

The following table sets forth the exercise price range, number of shares outstanding at June 2, 2001, weighted average remaining contractual life, weighted average exercise price, number of exercisable shares and weighted average exercise price of exercisable options by groups of similar price and grant date:

Range of Exercise Prices	Outstanding as of June 2, 2001	Weighted Average Remaining Contractual Life (Years)	Weighted Average Exercise Price	Exercisable as of June 2, 2001	Weighted Average Exercise Price
$ 1.38 - 13.60	580,707	4.55	$ 9.56	559,341	$ 9.46
14.25 - 18.71	90,622	6.38	16.50	66,122	16.58
18.72 - 18.88	615,048	7.93	18.87	292,370	18.87
18.91 - 26.64	569,020	7.79	23.71	219,515	22.50
26.75 - 27.00	1,275,270	9.84	27.00	–	–
27.31 - 52.56	180,800	9.21	38.72	5,250	37.90
52.75 - 52.75	1,088,208	8.86	52.75	272,010	52.75
53.25 - 61.00	64,790	8.59	59.18	18,040	58.82
61.62 - 63.25	1,500	8.85	62.17	375	62.17
	4,465,965	8.27	$30.21	1,433,023	$22.67

SEGMENT REPORTING

We adopted Statement of Financial Accounting Standards No. 131, "Disclosure about Segments of an Enterprise and Related Information" (SFAS 131), effective May 31, 1999. SFAS 131, which is based on a management approach to segment reporting, establishes requirements to report selected segment information quarterly and to report annually entity-wide disclosures about products and services, major customers and the countries in which the entity holds material assets and reports revenue. An operating segment is defined as a component that engages in business activities, whose operating results are reviewed by the chief operating decision maker, and for which discrete financial information is available. Based on the provisions of SFAS 131, ESI operates in one segment. We manage our resources and assess our performance on an enterprise-wide basis. We provide electronic manufacturers with equipment necessary to produce key components used in wireless communications, computers, automotive electronics and many other electronic products. Our products enable these manufacturers to reduce production costs, increase yields and improve the quality of their products. Our products include semiconductor yield improvement systems, electronic component manufacturing systems, advanced electronic packaging equipment, vision and inspection products and circuit fine tuning systems. Since ESI operates in one segment, all financial segment information required by SFAS 131 can be found in the consolidated financial statements.

The following data represents sales by product line for the years ended:

	June 2, 2001	June 3, 2000	May 31, 1999
Semiconductor Yield Improvement	$ 146,112	$ 81,947	$ 64,953
Electronic Component Systems	221,537	117,915	46,312
Advanced Electronic Packaging	41,917	40,897	46,149
Vision and Inspection Systems	42,609	45,122	27,021
Circuit Fine Tuning Products	43,997	31,044	21,807
Net Sales	$ 496,172	$ 316,925	$ 206,242

We have geographic operations in the United States, Europe and Asia. Transfers between geographic areas are made at prevailing market prices. Operating income is total revenue less operating expenses. In computing operating income, none of the following items have been added or deducted: interest income, other income or expense or the provision for income taxes. Identifiable assets are those assets of ours that are identified with the operations in each geographic location. Corporate assets are primarily cash and cash equivalents and securities available for sale.

Export sales included in United States sales to unaffiliated customers for the years ended June 2, 2001, June 3, 2000, and May 31, 1999 were as follows:

	Europe	Asia	Total
June 2, 2001	$44,800	$244,500	$289,300
June 3, 2000	$13,758	$ 164,697	$ 178,455
May 31, 1999	$ 5,512	$ 77,527	$ 83,039

The most significant sales outside the U.S. were to Taiwan and Japan, which represented 22.1% and 20.5% of our net sales for fiscal 2001, respectively.

In fiscal 2001, 2000 and 1999, there were no sales to any one customer in excess of 10% of consolidated net sales.

