
**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549
FORM 10-K**

(Mark One)

**ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE
SECURITIES EXCHANGE ACT OF 1934
FOR THE FISCAL YEAR ENDED JUNE 30, 2003**

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 0-12944**

ZYGO CORPORATION

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

06-0864500
(IRS Employer
Identification Number)

Laurel Brook Road, Middlefield, Connecticut
(Address of principal executive offices)

06455
(Zip Code)

Registrant's telephone number, including area code: (860) 347-8506

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

Securities registered pursuant to Section 12(g) of the Act:
Common Stock, \$.10 Par Value

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 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.

Indicate by check mark whether the Registrant is an accelerated filer (as defined in Rule 12b-2 of the Act). Yes No

The aggregate market value of the Registrant's Common Stock held by non-affiliates, based upon the closing price of the Common Stock on September 19, 2003, as reported by the Nasdaq National Market, was approximately \$139,001,371. Shares of Common Stock held by each executive officer and director and by each person who owns 5% or more of the outstanding Common Stock, based on filings with the Securities and Exchange Commission, have been excluded since such persons may be deemed affiliates. This determination of affiliate status is not necessarily a conclusive determination for other purposes.

Indicate the number of shares outstanding of each of the registrant's classes of common stock, as of the latest practicable date.

17,729,482 Shares of Common Stock, \$.10 Par Value, at September 19, 2003

Documents Incorporated by Reference:

Specified portions of the registrant's Proxy Statement related to the registrant's 2003 Annual Meeting of Stockholders, to be filed pursuant to Regulation 14A of the Securities Exchange Act of 1934 with the Securities and Exchange Commission, are incorporated by reference into Part III of this Annual Report on Form 10-K to the extent stated herein.

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As used in this report on Form 10-K, unless the context otherwise requires, the terms “we,” “us,” or “Company” and “ZYGO” refer to Zygo Corporation, a Delaware corporation.

FORWARD-LOOKING STATEMENTS

All statements other than statements of historical fact included in this Annual Report regarding our financial position, business strategy, plans, anticipated growth rates, and objectives of management for future operations are forward-looking statements. These forward looking statements include without limitation statements under “Business,” “Management’s Discussion and Analysis of Financial Condition and Results of Operations,” and “Risk Factors.” Forward-looking statements are intended to provide management’s current expectations or plans for the future operating and financial performance based upon information currently available and assumptions currently believed to be valid. Forward-looking statements can be identified by the use of words such as “anticipate,” “believe,” “estimate,” “expect,” “intend,” “plans,” “strategy,” “project,” and other words of similar meaning in connection with a discussion of future operating or financial performance. Actual results could differ materially from those contemplated by the forward-looking statements as a result of certain factors such as those disclosed under “Risk Factors.” Such statements reflect our current views with respect to future events and are subject to these and other risks, uncertainties, and assumptions relating to the operations, results of operations, and our growth strategy.

ZYGO undertakes no obligation to update forward-looking statements to reflect events or circumstances occurring after the date of this 10-K.

PART I

Item 1. *Business*

Overview

Zygo Corporation (“ZYGO,” “we,” “us,” or “Company”) is a leading designer, developer, and manufacturer of optics, metrology, and on-line yield enhancement solutions for the semiconductor and industrial manufacturing markets. We have achieved our leadership position through over 30 years of understanding, utilizing, and developing applications related to the physics of light. We intend to leverage this knowledge and expertise in on-line yield enhancement, namely metrology and automation, to provide innovative solutions and advanced optical components, optical assemblies and modules to customers in the semiconductor and industrial markets. We conduct the majority of our manufacturing in our 135,500 square foot facility in Middlefield, Connecticut.

Our metrology unit manufactures noncontact optical measurement instruments and products. We are one of the largest and most experienced manufacturers of interferometric products that inspect and analyze surfaces of objects. Zygo is also a leader in displacement interferometry, which is used to achieve highly accurate distance measurement and motion control. These products enable lithography tool and semiconductor chip manufacturers to increase yield and semiconductor chip capacity. These interferometric measurement instruments are sold to customers in the semiconductor and industrial manufacturing markets and are used by us in our manufacture of optical components, assemblies, and modules.

Our optics unit manufactures high performance macro-optics components, optical coatings, and optical system assemblies. We are a leader in the manufacture of plano-optics that are used in applications such as laser fusion research, semiconductor manufacturing equipment, and aerospace optical systems. Optical assemblies are manufactured in our optical assembly center in Tucson, Arizona. These optical systems are used in applications such as laser fusion research and semiconductor manufacturing equipment. These components and assemblies also are an integral part of our own optical measurement instruments and systems.

In May 2000, we acquired Firefly Technologies, Inc. renamed Zygo TeraOptix, which developed optical components and modules for the telecommunications market. We exited this telecommunications segment of our business in September 2002.

We were incorporated in 1970 under the laws of the State of Delaware. The address of our principal executive offices is Laurel Brook Road, Middlefield, Connecticut, 06455. Our telephone number at that address is (860) 347-8506. Our website address is www.zygo.com. The information on our website is not part of this Form 10-K.

Industry Background and Solutions

Precision Manufacturing Industry

Manufacturers in the semiconductor and industrial markets continue to redesign their processes in order to compete more effectively in an increasingly competitive marketplace. These changes are necessitated, among other things, by:

- decreasing product geometries;
- increasing complexity of manufacturing processes;
- shortening product life cycles;
- declining product prices; and
- intensifying global competition.

Precision metrology is an enabling technology for the semiconductor and industrial markets. The pressures on manufacturers to improve productivity and quality have fueled demand for precision noncontact optical metrology, and required integration of high precision metrology directly into the manufacturing process in order to increase yields and quality control.

Advancing technologies have required manufacturers in a variety of industries to produce smaller products with more precise tolerances and increased complexity of design geometries. These components cannot be adequately measured by the metrology devices and systems historically utilized. For example, contact profilers and visual qualitative inspection systems are inadequate for quantitative analysis of critical dimensions such as semiconductor line widths, photomask surface quality, and flat panel displays. Additionally, precision machined part tolerances now required in high-performance automotive engines are approaching dimensions that require manufacturers to implement sophisticated metrology and inspection tools.

The trend towards miniaturization and tighter tolerances creates new challenges for manufacturers as they are forced to handle, measure, and test ever-smaller components. As piece part dimensions and tolerances become smaller, “nanotechnology scale” precision is necessary and, to a greater extent than ever, manufacturers require automated measurement and control.

With on-line process control and yield improvement metrology solutions being enabling factors for manufacturers of precision components, the growth for yield enhancement solutions is expected to continue. Our growth is driven by both the projected number of steppers to be sold, and an increase in the number of axes per stepper as the need for precision requirements and throughput increases. Shortening product lifecycles, increased competition, and declining product prices in these industries have forced manufacturers no longer to depend solely on sales growth to fuel financial performance improvement, but rather to focus greater attention on the need to reduce production defects and significantly increase production yields. While the semiconductor market is rather mature in its use of these types of tools, the industrial manufacturing markets’ requirement for on-line automated metrology solutions is at an early stage of penetration, since manufacturers are just beginning to measure critical dimensions and surface topography of smaller parts to tighter tolerances.

History of Innovation and Commercialization

Throughout our history, we have met our customers’ requirements through innovation and commercialization. Since we introduced the first optical interferometer in 1972, we have been issued approximately 220 United States patents, of which over 100 are currently active, and 120 foreign patents, of which 60 are active, and we have 130 United States and 125 foreign patent applications pending. Our intellectual property has been the foundation and driver of our yield enhancement solutions over the last 30 years.

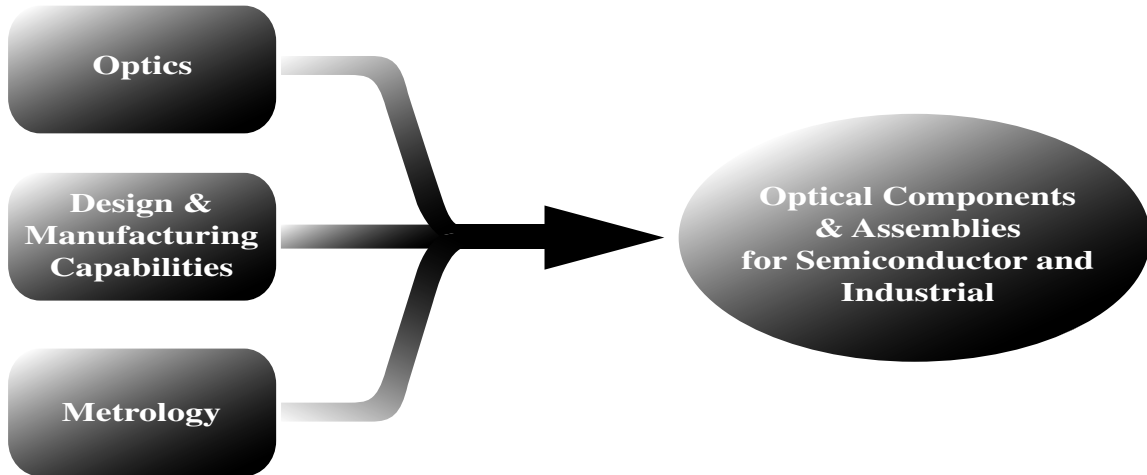
We have received numerous achievement awards, including:

- R&D Magazine 100 Award in 2003, for the VeriFire MST, Multi Surface Metrology;
- R&D Magazine 100 Award in 2002, for the Simetra, 3D Relational Metrology System and R&D 100 Awards in 1978, 1982, 1988 (three awards), 1994, 1996, 1997 and 1998;
- Laser Focus World Commercial Technology Award in 2001;
- Photonics Spectra Circle of Excellence Awards in 1988, 1994, 1996, 1997, 1998 and 2001;
- American Machinist Excellence in Manufacturing Technology Achievement Award for Technology & Reliability in 2000;
- 1998 R&D Magazine 100 and Photonics Spectra Circle of Excellence Award for MESA Interferometric System; and
- 1997 R&D Magazine 100 and Photonics Spectra Circle of Excellence Award for ZMI 2001 Displacement Measuring Interferometer.

Integrated Core Competencies

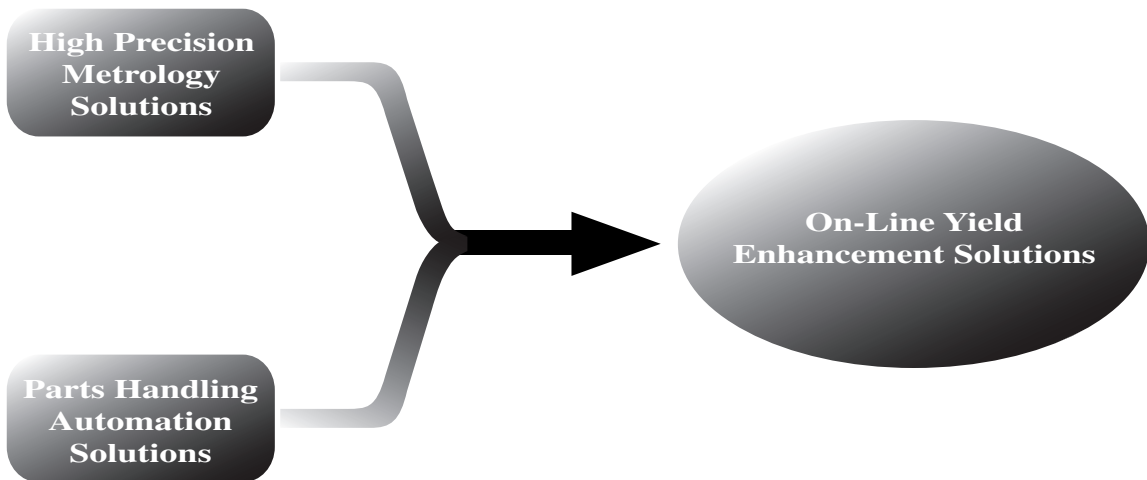
Optical Components, Assemblies and Modules

As illustrated in the following chart, we combine our expertise in optics, our capabilities in design and manufacturing, and our expertise in metrology to manufacture semiconductor and industrial optical components and optical assemblies.



Metrology and Automation: Yield Enhancement Solutions

As illustrated in the following chart, the combination of our high precision metrology systems and our parts handling automation solutions results in on-line yield enhancement solutions for our customers. These solutions can be customized to a customer's specific application.



PRODUCTS AND APPLICATIONS

We manufacture, design, and market yield enhancement solutions that utilize optical metrology and automation for high performance manufacturers. We also manufacture macro-optical components, such as flats, spheres, waveplates, mirrors, and optical assemblies for the semiconductor and industrial markets.

Our products are based on our two core competencies:

- Metrology—including OEM, process control, and on-line automated metrology for yield enhancement; and
- Optics—sold as components and assemblies.

We provide the following Metrology products:

Metrology

OEM

<u>Product</u>	<u>Description</u>	<u>Benefits to Customer</u>	<u>Market</u>
Displacement Measuring Interferometers	Used to measure and control, while they are in motion, the x, y and theta stages in photo lithography equipment	<ul style="list-style-type: none"> • Improves positioning accuracy • High Resolution • High Velocity • Low data age uncertainty 	Semiconductor Industrial

Process Control

<u>Product</u>	<u>Description</u>	<u>Benefits to Customer</u>	<u>Market</u>
Interferometric Microscopes	Used for three-dimensional analysis of the surface of an object	<ul style="list-style-type: none"> • Improves analysis of various types of surfaces 	Semiconductor Industrial
Small Aperture Wavefront Interferometer	Used to analyze the surface shape of transmitted wavelengths and optical components	<ul style="list-style-type: none"> • Measures performance of lenses 	Industrial
Large Aperture Wavefront Interferometer	Used to analyze surface shape and transmitted wavelength of optical components and modules	<ul style="list-style-type: none"> • Precise process control 	Semiconductor Industrial
Photomask Critical Dimension Metrology System	Used to measure and analyze resist-coated and production masks	<ul style="list-style-type: none"> • Allows superior resolution, repeatability, and linearity • Available with defect printability analysis 	Semiconductor
Geometrically Desensitized Interferometer	Used to measure the flatness of precision machined parts	<ul style="list-style-type: none"> • Allows industrial surfaces to be measured quickly and without contact 	Industrial
Digital Video Disk Interferometer	Used to measure the transmitted wavefront quality of small lenses	<ul style="list-style-type: none"> • Allows inspection of small aspherical lenses for digital video disk optical devices 	Industrial
3-D Interferometers	Used to measure flatness, thickness, and parallelism of precision machined parts	<ul style="list-style-type: none"> • High throughput • High yield 	Industrial

Automated Metrology

<u>Product</u>	<u>Description</u>	<u>Benefits to Customer</u>	<u>Market</u>
Auto KMS 100	Fully automated system used to measure critical dimensions on reticles	<ul style="list-style-type: none"> • High throughput • High yield • Process control 	Semiconductor
FPD 1500	Fully automated system measures critical dimensions on flat panel displays	<ul style="list-style-type: none"> • High throughput • High yield • Process control 	Semiconductor

Metrology

We offer a broad range of interferometry-based and imaging products. An interferometer analyzes the number, shape, and position of the lines in the fringe pattern of bright and dark lines that result from the optical path difference between a reference and a measurement beam. These interferometric and imaging instruments and systems utilize highly sophisticated subsystems including precision optical components, stable and long-life laser or other light sources, piece part positioning stages, and high-powered workstations or PCs for processing and analyzing fringe pattern data and image analysis. Our metrology products include:

OEM

Displacement Measuring Interferometers. Our displacement measuring interferometer family of laser interferometer systems provides measurements that control some of the world's most sophisticated machinery in the semiconductor, flat panel display production, and optical component manufacturing industries. These products are used to measure the position of a tool relative to a part under fabrication through the use of a directed laser beam reflected from the moving portion of a machine. Most of these systems are sold on an OEM basis into the semiconductor photolithography market.

Process Control

Interferometric Microscopes. Our interferometric microscopes combine advanced techniques of interferometry, microscopy, and precision analysis algorithms in an automated package. These instruments make high precision surface analysis possible and are important because they provide surface structure analysis. These microscopes use scanning white light interferometry to measure non-specular surfaces and build ultra-high z-axis resolution images. Our patented Frequency Domain Analysis system and powerful workstations and personal computers then combine for next-generation three-dimensional surface structure analysis.

Small Aperture Wavefront Interferometer. Our small aperture wavefront interferometer is a compact interferometer that is designed for ease of use, especially for applications that involve repetitive testing of similar components. It has the ability to quickly and automatically characterize microlenses as small as 20 microns to three millimeters in diameter. Its integrated motion control and down facing orientation make it ideal for testing lens arrays and picking and testing discrete lenses, molded aspherics, miniature mirrors, and filters.

Large Aperture Wavefront Interferometer. Our large aperture wavefront interferometer is used for large surface metrology. Our interferometers are used extensively in the optics industry to measure glass or plastic optical components such as flats, lenses, and prisms. In addition, they are used to measure other precision components such as bearings, sealing surfaces, polished ceramics, and contact lens molds.

Photomask Critical Dimension Metrology System. Our photomask critical dimension metrology system product lines hold a significant market share of the photomask metrology market. They provide the measurement of photomask line width. The positioning, measurement, and data collection functions of the products can be custom configured to specific applications.

Geometrically Desensitized Interferometer. Our geometrically desensitized interferometer product is a patented interferometer that utilizes diffraction gratings to measure surfaces that have roughness and departures approximately 20 times greater than those surfaces presently measurable with existing interferometer technology. It is able to measure rougher, non-specular surfaces, such as those used in precision-machined parts applications, without sacrificing such advantages of other interferometers, such as the ability to utilize high-speed non-contact interferometry and to produce a full-field wide aperture view.

Digital Video Disk Interferometer. The digital disk interferometer measures spherical and aspherical lenses for next-generation DVD players.

3-D Interferometers. The 3-D interferometer product family is a new concept in interferometric metrology. They extend optical interferometric metrology to the rapid measurement of dimensional relationships. While previous interferometric metrology only

measured one primary surface parameter such as roughness or flatness, 3-D interferometers simultaneously measure the flatness, thickness, and parallelism of industrial components. This patent pending technology combines our scanning broadband interferometry and our displacement interferometry into one system. We expect industrial assemblies, such as fuel injector systems, to benefit from this technology with both increased efficiency and improved production yields.

Automated Metrology

Our Automation Group develops products used across a broad range of industries. Our automation products include:

Auto KMS 100. This fully automated inspection system incorporates our KMS microscope with a robotic material handling system. The system accepts an individual reticle from a carrier, automatically presents it to a bar code reader for identification, loads it to the microscope’s inspection stage, performs an automated inspection routine, and returns the reticle to the original input location. A single graphical user interface provides the operator with input to both the handling and inspection systems.

FPD 1500: This fully automated inspection system incorporates our NewView 5000 microscope with a robotic material handling system. The system accepts an individual flat panel display from a carrier, loads it to the microscope’s inspection stage, performs an automated inspection routine, and returns the flat panel display to the original input location. A single graphical user interface provides the operator with input to both the handling and inspection systems.

We provide the following Macro-Optics and Assemblies products:

Macro-Optics and Assemblies

<u>Product</u>	<u>Description</u>	<u>Benefits to Customer</u>	<u>Market</u>
Prisms, Rhomboids, and Beamsplitters	High precision plano, or flat, optical components used singly or in combination to direct, steer, combine, divide, and separate laser beams	<ul style="list-style-type: none"> • Low insertion loss • High quality 	Semiconductor
Optical Coatings	Thin-film coatings used to reflect, minimize loss, separate or combine light	<ul style="list-style-type: none"> • High efficiency energy transfer • Reduced feedback and noise 	Semiconductor
Lenses and Lens Systems	High precision spherical and aspherical lens elements and assemblies	<ul style="list-style-type: none"> • High resolution optical imaging • High resolution lithography 	Industrial Semiconductor
Reference Flat Mirrors	Super-smooth flat mirrors used as reference surfaces with displacement measurement sensors	<ul style="list-style-type: none"> • Precise location of reference surfaces • High resolution lithography 	Semiconductor
Stage Mirrors	Lightweight wafer and reticle stages used for lithography and metrology systems used in semiconductor manufacturing and testing	<ul style="list-style-type: none"> • High throughput 	Semiconductor
Laser Optics	Mirrors, polarizers and laser and assemblies disks used in high energy laser systems for alternative energy research and nuclear weapons simulation	<ul style="list-style-type: none"> • Improved laser performance and damage resistance 	Industrial

Macro-Optics and Assemblies

We manufacture and supply high precision optical components and modules to customers, as well as for use in our own instruments. Our macro-optics products include:

Prisms, Rhomboids, and Beamsplitters. Our high-precision plano optical components are manufactured and supplied to our external customers for use in a variety of modules and assemblies. In addition, they are also used internally as part of our metrology and automation solutions. They are used individually or in combination with one another to direct, steer, combine, divide, and separate laser beams. These products are often coated with special optical films to meet the highly demanding requirements for low insertion loss and cross-channel isolation.

Optical Coatings. Reflective films are designed to minimize loss of optical energy upon reflection from the coated surface. Anti-reflective films minimize the loss of energy upon transmission through the coated surface. These coatings are produced by vacuum deposition of thin dielectric films in sophisticated coating chambers. Reflective and anti-reflective coatings are essential for achieving low insertion losses through components and assemblies. Polarization coatings are applied to prisms and other plano optical components to separate or combine laser beams of orthogonal polarization.