The following data represents segment information for the years ended:

June 2, 2001	United States	Europe	Asia	Adjustment and Eliminations	Consolidated
Sales to unaffiliated customers	$427,083	$25,630	$43,459	$ –	$496,172
Transfers between geographic areas	48,601	1,458	5,418	(55,477)	–
Total revenue	$475,684	$27,088	$48,877	$(55,477)	$496,172
Operating income (loss)[2]	$136,085	$ 131	$ 5,322	$(21)	$141,517
Identifiable assets at June 2, 2001	$277,115	$ 6,158	$18,350	$(57,656)	$243,967
Corporate assets					163,106
Total assets at June 2, 2001					$407,073
June 3, 2000					
Sales to unaffiliated customers	$266,243	$17,935	$32,747	$ –	$316,925
Transfers between geographic areas	38,944	–	287	(39,231)	–
Total revenue	$305,187	$17,935	$33,034	$(39,231)	$316,925
Operating income (loss)	$ 55,657	$(146)	$ 2,613	$(835)	$ 57,289
Identifiable assets at June 3, 2000	$233,025	$ 7,322	$19,653	$(66,757)	$193,243
Corporate assets					98,398
Total assets at June 3, 2000					$291,641
May 31, 1999					
Sales to unaffiliated customers	$173,912	$17,472	$14,858	$ –	$206,242
Transfers between geographic areas	23,643	–	229	(23,872)	–
Total revenue	$197,555	$17,472	$15,087	$(23,872)	$206,242
Operating income (loss)[1]	$ 11,220	$ (1,553)	$ 290	$(213)	$ 9,744
Identifiable assets at May 31, 1999	$226,612	$ 6,099	$10,286	$(53,832)	$189,165
Corporate assets					32,658
Total assets at May 31, 1999					$221,823

[1] Includes $2,773 in non-recurring operating expenses associated with the acquisition of MicroVision and Testec and $1,407 in trial-related expenses associated with the General Scanning lawsuit.

[2] Includes net non-recurring operating gain of $11.4 million related to the GSI Lumonics litigation award.

ACQUISITIONS

MicroVision Corp.

On January 29, 1999, we completed the acquisition of MicroVision, a provider of integrated, vision-based inspection and automation solutions for use in semiconductor front-end and back-end applications, located in Chanhassen, Minnesota. The acquisition consideration consisted of 2,037,000 shares of ESI common stock. The transaction has been accounted for as a pooling-of-interests and, accordingly, all data included in the Consolidated Financial Statements have been restated.

Testec, Inc.

On December 21, 1998, we completed the acquisition of Testec, a provider of electrical test systems for the passive component marketplace, located in Phoenix, Arizona. The acquisition consideration consisted of 1,000,000 shares of ESI common stock. The transaction has been accounted for as a pooling-of-interests and, accordingly, all data included in the Consolidated Financial Statements have been restated.

The following is a reconciliation of certain restated amounts with amounts previously reported. Testec and MicroVision activity shown for fiscal 1999 is for the period from June 1 to December 21 and January 29, respectively, their dates of acquisition.

	Year Ended May 31, 1999
Net Sales:	
ESI	$196,735
MicroVision	6,920
Testec	2,587
As Restated	$206,242
Net Income:	
ESI	$ 6,853
MicroVision	335
Testec	340
As Restated	$ 7,528

NON-RECURRING OPERATING ITEMS

In fiscal 2001, we received $13.9 million for a litigation award from GSI Lumonics. We incurred $2.5 million of legal fees and other related expenses directly in connection with the litigation award. We also were awarded $1.4 million of interest related to the GSI Lumonics litigation award. The $11.4 million net award is included in non-recurring operating items and $1.4 million is included in interest income on the income statement.

In fiscal 1999, we incurred $2,773 in professional service fees and expenses associated with the acquisitions of Testec and MicroVision. In addition, we incurred $1,407 in incremental trial-related legal costs associated with the General Scanning lawsuit. Both of these amounts are included in non-recurring operating items on the income statement.

QUARTERLY FINANCIAL INFORMATION
(UNAUDITED)

Year ended June 2, 2001	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Net Sales	$128,532	$139,568	$136,626	$ 91,446
Gross margin	74,832	83,214	79,518	49,996
Net income[1]	23,295	27,719	27,774	21,145
Net income per share - basic[1]	$0.87	$1.03	$1.03	$ 0.78
Net income per share - diluted[1]	$0.83	$1.00	$1.00	$0.75
Year ended June 3, 2000				
Net Sales	$ 58,974	$ 66,935	$ 82,081	$108,935
Gross margin	30,621	36,097	45,544	60,769
Net income	4,785	6,927	11,943	17,205
Net income per share - basic	$0.18	$0.26	$0.45	$0.64
Net income per share - diluted	$0.18	$0.26	$0.43	$0.61

[1] For fiscal 2001, fourth quarter net income and per share amounts include pre-tax non-recurring operating items of $11.4 million related to the litigation award from GSI Lumonics, and $1.4 million of accrued interest.