Lenses and Lens Systems. Lenses are transmissive optical components with spherical or aspherical surfaces. They are used individually or in combination as lens systems to form and transfer images. We produce lenses and assemblies for use in a wide variety of applications, ranging from spectrum analyzers for optical telecom systems to semiconductor lithography. Such lenses are produced using advanced computer numeric control manufacturing and metrology equipment. We assemble lens systems in clean-room conditions using laser-based alignment and centering equipment.

Reference Flat Mirrors. Our super-smooth flat mirrors serve as reference surfaces when used in conjunction with displacement measurement interferometers. These reference mirrors must be made of special materials to be insensitive to temperature variation and non-uniformity. We produce a large quantity and variety of reference flat mirrors used in semiconductor manufacturing and metrology equipment. The flatness and smoothness of these mirrors are essential for precise location of semiconductor wafers and exposure masks during production and testing of integrated circuits.

Stage Mirrors. Our stage mirrors are lightweight structures, which serve as both a mechanical support for a wafer or reticle and two orthogonal reference flat mirror surfaces. Stage mirrors are used in high performance lithography and metrology systems employing laser, electron-beam, or x-ray exposure sources. They are made of low-expansion materials to reduce sensitivity to thermal variations, and are machined to produce a lightweight but stiff mechanical structure with excellent dimensional stability. Two adjacent sides of the stage are finished using proprietary technology to serve as reference flat mirrors. The combined optical and structural properties of such stage mirrors are critical for achieving higher wafer throughput in advanced lithography and metrology tools. We supply stage mirrors to a number of manufacturers of semiconductor lithography and metrology equipment.

Laser Optics. Laser optics are mirrors, polarizers and solid-state laser amplifiers used in high energy laser systems. Such components are used in laser fusion research and nuclear weapons simulation. Such optical components must be finished to the highest quality in terms of surface flatness, smoothness, and surface cosmetics. Even the smallest defects can lead to catastrophic failure in use. We are a leader in producing large plano laser optics, having supplied such components to major laser fusion laboratories for nearly two decades. We are under contract with the Lawrence Livermore National Laboratory to produce mirrors, polarizers, and amplifier slabs for the National Ignition Facility, also known as NIF. The NIF, scheduled for completion in 2007, is expected to be the largest laser system ever built.

CUSTOMERS AND MARKETS

The growing requirements for dimensional control to the sub-nanometer level have created an escalating need for our yield enhancement instruments and systems among both OEMs and end-users of microfabrication technology. We have been able to meet these demands with on-line yield improvement instruments and systems as well as with our off-line quality control instruments. Today, our installed base of high precision metrology systems exceeds 10,800 systems.

Several of our customers purchase multiple product family types and multiple technology platforms and employ our solutions at their facilities worldwide. The following is a sampling of our customers in fiscal 2003:

Selected Customers by End Market

<u>Semiconductor</u>	<u>Industrial</u>
Applied Materials	AWE
AU Optronics	Bosch
Canon	Chengdu
DuPont	Lawrence Livermore National Laboratory
Electro Scientific	Lockheed Martin
IBM	Northrop Grumman
KLA-Tencor	Raytheon
Nikon	Siemens
Samsung	Toyota
Zeiss	University of Rochester

During fiscal 2003, 2002, and 2001, aggregate sales to Canon Inc. and its affiliate Canon Sales Co., Inc., amounted to 51%, 22%, and 33%, respectively, of our net sales. No other single customer accounted for more than 10% of our sales in any of the fiscal years 2003, 2002, and 2001.

Patents and Other Intellectual Property

Our success and ability to compete depend substantially upon our technology. We have been developing a portfolio of intellectual property for 30 years. We rely on a combination of patent, copyright, trademark and trade secret laws and license agreements to establish and protect our proprietary rights in our products.

Since we introduced the first optical interferometer in 1972, we have had approximately 220 United States patents issued, of which over 100 are currently active, and 120 foreign patents issued, of which 60 are active, and we have approximately 130 United States and 125 foreign patent applications pending. In addition, we have a number of registered and unregistered trademarks.

While we rely on patent, copyright, trademark, and trade secret laws to protect our technology, we also believe that factors such as the technological and creative skills of our personnel, new product developments, frequent product enhancements, and reliable product maintenance are essential to establishing and maintaining a technology leadership position.

Research and Development and Engineering Operations

We operate in industries that are subject to rapid technological change and engineering innovation. We dedicate substantial resources to research and development. At June 30, 2003, we employed approximately 120 individuals within our research and development and engineering operations. Our strategy is to form close technical working relationships with customers and OEM suppliers in our markets to ensure that our products have relevancy when commercialized. In connection with our research and development operations, we also maintain a close working relationship with various research groups and academic institutions in the United States as well as

abroad. We believe that continued enhancement, development, and commercialization of new and existing products and systems are essential to maintaining and improving our leadership position.

Competition

The industries in which we participate are intensely competitive and are characterized by price pressure and rapid technological change. Furthermore, these markets are dominated by a few market leaders.

We believe that we are one of a limited group of companies that develop and market yield enhancement solutions. Our primary yield enhancement competitors in the semiconductor and industrial markets include Agilent's Laser Interferometer Positioning Systems Division, ADE's Phase Shift Technology, Leica's Mask Metrology Division, and Veeco's Metrology Division.

The principal factors upon which we compete are:

- performance and flexibility of solutions;
- value;
- on-time delivery;
- responsive customer service and support; and
- breadth of product line.

BACKLOG

Backlog at June 30, 2003 was \$37.2 million, a decrease of \$3.3 million, or 8%, as compared to \$40.5 million at June 30, 2002. The year-end fiscal 2003 backlog consisted of \$20.6 million, or 55%, in the semiconductor segment and \$16.6 million, or 45%, in the industrial segment. Orders for the fiscal year ended June 30, 2003 totaled \$99.2 million (gross orders of \$104.9 million less cancellations of \$5.7 million) and consisted of \$57.9 million (gross orders of \$61.1 million less cancellations of \$3.2 million), or 58%, in the semiconductor segment and \$41.3 million (gross orders of \$43.8 million less cancellations of \$2.5 million), or 42%, in the industrial segment.

MARKETING AND SALES

Our sales and marketing strategy is to establish and/or solidify strategic relationships with leading OEMs and end-users in targeted sectors within our markets. The selling process for our products is performed through our worldwide sales organization operating out of six regional sales offices in California, Connecticut, Germany, Japan, Singapore, and Taiwan. Supporting this core sales team are business development, marketing, service, and engineering specialists representing our various optics and metrology units in Connecticut, Arizona, California, and Florida. Product promotion is done through trade shows, printed and e-business advertising, and industry technical organizations.

The following table sets forth the percentage of our total sales by region (including sales delivered through distributors) during the past three years:

	Fiscal Year Ended June 30,		
	<u>2003</u>	<u>2002</u>	<u>2001</u>
Americas (primarily United States)	30%	47%	50%
Far East:			
Japan	53%	27%	35%
Pacific Rim	<u>7%</u>	<u>10%</u>	<u>6%</u>
Total Far East	60%	37%	41%
Europe and other (primarily Europe)	<u>10%</u>	<u>16%</u>	<u>9%</u>
Total	<u>100%</u>	<u>100%</u>	<u>100%</u>

Customer service is an essential and growing part of our business since product up time is critical given its effect on our customers' production efficiency. As of June 30, 2003, our global sales customer support and service organization consisted of over 70 people skilled in sales, marketing, optical and electro component repair, software, application and system integration, diagnostics, and problem-solving capabilities.

MANUFACTURING, RAW MATERIALS, AND SOURCES OF SUPPLY

Our principal manufacturing activities are conducted at our facilities in Middlefield, Connecticut and Tucson, Arizona.

We maintain an advanced optical components manufacturing facility in Middlefield specializing in the fabrication, polishing, and coating of plano, or flat, optics for sales to third parties, as well as the manufacturing of a wide variety of optics that are used in our metrology products. Our manufacturing activities for our metrology products consist primarily of assembling and testing components and sub-assemblies supplied by us and third-party vendors, and then integrating these components and sub-assemblies into our finished products.

Our optical assembly manufacturing activities are conducted in our Tucson, Arizona facility. We integrate ZYGO optics, optics from third party vendors, and mechanical sub-systems utilizing ZYGO metrology, in this facility.

Certain components and sub-assemblies incorporated into our systems are obtained from a single source or a limited group of suppliers. We routinely monitor single or limited source supply parts, and we endeavor to ensure that adequate inventory is available to maintain manufacturing schedules should the supply of any part be interrupted. Although we seek to reduce our dependence on sole or limited source suppliers, we have not qualified a second source for some of these products and the partial or complete loss of certain of these sources could have a negative impact on our results of operations and damage customer relationships.

AVAILABLE INFORMATION

We make available free of charge through our website, www.zygo.com, our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, proxy statements and all amendments to those reports as soon as reasonably practicable after such material is electronically filed with the Securities and Exchange Commission ("SEC"). These reports may also be obtained without charge by contacting Investor Relations, Zygo Corporation, Corporate Headquarters, Laurel Brook Road, Middlefield, Connecticut 06455, phone: 1-860-347-8506. Our Internet website and the information contained therein or incorporated therein are not intended to be incorporated into this Annual Report on Form 10-K. In addition, the public may read and copy any materials we file with the SEC's Public Reference Room at 450 Fifth Street, NW, Washington, DC 20549 or may obtain information by calling the SEC at 1-800-SEC-0330. Moreover, the SEC maintains an Internet site that contains reports, proxy, and information statements, or other information regarding reports that we file electronically with them at <http://www.sec.gov>.

EMPLOYEES

At June 30, 2003, we employed 477 people. Our employees are not represented by a labor union or a collective bargaining agreement. We regard our employee relations as good.

EXECUTIVE OFFICERS OF THE REGISTRANT

J. Bruce Robinson—age 61—Chairman, President, and Chief Executive Officer

Mr. Robinson has served as our Chairman, President, and Chief Executive Officer since November 2000, as President and Chief Executive Officer from November 1999 to November 2000, and as President from February 1999 to November 1999. Previously, he spent 25 years with The Foxboro Company, where his most recent positions were President Worldwide Operations from 1996 to 1998 and President of Europe from 1990 to 1996.

Mr. Robinson has served as an executive officer of ZYGO since February 1999 and is a director.

Richard M. Dressler—age 58—Vice President, Finance, Chief Financial Officer, and Treasurer

Mr. Dressler has served as Vice President, Finance, Chief Financial Officer, and Treasurer since January 2001. Previously, he served as President of Richard Dressler L.L.C. Consulting from July 2000 until January 2001. From 1976 to 2000, Mr. Dressler served in various capacities with units of United Technologies Corporation, including as Director of Cost Management and Financial Systems of Carrier, as Controller of Sikorsky Aircraft, and as Vice President, Finance and Administration of United Technologies Control Systems.

Mr. Dressler has served as an executive officer of ZYGO since January 2001.

William H. Bacon—age 53—Vice President, Manufacturing

Mr. Bacon has served as Vice President, Manufacturing since April 2002. Previously, he served as our Vice President, Metrology Manufacturing from April 2000 to April 2002, and Vice President, Corporate Quality from January 1996 to April 2000. From November 1993 to January 1996, Mr. Bacon was Director of Total Quality and also served as Manager of Instrument Manufacturing from June 1987 to November 1993.

Mr. Bacon has served as an executive officer of ZYGO since January 1996.

Brian J. Monti—age 47—Vice President, Worldwide Sales and Marketing

Mr. Monti has served as Vice President, Worldwide Sales and Marketing since July 1999. Previously, he served as Vice President, Sales, Service and Marketing for Radiometric Corporation

from 1998 to 1999. From 1984 to 1998, Mr. Monti held various positions for Honeywell Measurex including Vice President, Sales, Service and Marketing.

Mr. Monti has served as an executive officer of ZYGO since July 1999.

David J. Person—age 55—Vice President, Human Resources

Mr. Person has served as Vice President, Human Resources since September 1998. Previously, he served in a number of senior human resource management positions with Digital Equipment Corporation from 1972 to September 1998.

Mr. Person has served as an executive officer of ZYGO since September 1998.

Robert A. Smythe—age 51—Vice President, Marketing

Mr. Smythe has served as Vice President, Marketing since April 2002. Previously, he served as our Vice President, Engineering from June 1998 to April 2002; Vice President, Sales and Marketing, from January 1996 to June 1998; Director of Sales and Marketing from June 1993 to January 1996; and Manager, Industry from April 1992 to June 1993.

Mr. Smythe has served as an executive officer of ZYGO since January 1996.

Carl A. Zanoni—age 62—Senior Vice President, Technology

Dr. Zanoni has served as Senior Vice President, Technology since November 2001. Previously, he served as our Vice President, Technology from June 1998 to November 2001, and Vice President, Research, Development and Engineering from April 1992 to June 1998.

Dr. Zanoni is a co-founder and has served as an executive officer since the Company's inception in 1970. He is also a director.

Under the By-laws, executive officers serve for a term of one year and until their successors are chosen and qualified unless earlier removed.

Item 2. Properties

Our principal manufacturing facility and corporate headquarters is located on Laurel Brook Road in Middlefield, Connecticut. The Middlefield facility consists of one 135,500-square-foot building on approximately 13 acres.

<u>Operation/Location</u>	<u>Square Footage</u>		<u>Owned/Leased Expiration Date</u>
	<u>Manufacturing</u>	<u>Total</u>	
Corporate Headquarters, Eastern Regional Sales Office, and Instrument and Optics Manufacturing Middlefield, Connecticut	80,000	135,500	Owned
R&D Center Delray Beach, Florida	0	10,343	Leased—06/30/04
Zygo—Laser Technology (R&D) Watsonville, California	0	1,452	Leased—04/14/05
Opto-Mechanical Assembly Tucson, Arizona	14,560	22,560	Leased—08/31/06
Western Regional Sales Office and R&D Center Sunnyvale, California	0	20,000	Leased—10/31/03
R&D Center Simi Valley, California	0	6,290	Leased—12/14/05
Zygo PTE Ltd—Sales Office Singapore	0	1,550	Leased—12/27/04
Zygo Taiwan—Sales Office Taiwan	0	3,500	Leased—07/31/04
ZygoLOT Darmstadt, Germany	0	1,296	Leased—10/01/04
Zygo KK Japan	0	1,775	Leased—10/31/03
Properties Unoccupied or Leased to Others			
Westborough, Massachusetts	0	118,575	Owned
Plymouth, Massachusetts	0	6,600	Leased—05/31/06
Longmont, Colorado	0	32,000	Leased—05/31/06
Total	<u>94,560</u>	<u>361,441</u>	

Item 3. Legal Proceedings

From time to time, we are subject to certain legal proceedings and claims that arise in the normal course of our business. In the opinion of management, we are not party to any litigation that we believe could have a material effect on our business.

Item 4. Submission of Matters to a Vote of Security Holders

None.

PART II

Item 5. Market for the Registrant's Common Equity and Related Stockholder Matters

Our common shares are traded over-the-counter and are quoted on the NASDAQ/National Market under the symbol "ZIGO." Market price data for fiscal 2003 and 2002 is as follows:

	Fiscal Year Ended June 30, 2003		Fiscal Year Ended June 30, 2002	
	High	Low	High	Low
First quarter.....	\$8.09	\$4.13	\$22.00	\$ 8.70
Second quarter	\$9.35	\$3.55	\$19.85	\$ 9.75
Third quarter	\$8.20	\$4.79	\$18.00	\$11.10
Fourth quarter	\$8.40	\$5.65	\$18.00	\$ 6.80

The number of record holders of our common stock at June 30, 2003 was 476.

We have never declared or paid a cash dividend on our capital stock. We currently intend to retain all our earnings to finance the expansion and development of our business and, therefore, do not anticipate paying any cash dividends in the foreseeable future.

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operation

CRITICAL ACCOUNTING POLICIES, SIGNIFICANT JUDGMENTS, AND ESTIMATES

The discussion and analysis of our financial condition and results of operations are based upon our consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States of America. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues, and expenses, and related disclosures at the date of our consolidated financial statements. On an on-going basis, management evaluates its estimates and judgments, including those related to bad debts, inventories, warranty obligations, income taxes, and long-lived assets. Management bases its estimates and judgments on historical experience and current market conditions and on various other factors that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions. We consider certain accounting policies related to revenue recognition and allowance for doubtful accounts, inventory valuation, warranty costs, accounting for incomes taxes, and valuation of long-lived assets to be critical policies due to the estimates and judgments involved in each.

Revenue Recognition and Allowance for Doubtful Accounts

We recognize revenue based on guidance provided in Securities and Exchange Commission ("SEC") Staff Accounting Bulletin ("SAB") No. 101, "Revenue Recognition in Financial Statements." We recognize revenue when persuasive evidence of an arrangement exists, delivery has occurred or services have been rendered, there is no significant risk pertaining to customer acceptance, our price is fixed or determinable, and collectibility is reasonably assured.

We maintain an allowance for doubtful accounts based on a continuous review of customer accounts, payment patterns, and specific collection issues. We perform on-going credit evaluations of our customers and do not require collateral from our customers. For many of our international customers, we require an irrevocable letter of credit to be issued by the customer before a shipment is made. If the financial condition of our customers were to deteriorate, resulting in an impairment of their ability to make payments, additional allowances would be required.

Inventory Valuation

Inventories are valued at the lower of cost or market, cost being determined on a first-in, first-out basis. Management evaluates the need to record adjustments for impairment of inventory on a monthly basis. Our policy is to assess the valuation of all inventories, including raw materials, work-in-process, and finished goods. Obsolete inventory or inventory in excess of management's estimated future usage is written down to its estimated market value, if less than its cost. Contracts with fixed prices are evaluated to determine if estimated total costs will exceed revenues. A loss provision is recorded when the judgment is made that actual costs incurred plus estimated costs remaining to be incurred will exceed total revenues from the contract. Inherent in the estimates of market value are management's estimates related to current economic trends, future demand for our products, and technological obsolescence. Significant management judgments must be made when providing for obsolete and excess inventory and losses on contracts. If actual market conditions are different than those projected by management, additional inventory write-downs and loss accruals may be required.

Warranty Costs

We provide for the estimated cost of product warranties at the time revenue is recognized. We consider historical warranty costs actually incurred and specifically identified circumstances to establish the warranty liability. The warranty liability is reviewed on a quarterly basis. Should actual costs differ from management's estimates, revisions to the estimated warranty liability would be required.

Accounting for Income Taxes

Deferred income tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective income tax bases, and operating loss and tax credit carryforwards. Statement of Financial Accounting Standards (“SFAS”) No. 109, “Accounting for Income Taxes,” requires the establishment of a valuation allowance to reflect the likelihood of the realization of deferred tax assets. We record a valuation allowance to reduce our deferred tax assets to an estimated realizable amount based on historical and forecasted results. While management has considered future taxable income and ongoing prudent and feasible tax planning strategies in assessing the need for the valuation allowance, in the event management were to determine that it would be able to realize its deferred tax assets in the future in excess of its net recorded amount, an adjustment to the valuation allowance would increase income in the period such determination was made. Likewise, should management determine that it would not be able to realize all or part of its net deferred tax asset in the future, an adjustment to the valuation allowance would be charged to income in the period such determination was made. Our effective tax rate may vary from period to period based on changes in estimated taxable income or loss, changes to the valuation allowance, changes to federal, state or foreign tax laws, and deductibility of certain costs and expenses by jurisdiction.

Valuation of Long-Lived Assets

In accordance with SFAS No. 144, “Accounting for the Impairment or Disposal of Long-Lived Assets,” the carrying value of intangible assets and other long-lived assets is reviewed on a regular basis for the existence of facts or circumstances, both internally and externally, that may suggest impairment. Some factors we consider important, which could trigger the impairment review, include a significant decrease in the market value of an asset, a significant change in the extent or manner in which an asset is used, a significant adverse change in the business climate that could affect the value of an asset, an accumulation of costs for an asset in excess of the amount originally expected, a current period operating or cash flow loss combined with a history of operating or cash flow losses or a projection that demonstrates continuing losses, and a current expectation that, more likely than not, a long-lived asset will be disposed of significantly before the end of its estimated useful life.

If such circumstances exist, we evaluate the carrying value of long-lived assets to determine if impairment exists based upon estimated undiscounted future cash flows over the remaining useful life of the assets and comparing that value to the carrying value of the assets. If the carrying value of the assets is greater than the estimated future cash flows, the assets are written down to the estimated fair value. We determine the estimated fair value of the assets based on a current market value of the assets. If a current market value is not readily available, a projected discounted cash flow method is applied using a discount rate determined by management to be commensurate with the risk inherent in the current business model. Our cash flow estimates contain management’s best estimates, using appropriate and customary assumptions and projections at the time.

Off-Balance Sheet Arrangements

We have not created, and are not party to, any special-purpose or off-balance sheet entities for the purpose of raising capital, incurring debt or operating parts of our business that are not consolidated into our financial statements. We have not guaranteed any obligations of a third party.

RESULTS OF OPERATIONS

As previously announced, we discontinued our telecommunications TeraOptix business unit during fiscal 2003. We disposed of the unit’s equipment and are currently marketing for sale the facility located in Westborough, Massachusetts. Accordingly, the results of TeraOptix have been presented as a separate line item on the consolidated statements of operations as discontinued

TeraOptix operations, net of tax, for all periods presented. In addition, the loss on disposal of the business, net of tax, including adjustments to original estimates, has been recorded as a separate line item for the fiscal 2003 periods presented. The consolidated statements of operations for the fiscal 2002 and 2001 periods have been reclassified to conform with the current period presentations of the discontinued operations and loss on disposal of TeraOptix.