REPORT OF INDEPENDENT PUBLIC ACCOUNTANTS

To the Board of Directors and Shareholders of Electro Scientific Industries, Inc.:

We have audited the accompanying consolidated balance sheets of Electro Scientific Industries, Inc. (an Oregon corporation) and subsidiaries as of June 2, 2001 and June 3, 2000 and the related consolidated statements of income, shareholders' equity and cash flows for each of the three years in the period ended June 2, 2001. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Electro Scientific Industries, Inc. and subsidiaries as of June 2, 2001 and June 3, 2000, and the results of their operations and their cash flows for each of the three years in the period ended June 2, 2001 in conformity with accounting principles generally accepted in the United States.

ARTHUR ANDERSEN LLP
Portland, Oregon
June 29, 2001

ITEM 9: CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

PART III

ITEM 10: DIRECTORS AND EXECUTIVE OFFICERS OF THE REGISTRANT

The information required by this item is included under "Election of Directors" in our Proxy Statement for our 2001 Annual Meeting of Shareholders (the "2001 Proxy Statement") and is incorporated herein by reference.

Information with respect to our executive officers is included under Item 4 of Part I of this Report. No information is required to be included for Item 405 of Regulation S-K for fiscal 2001.

ITEM 11: EXECUTIVE COMPENSATION

The information required by this item is included under "Board Compensation", "Executive Compensation" (excluding the performance graph) and "Compensation Committee Interlocks and Insider Participation" in our 2001 Proxy Statement and is incorporated herein by reference.

ITEM 12: SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

Information with respect to security ownership of certain beneficial owners and management is included under "Voting Securities and Principal Shareholders" in our 2001 Proxy Statement and is incorporated herein by reference.

ITEM 13: CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

The information required by this item is included under "Executive Compensation" in our 2001 Proxy Statement and is incorporated herein by reference.

PART IV

ITEM 14: EXHIBITS, FINANCIAL STATEMENT SCHEDULES, AND REPORTS ON FORM 8-K

(a) Financial Statements and Schedules.

The following financial statements are included in this Annual Report on Form 10-K on the pages indicated.

All schedules are omitted, as the required information is inapplicable or not significant.

(b) Exhibit List

(b) EXHIBIT LIST

3-A. Restated Articles of Incorporation of the Company. Incorporated by reference to Exhibit 3-A of the Company's Annual Report on Form 10-K for the fiscal year ended May 31, 1991.

3-B. Articles of Amendment of Third Restated Articles of Incorporation of the Company. Incorporated by reference to Exhibit 3-B of the Company's Annual Report on Form10-K for the fiscal year ended May 31, 1999.

3-C. 2001 Restated Bylaws of the Company. Incorporated by reference to Exhibit 3 of the Company's Quarterly Report on Form 10-Q for the quarter ended March 3, 2001.

3-D. Articles of Amendment of Third Restated Articles of Incorporation of the Company. Incorporated by reference to Exhibit 3 of the Company's Quarterly Report on Form 10-Q for the fiscal quarter ended December 2, 2000.

4-A. Amended and Restated Rights Agreement, dated as of March 1, 2001, between the Company and Mellon Investor Services, relating to rights issued to all holders of Company Common Stock.

10-A. ESI 1983 Stock Option Plan, as amended. Incorporated by reference to Exhibit 10-E of the Company's Annual Report on Form 10-K for the fiscal year ended May 31, 1986.

10-B. ESI 1989 Stock Option Plan, as amended. Incorporated by reference to Exhibit 10-B of the Company's Annual Report on Form 10-K for the fiscal year ended May 31, 1997.

10-C. Form of Change in Control Agreement between the Company and each of its corporate officers.[1]

10-D. 1996 Stock Incentive Plan. Incorporated by reference to Exhibit 10-E of the Company's Annual Report on Form 10-K for the fiscal year ended May 31, 1997.[1]

10-E. 2000 Stock Option Plan. Incorporated by reference to Exhibit 10-F of the Company's Annual Report on Form 10-K for the fiscal year ended June 3, 2000.

10-F. Form of Indemnity Agreement between the Company and each of its Directors and Corporate Officers.

10-G. 2000 Stock Option Incentive Plan. Incorporated by reference to Appendix A of the Company's definitive Proxy Statement for its 2000 Annual Meeting of Shareholders.[1]

21. Subsidiaries of the Company.

23. Consent of Independent Public Accountants.

24. Powers of Attorney.

27. Financial Data Schedule.

(c) REPORTS ON FORM 8-K

No reports on Form 8-K were filed during the quarter ended June 2, 2001.

Notes:
(1) Management contract or compensatory plan or arrangement.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Date: July 25, 2001

ELECTRO SCIENTIFIC INDUSTRIES, INC.

By /s/ JAMES T. DOOLEY
James T. Dooley
Vice President and Chief Financial Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the Registrant and in the capacities indicated on July 25, 2001.

Signature	Title
(1) Principal Executive, Financial and Accounting Officers	
/s/ *DONALD R. VANLUVANEE Donald R. VanLuvanee	Director, President and Chief Executive Officer
/s/ JAMES T. DOOLEY James T. Dooley	Vice President and Chief Financial Officer
(2) Directors	
/s/ *DAVID F. BOLENDER David F. Bolender	Chairman of the Board
/s/ *LARRY L. HANSEN Larry L. Hansen	Director
/s/ *W. ARTHUR PORTER W. Arthur Porter	Director
/s/ *VERNON B. RYLES JR. Vernon B. Ryles	Director
/s/ *GERALD F. TAYLOR Gerald F. Taylor	Director
/s/ *JON D. TOMPKINS Jon D. Tompkins	Director
/s/ *KEITH L. THOMSON Keith L. Thomson	Director

*By: /s/ JAMES T. DOOLEY
James T. Dooley
as Attorney-in-Fact

STOCK LISTING

ESI's common stock is traded on the Nasdaq National Market under the symbol ESIO.

INVESTOR INQUIRIES

Investors seeking financial information about ESI can access the investor relations site of www.esi.com. Additional questions should be addressed to:
Electro Scientific Industries, Inc.
13900 NW Science Park Drive
Portland, OR 97229-5497
Phone: (503) 641-4141

TRANSFER AGENT AND REGISTRAR

Mellon Investor Services LLC
Overpeck Center
85 Challenger Road
Ridgefield Park, NJ 07660-2108

SHAREHOLDER INQUIRIES

Contact Mellon Investor Services LLC:

By Mail:
P.O. Box 3315
South Hackensack, NJ 07606
or
85 Challenger Road
Ridgefield Park, NJ 07660

By Phone:
(800) 522-6645

TDD for Hearing Impaired: (800) 231-5469 Foreign Shareholders: (201) 329-8660
TDD Foreign Shareholders: (201) 329-8354

www.melloninvestor.com

NOTICE OF ANNUAL MEETING

The annual meeting of shareholders will be held on Friday, September 21, 2001 at 1 p.m. PDT at ESI, 14100 NW Science Park Drive, Portland, OR 97229-5497.

World Headquarters

Electro Scientific Industries, Inc.
13900 NW Science Park Drive
Portland, OR 97229-5497
Phone: 503-641-4141
Fax: 503-643-4873
http://www.esi.com

ESI Around the World

Santa Ana, California
Escondido, California
Canton, Massachusetts
Ann Arbor, Michigan
Chanhassen, Minnesota
Klamath Falls, Oregon
Austin, Texas
West Sussex, England
Paris, France
Munich, Germany
Guangzhou, China
Shanghai, China
Tokyo, Japan
Nagoya, Japan
Seoul, Republic of Korea
Hsinchu, Taiwan
Chungli, Taiwan
Singapore

Corporate Officers

Donald R. VanLuvanee
President, Chief Executive Officer and Director

Robert E. Belter
Vice President

Bradford S. Cooley
Vice President

James T. Dooley
Vice President and Chief Financial Officer

Barry A. Glasgow
Vice President

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Vice President

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General Counsel and Assistant Corporate Secretary

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Gary S. Klein
Vice President

Mark W. Klug
Vice President

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Vice President

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Vice President

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Gerald F. Taylor
Chief Financial Officer (retired) Applied Materials

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Vice President (retired) Intel Corporation

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