Fiscal 2003 Compared to Fiscal 2002

Net sales of \$102.6 million for fiscal 2003 increased by \$22.3 million, or 28%, from the comparable prior year period sales of \$80.3 million. Net sales for fiscal 2003 included \$18.8 million from a development services agreement, as compared to \$1.4 million in the prior fiscal year. The development services agreement is expected to be substantially completed by June 2004. Revenue under this agreement can vary significantly from quarter to quarter. For fiscal 2003, net sales in the semiconductor segment were \$59.3 million, or 58% of total net sales, as compared to \$37.5 million, or 47%, in the prior year period and net sales in the industrial segment were \$43.3 million, or 42% of total net sales, as compared to \$42.8 million, or 53%, in the prior year period. The increase in net sales in the semiconductor segment was primarily due to the sales from the development services agreement.

Sales to the Americas, primarily the United States, amounted to \$31.1 million in fiscal 2003, a decrease of \$6.8 million, or 18%, from fiscal 2002 levels of \$37.9 million. Sales outside the Americas amounted to \$71.5 million in fiscal 2003, an increase of \$29.1 million, or 69%, from fiscal 2002 levels of \$42.4 million. Sales to Japan during fiscal 2003 amounted to \$54.7 million, an increase of \$33.5 million, or 158%, from fiscal 2002 sales levels, primarily due to the development services agreement. Sales to Europe/Other, primarily Europe, amounted to \$10.3 million, a decrease of \$2.8 million, or 21%, from fiscal 2002. Sales to the Pacific Rim, excluding Japan, amounted to \$6.5 million, a decrease of \$1.6 million, or 20%, from 2002 sales levels.

Approximately 85% of all fiscal 2003 sales were in U.S. dollars. Significant changes in the values of foreign currencies relative to the value of the U.S. dollar can impact the sales of our products in export markets, as would changes in the general economic conditions in those markets. The impact of changes in foreign currency values on our sales cannot be measured.

Gross profit for fiscal 2003 totaled \$35.4 million, an increase of \$7.9 million, or 29%, from \$27.5 million in the prior fiscal year. Gross profit as a percentage of sales for fiscal 2003 and 2002 was 35% and 34%, respectively. Gross profit for fiscal 2003 included \$3.8 million from the development services agreement, as compared to \$0.3 million for fiscal 2002.

Selling, general, and administrative expenses ("SG&A") in fiscal 2003 amounted to \$20.3 million, a decrease of \$1.6 million, or 7%, from fiscal 2002. SG&A as a percentage of net sales in fiscal 2003 was 20%, as compared to 27% in fiscal 2002. The decrease in SG&A for fiscal 2003 is primarily related to SG&A costs eliminated after the sale of the Automation Systems Group in December 2001 and a reduction in selling expenses, including commissions to outside sales representatives and personnel costs.

Research and development expenses ("R&D") in fiscal 2003 totaled \$12.7 million, a decrease of \$5.0 million, or 28%, from \$17.7 million in the comparable prior year period. R&D as a percentage of net sales in fiscal 2003 was 12%, as compared to 22% in fiscal 2002. The decrease was primarily related to the completion of several large research and development projects in the semiconductor segment in fiscal 2002 and the transfer of engineering resources to revenue producing projects in fiscal 2003.

Our operating profit in fiscal 2003 was \$2.0 million, as compared to an operating loss of \$14.8 million in fiscal 2002. Operating profit as a percentage of sales in fiscal 2003 was 2%, as compared to the operating loss as a percentage of sales of 18% in fiscal 2002.

The income tax expense from continuing operations in fiscal 2003 totaled \$0.6 million, or 24% of pretax profits, which compares with an income tax benefit of \$3.7 million, or 49% of pretax losses in fiscal 2002. The effective tax rate for fiscal 2003 relates primarily to large R&D credits

being applied to a low taxable income from continuing operations. The overall tax rate, including the tax effect on the discontinued operations, for fiscal years 2003 and 2002 was 38%.

We recorded a net loss of \$10.6 million for fiscal 2003 as compared to a net loss of \$11.7 million for fiscal 2002. On a diluted per share basis, the net loss was \$0.60 per share for fiscal 2003 as compared to a net loss of \$0.67 for fiscal 2002. The net loss for fiscal 2003 includes losses of \$2.5 million related to the operations of our discontinued TeraOptix unit and charges of \$9.7 million related to the disposal of our discontinued TeraOptix unit. The net loss for fiscal 2002 includes losses related to the operations of our discontinued TeraOptix unit of \$7.4 million. The net loss for fiscal 2002 also includes a gain on the sale of our Automation Systems Group of \$6.1 million before related exit costs of \$1.9 million, inventory write-downs of \$0.8 million, and tax expense of \$1.3 million. The income from continuing operations for fiscal 2003 was \$1.6 million, or \$0.09 per share, as compared to a net loss of \$4.3 million, or \$0.24 per share, for fiscal 2002.

Backlog at June 30, 2003 totaled \$37.2 million, a decrease of \$3.3 million, or 8%, from \$40.5 million at June 30, 2002. The year-end fiscal 2003 backlog consisted of \$20.6 million, or 55%, in the semiconductor segment and \$16.6 million, or 45%, in the industrial segment. Orders for fiscal 2003 totaled \$99.2 million. Orders related to the development services agreement totaled \$18.8 million in fiscal 2003. Orders by segment for fiscal 2003 consisted of \$57.9 million, or 58%, in the semiconductor segment and \$41.3 million, or 42%, in the industrial segment.

Fiscal 2002 Compared to Fiscal 2001

On December 12, 2001, we sold our Automation Systems Group in Longmont, Colorado, to Brooks Automation, Inc. of Chelmsford, Massachusetts, in a cash transaction, for \$12.2 million. Substantially all of the assets were sold to Brooks and substantially all of the liabilities were assumed by Brooks. The gain on the sale was \$6.1 million before related exit costs of \$1.9 million to be paid from the proceeds, inventory write-downs of \$0.8 million, and tax expense of \$1.3 million.

Net sales of \$80.3 million for fiscal 2002 decreased by \$49.2 million, or 38%, from fiscal 2001 net sales of \$129.5 million. For fiscal 2002, net sales in the semiconductor segment were \$37.5 million, or 47% of total net sales, as compared to \$84.6 million, or 65%, in the prior year period and net sales in the industrial segment were \$42.8 million, or 53% of total net sales, as compared to \$44.9 million, or 35%, in the prior year period. The decrease in sales is primarily due to a decrease in units sold, reflecting the downturn in the semiconductor industry.

Sales to the Americas, primarily the United States, amounted to \$37.9 million in fiscal 2002, a decrease of \$26.7 million, or 41%, from fiscal 2001 levels of \$64.6 million. Sales outside the Americas amounted to \$42.4 million in fiscal 2002, a decrease of \$22.5 million, or 35%, from fiscal 2001 levels of \$64.9 million. Sales to Japan during fiscal 2002 amounted to \$21.2 million, a decrease of \$24.0 million, or 53%, from fiscal 2001 sales levels. Sales to Europe/Other, primarily Europe, amounted to \$13.1 million, an increase of \$0.8 million, or 7%, from fiscal 2001. Sales to the Pacific Rim, excluding Japan, amounted to \$8.1 million, an increase of \$0.7 million, or 9%, from fiscal 2001 sales levels. Substantially all of our sales and costs are negotiated and paid in U.S. dollars. Significant changes in the values of foreign currencies relative to the value of the U.S. dollar can impact the sales of our products in our export markets, as would changes in the general economic conditions in those markets. The impact of such changes in foreign currency values on our sales cannot be measured.

Gross profit in fiscal 2002 amounted to \$27.5 million (including \$0.8 million of inventory write-downs related to the sale of the Automation Systems Group in Longmont, Colorado to Brooks Automation, Inc. in December 2001), a decrease of \$33.9 million, or 55%, from gross profit of \$61.4 million in fiscal 2001. Gross profit as a percentage of sales in fiscal 2002 was 34%, as compared to 47% in fiscal 2001. The decrease in gross profit and gross profit as a percentage of sales were primarily due to lower production volumes.

Selling, general, and administrative expenses ("SG&A") in fiscal 2002 amounted to \$21.9 million, a decrease of \$5.5 million, or 20%, from fiscal 2001. SG&A as a percentage of net sales in

fiscal 2002 was 27%, as compared to 21% in fiscal 2001. The decrease in SG&A for fiscal 2002 resulted from lower incentive compensation costs due to lower sales volumes and net losses for fiscal 2002.

Research and development expenses (“R&D”) in fiscal 2002 totaled \$17.7 million and increased by \$4.2 million, or 31%, from fiscal 2001. R&D as a percentage of net sales in fiscal 2002 was 22%, as compared to 10% in fiscal 2001. This increase was primarily due to the continued investment in the semiconductor segment, primarily in the motion measurement product line, through the first three quarters of fiscal 2002.

Our operating loss in fiscal 2002 was \$14.8 million (including \$1.9 million of exit costs and \$0.8 million of inventory write-downs related to the sale of the Automation Systems Group in Longmont, Colorado), as compared to an operating profit of \$19.7 million in fiscal 2001. Operating loss as a percentage of sales in fiscal 2002 was 18%, as compared to the operating profit as a percentage of sales of 15% in fiscal 2001.

Income tax benefit on continuing operations in fiscal 2002 totaled \$3.7 million, or 49% of pretax losses, which compares with income tax expense on continuing operations of \$6.3 million, or 30% of pretax profits, in fiscal 2001. The change in the effective tax rate is primarily due to changes in the valuation for certain state tax carryforwards and the effect of R&D credits on a lower taxable loss amount.

We recorded a net loss for fiscal year 2002 of \$11.7 million, or \$0.67 loss per share, as compared to a net profit of \$10.7 million, or \$0.66 on a diluted per share basis, during fiscal 2001. The loss in fiscal 2002 includes a gain on the sale of the Automation Systems Group in Longmont, Colorado of \$6.1 million, offset by related exit costs (\$1.9 million), inventory write-downs (\$0.8 million), and tax expense (\$1.3 million).

The basic and diluted weighted average number of shares outstanding for the fiscal year ended June 30, 2002 were 17,414,000 as compared to 15,398,000 basic shares and 16,063,000 fully diluted shares for the fiscal year ended June 30, 2001. The increase in the number of shares outstanding was primarily due to the 2,925,000 shares issued in March 2001 in the secondary offering of our common stock.

RELATED PARTY TRANSACTIONS

Sales to Canon Inc., a stockholder, and Canon Sales Co., Inc., a distributor of certain of our products in Japan and a subsidiary of Canon Inc., amounted to \$52.8 million (51% of net sales), \$17.6 million (22% of net sales), and \$43.3 million (33% of net sales), for the years ended June 30, 2003, 2002, and 2001, respectively. Selling prices of products sold to Canon Inc. and Canon Sales Co., Inc. are based, generally, on the normal terms customarily given to distributors. Revenues generated from a development contract with Canon are recorded on a cost-plus basis. At June 30, 2003 and 2002, there was approximately, in the aggregate, \$4.0 million and \$2.7 million, respectively, of trade accounts receivable from Canon.

In September 2002, we entered into a contract with Canon related to the development of certain interferometers. The development contract currently has a value of \$29.7 million and generally covers the period through June 2004, subject to meeting certain milestones during this period. We have recognized revenue of \$20.2 million since the inception of this contract, including \$18.8 million of revenue in fiscal 2003.

LIQUIDITY AND CAPITAL RESOURCES

At June 30, 2003, working capital was \$66.9 million, an increase of \$1.0 million from the \$65.9 million at June 30, 2002. We maintained cash, cash equivalents, and marketable securities at June 30, 2003 totaling \$52.9 million. This represents an increase of \$14.4 million from June 30, 2002. The increase was primarily due to a reduction in accounts receivable, a decrease in inventory, an improvement in operating results, and income tax refunds.

We disposed of the equipment and are currently marketing for sale the facility of the discontinued TeraOptix unit located in Westborough, Massachusetts. The remaining assets have been reclassified to current assets as assets of discontinued unit held for sale. We intend to use the proceeds from the sale of the facility to pay down the mortgage loan and swap agreement described below. The facility has been valued at an estimated fair market value based on third party appraisals. The book value of the facility is estimated at \$11.9 million, which is net of estimated selling expenses. As of June 30, 2003, the mortgage balance was \$11.4 million and the swap agreement liability was \$1.4 million. If we are able to sell the facility for its book value, an additional \$0.9 million of cash on hand would be used to pay down the related debts. Factors which could influence the actual amount of cash used to pay the related debts include a selling price which differs from the current estimated value, the timing of the sale of the facility, and changes in the value of the swap agreement, which is based on financial market conditions.

The mortgage on the Westborough facility, which has an interest rate of the one month LIBOR rate plus an applicable margin based on a certain debt ratio (approximately 3.7% in total at June 30, 2003), is payable in full on May 14, 2007. The mortgage principal is amortizing on a 15-year level amortization schedule requiring monthly principal and interest payments. Future mortgage principal payments by fiscal years ended June 30, to be paid until the mortgage is paid with the proceeds from the sale, if any, of the facility will total \$0.8 million for each fiscal year 2004-2006 and \$0.7 million for the first 10 months of fiscal 2007 with a final payment of \$8.2 million in May 2007. In conjunction with the mortgage, we entered into an interest rate swap agreement that provides for a fixed interest rate of 6.0% in place of the LIBOR component for the duration of the mortgage. The variable rate component based on our financial results can vary from 1.0% to 2.5 % (2.5% as of June 30, 2003).

There were no borrowings outstanding under our \$3.0 million bank line of credit at fiscal year-end 2003.

Acquisitions of property, plant, and equipment were \$5.0 million for fiscal 2003.

Although cash requirements will fluctuate based on the timing and extent of various factors, management believes that cash generated from operations, together with the liquidity provided by existing cash balances and borrowing capability, will be sufficient to satisfy our liquidity requirements for the next 12 months.

RISK FACTORS THAT MAY IMPACT FUTURE RESULTS

Industry Concentration and Cyclicalty

Our business is significantly dependent on capital expenditures and component requirements for manufacturers in the semiconductor industry. This industry is cyclical and has historically experienced periods of oversupply, resulting in significantly reduced demand for capital equipment, including the products manufactured and marketed by us. For the foreseeable future, our operations will continue to be dependent on the capital expenditures in this industry which, in turn, is largely dependent on the market demand in the semiconductor and industrial markets.

Risks Associated with Acquisitions

Our growth strategy includes expanding our products and services, and we may seek acquisitions to expand our business. We regularly review potential acquisitions of businesses, technologies or products complementary to our business and periodically engage in discussions regarding such possible acquisitions. Acquisitions involve numerous risks, including some or all of the following: substantial cash expenditures and capital investments; potentially dilutive issuance of equity securities; incurrence of debt and contingent liabilities; amortization of certain intangible assets; difficulties in assimilating the operations and products of the acquired companies; diverting our management's attention away from other business concerns; risks of entering markets in which we have limited or no direct experience; the inability to manage the growth expected for various acquisitions; potential loss of key employees of the acquired companies in the process of

integrating personnel with disparate business backgrounds; and combining different corporate cultures.

We cannot assure you that any acquisition will result in long-term benefits to us or that our management will be able to effectively manage the acquired businesses. We may also incorrectly judge the value or worth of an acquired company or business. We have recently disposed or divested ourselves of several companies or lines of business that were acquired by us in the past few years, at a significant net loss to us.

Costs of Discontinued Operations

We have exited the telecommunications segment of our business and closed the TeraOptix facility in Westborough, Massachusetts. The facility, which is financed with a mortgage note, is being actively marketed. The mortgage note payable has a balance at June 30, 2003 of \$11.4 million and a swap agreement to fix the interest rate on the mortgage at 6% has a fair value at June 30, 2003 of \$1.4 million. We intend to use the proceeds from the sale of the facility to pay down the mortgage note and swap agreement. The facility has been valued at an estimated fair market value based on a third party appraisal. The value of the facility is estimated at \$11.9 million, which is net of estimated selling expenses. If we are unable to sell the facility for its estimated value, additional funds (beyond the \$0.9 million estimated shortfall) would be needed to pay down the related debts. Factors which could influence the actual amount of cash used to pay the related debts include a selling price which differs from the current estimated value, the timing of the sale of the facility, and changes in the value of the swap agreement, which is based on financial market conditions.

Customer Concentration; Relationship with Canon

During fiscal 2003, 2002, and 2001, sales to Canon Inc. and Canon Sales Co., Inc. (collectively, "Canon"), our largest customer in those periods, accounted for 51%, 22%, and 33% of our net sales, respectively. We expect that sales to Canon will continue to represent a significant percentage of our net sales for the foreseeable future. Canon is an original investor in our company, the owner at September 1, 2003 of approximately 7% of our outstanding shares of common stock, and is a distributor of certain of our products in the Japanese market. A reduction or delay in orders from this customer, including reductions or delays due to market, economic, or competitive conditions in the industries in which we serve, could have a material adverse effect upon our results of operations. Our customers, including Canon, generally do not enter into long-term agreements obligating them to purchase our products.

Quarterly Fluctuations

Our quarterly and annual operating results have varied in the past and may in the future vary significantly depending on factors such as: the effect of our acquisitions and consequent integration; budgeting cycles of our customers; the size, timing and recognition of revenue from significant orders; increased competition; our ability to develop innovative products; the timing of new product releases by us or our competitors; market acceptance of our products; changes in our and our competitors' pricing policies; changes in operating expenses and personnel changes; changes in our business strategy; and general economic factors.

Due to these and other factors we believe that quarter-to-quarter comparisons of our operating results may not be meaningful. You should not rely on our results for one quarter as any indication of our future performance. In future periods our operating results may be below the expectations of public market analysts or investors. If this occurs, the price of our common stock would likely decrease.

Current conditions in the domestic and global economies are extremely uncertain. As a result, it is difficult to estimate the level of growth for the economy as a whole or of capital expenditures in the semiconductor and industrial markets. Because all of the components of our budgeting and forecasting are dependent on estimates of spending within these markets, the prevailing economic

uncertainty renders estimates of future revenue and expenses even more difficult than usual to make.

Possible Volatility of Stock Price

We believe that factors such as the announcement of new products or technologies by us or our competitors, market conditions in the semiconductor and industrial markets, and quarterly fluctuations in financial results are expected to cause the market price of our common stock to vary substantially. Further, our net sales or results of operations in future quarters may be below the expectations of public market securities analysts and investors. In such event, the price of the common stock would likely decline. In addition, historically the stock market has experienced price and volume fluctuations that have particularly affected the market prices for many high technology companies and which often have been unrelated to the operating performance of such companies. The market volatility may adversely affect the market price of shares of our common stock.

Competition

We face competition from a number of companies in all our markets, some of which have greater manufacturing and marketing capabilities, and greater financial, technological, and personnel resources. In addition, we compete with the internal development efforts of our current and prospective customers, some of which may attempt to become vertically integrated. Our competitors can be expected to continue to improve the design and performance of their products and to introduce new products with competitive price/performance characteristics. Competitive pressures may necessitate price reductions, which can adversely affect results of operations. Although we believe that we have certain technical and other advantages over some of our competitors, maintaining such advantages will require a continued high level of investment by our company in research and development and sales, marketing, and service. There can be no assurance that we will have sufficient resources to continue to make such investments or that we will be able to make the technological advances necessary to maintain such competitive advantages. In addition, there can be no assurance that the bases of competition in the industries in which we compete will not shift.

Technological Change and New Product Development

The market for our products is characterized by rapidly changing technology. Our future success will continue to depend upon our ability to enhance our current products and to develop and introduce new products that keep pace with technological developments and evolving industry standards, respond to changes in customer requirements, and achieve market acceptance. The development of new technologically advanced products is a complex and uncertain process requiring high levels of innovation, as well as the accurate anticipation of technological and market trends.

We commit significant financial and personnel resources on a continuous basis to redesign and enhance our instruments, systems, and components and upgrade our proprietary software technology incorporated in our products. Any failure by us to anticipate or respond adequately to technological developments and customer requirements, or any significant delays in product development or introduction, could have a material adverse effect on our business and impact our close relationships with customers. This could have an impact on customers' willingness to share proprietary information about their requirements and participate in collaborative efforts with us. There can be no assurance that our customers will continue to provide us with timely access to such information, that we will be successful in developing and marketing new products and services or product and service enhancements on a timely basis, or respond effectively to technological changes or new product announcements by others. In addition, there can be no assurance the new products and services or product enhancements, if any, which we developed will achieve market acceptance.

Dependence on Proprietary Technology

Our success is heavily dependent upon our proprietary technology. There can be no assurance that the steps taken by us to protect our proprietary technology will be adequate to prevent misappropriation of our technology by third parties or will be adequate under the laws of some foreign countries, which may not protect our proprietary rights to the same extent as do laws of the United States. In addition, there remains the possibility that others will “reverse engineer” our products in order to determine their method of operation and introduce competing products or that others will develop competing technology independently. Any such adverse circumstances could have a material adverse effect on our results of operations.

Some of the markets in which we compete are characterized by the existence of a large number of patents and frequent litigation for financial gain that is based on patents with broad, and often questionable, application. As the number of our products increase, the markets in which our products are sold expands, and the functionality of those products grows and overlaps with products offered by competitors, we believe that we may become increasingly subject to infringement claims. Although we do not believe any of our products or proprietary rights infringe the rights of third parties, there can be no assurance that infringement claims will not be asserted against us in the future or that any such claim will not result in costly litigation or require us to enter into royalty arrangements, which may not be available to us on commercially acceptable terms if at all.

Dependence on Key Personnel

Our success depends in large part upon the continued services of many of our highly skilled personnel involved in management, research, development and engineering, sales and marketing, manufacturing, and support and upon our ability to attract and retain additional highly qualified employees. Our employees may voluntarily terminate their employment with us at any time. Competition for these individuals from a variety of employers, including our competitors and companies in computer or technology-related industries, at times is intense. We cannot assure you that we will be able to retain our existing personnel or attract and retain additional personnel.

Dependence on Third-Party Suppliers

We are dependent on suppliers for raw materials and various electrical, mechanical, and optical supplies, including fiber and electronic components and modules. If any relationship with a key supplier is terminated or if a supplier fails or is unable to provide reliable services or equipment and we are unable to reach suitable alternative solutions quickly, we may experience significant delays and additional costs in the manufacturing of our products. If our key suppliers cease manufacturing the supplies we require, if their manufacturing operations are interrupted for any significant amount of time, or if they are unwilling to supply us for any other reason, including capacity restraints, then we may be at least temporarily unable to obtain these supplies, thus exposing us to significant delays and additional costs. Currently there are only a limited number of companies that are capable of supplying optical materials in the quantity and of the quality we require.

Although we enter, either directly or through our contract manufacturers, into purchase orders with our suppliers based on our forecasts, we do not have any guaranteed supply arrangements with these suppliers. Moreover, as our demand for supplies increases, we may not be able to obtain these supplies in a timely manner. If we are unable to obtain, either directly or through contract manufacturers, a sufficient amount of supplies, or if we experience any interruption in delivery of supplies, we could experience difficulties in obtaining alternative sources or in altering product designs to use alternative supplies.

Revenues Derived From International Sales and Foreign Operations

We sell our products internationally, primarily to customers in Japan and throughout the Pacific Rim. Net sales to customers outside the Americas (primarily the United States) accounted

for 70%, 53%, and 50% of our net sales in each of the fiscal years ended June 30, 2003, 2002, and 2001, respectively, and are expected to continue to account for a substantial percentage of our net sales.

International sales and foreign operations are subject to inherent risks, including the economic conditions in these various foreign countries and their trading partners, political instability, longer payment cycles, greater difficulty in accounts receivable collection, compliance with foreign laws, changes in regulatory requirements, tariffs or other barriers, difficulties in obtaining export licenses, staffing and managing foreign operations, exposure to currency exchange fluctuations, transportation delays, and potentially adverse tax consequences.

Our sales and costs are negotiated and paid primarily in U.S. dollars. However, changes in the values of foreign currencies relative to the value of the U.S. dollar can render our products comparatively more expensive to the extent locally produced alternative products are available. Such conditions could negatively impact international sales of our products and foreign operations, as would changes in the general economic conditions in those markets. For our sales which are based in local currency, we are exposed to foreign exchange fluctuations from the time customers are invoiced in local currency until collection occurs. For fiscal 2003, approximately 15% of our sales were in foreign currency. There can be no assurance that risks inherent in international sales and foreign operations will not have a material adverse effect on our results of operations in the future.

Backlog

We schedule the production of our systems based in part upon order backlog. Due to possible customer changes in delivery schedules and cancellations of orders, our backlog at any particular date is not necessarily indicative of actual sales for any succeeding period. There can be no assurance that amounts included in backlog will ultimately result in future sales. A reduction in backlog during any particular period, or the failure of our backlog to result in future sales could adversely affect our results of operations. We have recently experienced a significant decrease in backlog over the past two fiscal years primarily due to the slowdown in the semiconductor market.

Sales Cycle

Our lengthy and variable qualification and sales cycle makes it difficult to predict the timing of a sale or whether a sale will be made, which may cause us to have excess manufacturing capacity or inventory and negatively impact our operating results. As is typical in the industry, our customers generally expend significant efforts in evaluating and qualifying our products and manufacturing process. This evaluation and qualification process frequently results in a lengthy sales cycle, typically ranging from three to six months and sometimes longer. While our customers are evaluating our products and before they place an order with us, we may incur substantial sales, marketing, and research and development expenses, expend significant management efforts, increase manufacturing capacity and order long-lead-time supplies prior to receiving an order. Even after this evaluation process, it is possible that a potential customer will not purchase our products. In addition, product purchases are frequently subject to unplanned processing and other delays, particularly with respect to larger customers for which our products represent a very small percentage of their overall purchase activity.

If we increase capacity and order supplies in anticipation of an order that does not materialize, our gross margins will decline and we will have to carry or write off excess inventory. Even if we receive an order, the additional manufacturing capacity that we add to service the customer's requirements may be underutilized in a subsequent quarter. Either situation could cause our results of operations to be adversely affected. Our long sales cycles also may cause our revenues and operating results to vary significantly and unexpectedly from quarter to quarter.

Prediction of Manufacturing Requirements

If we fail to predict our manufacturing requirements accurately, we could incur additional costs or experience manufacturing delays, which could cause us to lose orders or customers and result in lower net sales. We currently use a rolling 12-month forecast based primarily on our anticipated product orders and our product order history to help determine our requirements for components and materials. It is very important that we accurately predict both the demand for our products and the lead-time required to obtain the necessary components and raw materials. Lead times for materials and components that we order vary significantly and depend on factors such as the specific supplier, the size of the order, contract terms, and demand for each component at a given time. If we underestimate our requirements, we may have inadequate manufacturing capacity or inventory, which could interrupt manufacturing of our products and result in delays in shipments and net sales. If we overestimate our requirements, we could have excess inventory of parts. We also may experience shortages of components from time to time, which also could delay the manufacturing of our products and could cause us to lose orders or customers.

Undetected Product Defects

Our products are deployed in large and complex systems and may contain defects that are not detected until after our products have been installed, which could damage our reputation and cause us to lose customers. We design some of our products for deployment in large and complex optical networks. Because of the nature of these products, they can only be fully tested for reliability when deployed in networks for long periods of time. Our customers may discover defects in our products only after they have been fully deployed and operated under peak stress conditions. In addition, our products are combined with products from other vendors. As a result, should problems occur, it might be difficult to identify the source of the problem. These conditions increase the risk that we could experience, among other things: loss of customers; damage to our brand reputation; failure to attract new customers or achieve market acceptance; diversion of development and engineering resources; and legal actions by our customers. The occurrence of any one or more of the foregoing factors could cause us to experience losses, incur liabilities, and cause our net sales to decline.

Environmental Regulations

Environmental regulations applicable to our manufacturing operations could limit our ability to expand or subject us to substantial costs. We are subject to a variety of environmental regulations relating to the use, storage, discharge, and disposal of hazardous chemicals used during our manufacturing processes. Any failure by us to comply with present and future regulations could subject us to future liabilities or the suspension of production. In addition, such regulations could restrict our ability to expand our facilities or could require us to acquire costly equipment or to incur other significant expenses to comply with environmental regulations.

EFFECT OF RECENT ACCOUNTING PRONOUNCEMENTS

In June 2002, the Financial Accounting Standards Board (“FASB”) issued Statement of Financial Accounting Standards (“SFAS”) No. 146, “Accounting for Costs Associated with Exit or Disposal Activities,” which addresses financial accounting and reporting for costs associated with exit or disposal activities. SFAS No. 146 nullifies Emerging Issues Task Force Issue 94-3, “Liability Recognition for Certain Employee Termination Benefits and Other Costs to Exit an Activity (including Certain Costs Incurred in a Restructuring).” SFAS No. 146 requires companies to record liabilities for exit or disposal activities in the period in which they are incurred, except for certain types of transactions. SFAS No. 146 is effective for exit or disposal activities that are initiated after December 31, 2002. The adoption of SFAS No. 146 did not have a material effect on our results of operations or financial position.

In November 2002, the FASB issued FASB Interpretation No. (“FIN”) 45, “Guarantor’s Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of

Indebtedness of Others.” FIN 45 requires that upon issuance of a guarantee, a guarantor must recognize a liability for the fair value of an obligation assumed under a guarantee. FIN 45 also requires additional disclosures by a guarantor in its interim and annual financial statements about the obligations associated with guarantees that have been issued. The recognition provisions of FIN 45 are effective for any guarantees issued or modified after December 31, 2002. The disclosure requirements are effective for financial statements of interim and annual periods after December 15, 2002. The adoption of FIN 45 did not have a material effect on our results of operations or financial position.

In December 2002, the FASB issued SFAS No. 148, “Accounting for Stock-Based Compensation—Transition and Disclosure,” which addresses the alternative methods of transition for a voluntary change to the fair value based method of accounting for stock-based employee compensation. In addition, SFAS No. 148 amends the disclosure requirements of SFAS No. 123 to require prominent disclosures in both annual and interim financial statements about the method of accounting for stock-based employee compensation and the effect of the method used on reported results. If a company adopts the recognition provisions of SFAS No. 148 in a fiscal year beginning before December 16, 2003, that change in accounting principle must be reported using one of three methods: Prospective Method, Modified Prospective Method or Retroactive Restatement Method. If a company adopts the recognition provisions of SFAS No. 148 for fiscal years beginning after December 15, 2003, only the Modified Prospective Method and Retroactive Restatement Method may be used. In the absence of a single accounting method for stock-based employee compensation, SFAS No. 148 requires disclosure of comparable information for all companies regardless of whether, when, or how a company adopts the fair value based method of accounting. SFAS No. 148 is effective for fiscal years ending after December 15, 2002 and interim periods beginning after December 15, 2002. We have adopted the disclosure requirements of SFAS No. 148.

In January 2003, the FASB issued FIN 46, “Consolidation of Variable Interest Entities.” In general, a variable interest entity is a corporation, partnership, trust, or any other legal structure used for business purposes that either (a) does not have equity investors with voting rights or (b) has equity investors that do not provide sufficient financial resources for the entity to support its activities. FIN 46 requires a variable interest entity to be consolidated by a company if that company is subject to a majority of the risk of loss from the variable interest entity’s activities or entitled to receive a majority of the entity’s residual returns or both. The consolidation requirements of FIN 46 apply immediately to variable interest entities created after January 31, 2003. The consolidation requirements apply to older entities in the first fiscal year or interim period beginning after June 15, 2003. Certain of the disclosure requirements apply in all financial statements issued after January 31, 2003, regardless of when the variable interest entity was established. The adoption of FIN 46 did not have a material affect on our results of operations or financial position.

In April 2003, the FASB issued SFAS No. 149, “Amendment of Statement 133 on Derivative Instruments and Hedging Activities,” which amends and clarifies financial accounting and reporting for derivative instruments. SFAS No. 149 became effective for us in July 2003. The adoption of SFAS No. 149 is not expected to have a material affect on our results of operations or financial position.

In May 2003, the FASB issued SFAS No. 150, “Accounting for Certain Financial Instruments with Characteristics of both Liabilities and Equity,” which establishes standards for how an issuer classifies and measures certain financial instruments with characteristics of both liabilities and equity. Generally, the statement is effective for financial instruments entered into or modified after May 31, 2003 and is otherwise effective for at the beginning of the first interim period beginning after June 15, 2003. The adoption of SFAS No. 150 is not expected to have a material affect on our results of operations or financial position.

Item 7A. Quantitative and Qualitative Disclosures about Market Risks

The following discussion about our market risk involves forward-looking statements. Actual results could differ materially from those projected in the forward-looking statements. We are exposed to market risk related to changes in interest rates and foreign currency exchange rates. We do not use derivative financial instruments for speculative or trading purposes.

Interest Rate Sensitivity

We maintain a portfolio of cash equivalents and marketable securities including institutional money market funds (which may include commercial paper, certificates of deposit, and U.S. treasury securities), government agency securities, and corporate bonds. Our interest income is sensitive to changes in the general level of U.S. interest rates, particularly on our short-term instruments. The table below presents principal amounts and related weighted average interest rates by year of maturity for the Company's investment portfolio.

Fair value of investments as of June 30, 2003 maturing in:	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>
Cash and cash equivalents					
Fixed rate.....	\$23.4	\$—	\$—	\$—	\$—
Weighted average interest rate	1.5%	0.0%	0.0%	0.0%	0.0%
Marketable securities					
Fixed rate.....	\$15.0	\$2.9	\$1.5	\$0.8	\$1.4
Weighted average interest rate	2.4%	1.5%	1.9%	2.3%	2.7%

During fiscal 2001 we entered into a mortgage on our Westborough facility of \$12.6 million at an interest rate of the one month LIBOR rate plus a variable rate component based on a certain debt ratio (3.7% in total at June 30, 2003). As of June 30, 2003, the mortgage loan had a balance of \$11.4 million. In conjunction with the mortgage, we entered into an interest rate swap agreement that provides for a fixed interest rate of 6.0% in place of the LIBOR component for the duration of the mortgage. The variable rate component based on a certain debt ratio can vary from 1.0% to 2.5% (2.5% as of June 30, 2003). We estimate that a 1% change in applicable market interest rates would increase or decrease the fair value of the swap agreement by approximately \$0.4 million.

Exchange Rate Sensitivity

Approximately 85% of our fiscal 2003 sales were in U.S. dollars. At June 30, 2003, our backlog included orders in U.S. dollars of \$35.2 million, or 95% of the total backlog. Substantially all of our costs are negotiated and paid in U.S. dollars. Significant changes in the values of foreign currencies relative to the value of the U.S. dollar can impact sales of our products in export markets as would changes in the general economic conditions in those markets. For our sales which are based in local currency, we are exposed to foreign exchange fluctuations from the time customers are invoiced in local currency until collection occurs. The majority of our foreign currency transactions are in euro and Japanese yen. A 10% appreciation or depreciation of the U.S. dollar against the euro and yen would have an immaterial impact on our financial position and results of operations.

Item 8. Financial Statements and Supplementary Data

Financial statements and supplementary data required pursuant to this Item begin on Page F-1 of this Report.

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

None.

Item 9A. Controls and Procedures

ZYGO maintains “disclosure controls and procedures,” as such term is defined under Securities Exchange Act Rule 13a-15(e), that are designed to ensure that information required to be disclosed in our Exchange Act reports is recorded, processed, summarized, and reported within the time periods specified in the SEC’s rules and forms, and that such information is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosures. In designing and evaluating the disclosure controls and procedures, our management recognized that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives and our management necessarily was required to apply its judgment in evaluating the cost-benefit relationship of possible controls and procedures. We have carried out an evaluation, as of the end of the period covered by this report, under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures. Based upon their evaluation and subject to the foregoing, the Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were effective in ensuring that material information relating to ZYGO is made known to the Chief Executive Officer and Chief Financial Officer by others within our company during the period in which this report was being prepared.

There were no changes in our internal controls over financial reporting that occurred during our most recent fiscal quarter that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART III

Item 10. *Directors and Executive Officers of the Registrant*

Except for the information concerning executive officers which is set forth in Part I of this Annual Report, information required by this item will be included under the captions “Election of Board of Directors” and “Other Agreements and Other Matters” in the Proxy Statement to be filed pursuant to Regulation 14A for use in connection with our company’s 2003 Annual Meeting of Stockholders (“the Proxy Statement”) and is herein incorporated by reference.

Item 11. *Executive Compensation*

Information required by this item will be included in the Proxy Statement under the caption “Executive Compensation” and is herein incorporated by reference.

Item 12. *Security Ownership of Certain Beneficial Owners and Management*

Information required by this item will be included in the Proxy Statement under the captions “Election of Board of Directors,” “Equity Compensation Plan Information,” and “Principal Stockholders” and is herein incorporated by reference.

Item 13. *Certain Relationships and Related Transactions*

Information required by this item will be included in the Proxy Statement under the caption “Certain Relationships and Related Transactions” and is herein incorporated by reference.

Item 14. *Principal Accounting Fees and Services*

Information required by this item will be included in the Proxy Statement under the caption “Relationship with Independent Public Accountants” and is herein incorporated by reference.

PART IV

Item 15. Exhibits, Financial Statement Schedules and Reports on Form 8-K

(a) The following documents are filed as part of this report:

1. and 2. Financial Statements and Financial Statement Schedules:

An index to the financial statements and financial statement schedules filed is located on page F-1.

3. Exhibits

- 3.(i) —Restated Certificate of Incorporation of the Company and amendments thereto (Exhibit 3.(i) to the Company's Annual Report on Form 10-K for its year ended June 30, 1993)*
- 3.(ii) —Certificate of Amendment of Certificate of Incorporation, filed June 3, 1996 (Exhibit 3.(ii) to the Company's Annual Report on Form 10-K 405 for its year ended June 30, 1996)*
- 3.(iii) —By-laws of the Company (Exhibit (3)(b) to Registration No. 2-87253 on Form S-1 hereinafter "Registration No. 2-87253")*
- 10.1 —Confidentiality and Non-Competition Agreement dated October 25, 1983, between the Company and Carl A. Zaroni (Exhibit (10)(b) to Registration No. 2-87253)*
- 10.2 —Agreement dated May 27, 1975, between the Company and Canon U.S.A., Inc., regarding information sharing and marketing (Exhibit (10)(x) to Registration No. 2-87253)*
- 10.3 —Agreement dated November 20, 1980, between the Company and Canon Inc. regarding exchange of information (Exhibit (10)(y) to Registration No. 2-87253)*
- 10.4 —Amended and Restated Zygo Corporation Profit Sharing Plan (Exhibit 10.15 to the Company's Annual Report on Form 10-K405 for its year ended June 30, 1995)*
- 10.5 —Canon/Zygo Confidentiality Agreement dated March 7, 1990, between the Company and Canon Inc. regarding confidential technical information received from each other (Exhibit 10.42 to the Company's Annual Report on Form 10-K for its year ended June 30, 1991)*
- 10.6 —Services Agreement dated August 26, 1993, between the Company and Paul F. Forman (Exhibit 10.26 to the Company's Annual Report on Form 10-K for its year ended June 30, 1993)*
- 10.7 —Amendment Agreement dated as of December 31, 1996, between the Company and Paul F. Forman (Exhibit 10.16 to the Company's Annual Report on Form 10-K for its year ended June 30, 1997)*
- 10.8 —Non-Competition Agreement dated August 26, 1993, between the Company and Paul F. Forman (Exhibit 10.27 to the Company's Annual Report on Form 10-K for its year ended June 30, 1993)*
- 10.9 —Zygo Corporation Amended and Restated Non-Qualified Stock Option Plan ratified and approved by the Company's Stockholders on November 19, 1992 (Exhibit 10.30 to the Company's Annual Report on Form 10-K for its year ended June 30, 1993)*
- 10.10 —Renewal of Line of Credit dated June 4, 1997, between the Company and Fleet Bank Connecticut, N.A. (Exhibit 10.23 to the Company's Annual Report on Form 10-K for its year ended June 30, 1997)*
- 10.11 —Zygo Corporation Non-Employee Director Stock Option Plan ratified and approved by the Company's stockholders on November 17, 1994 (Exhibit 10.30 to the Company's Annual Report on Form 10-K405 for its year ended June 30, 1996)*
- 10.12 —Subcontract B335188 between The Regents of The University of California Lawrence Livermore National Laboratory and Zygo Corporation dated May 9, 1997 (Exhibit 10.31 to the Company's Annual Report on Form 10-K for its year ended June 30, 1997)*
- 10.13 —Agreement between Zygo Corporation and Dacon Corporation covering an addition to the Company's Middlefield, Connecticut, facilities (Project 1774) and the N.I.F. Manufacturing Renovation (Project 1842) dated April 7, 1997 (Exhibit 10.32 to the Company's Annual Report on Form 10-K for its year ended June 30, 1997)*
- 10.14 —Employment agreement dated January 15, 1999, between Zygo Corporation and J. Bruce Robinson (Exhibit 10.34 to the Company's Annual Report on Form 10-K 405 for its year ended June 30, 1999)*
- 10.15 —Zygo Corporation Amended and Restated Non-Employee Director Stock Option Plan ratified and approved by the Company's stockholders on November 17, 1999 (Exhibit to the Company's Definitive Proxy Statement for its year ended June 30, 1999)*

- 10.16—Employment agreement dated July 1, 1999, between Zygo Corporation and Brian J. Monti (Exhibit 10.22 to the Company's Annual Report on Form 10-K405 for its year ended June 30, 2000)*
 - 10.17—Acquisition Agreement dated May 5, 2000, by and among Zygo Corporation, Firefly Technologies Inc., and the Shareholders of Firefly Technologies Inc. (Company's Current Reports on Form 8-K dated May 8, 2000 and on Form 8-KA dated June 30, 2000)*
 - 10.18—Employment agreement dated May 5, 2000, between Zygo Corporation and John Berg (Exhibit 10.01(e)(1) to the Company's Current Reports on Form 8-K dated May 8, 2000 and on Form 8-KA dated June 30, 2000)*
 - 10.19—Employment agreement dated May 5, 2000, between Zygo Corporation and Patrick Tan (Exhibit 10.01(e)(2) to the Company's Current Reports on Form 8-K dated May 8, 2000 and on Form 8-KA dated June 30, 2000)*
 - 10.20—Promissory Note to the amended and restated credit agreement dated May 14, 2001, between Zygo Corporation and Fleet National Bank (Exhibit 10.26 to the Company's Annual Report on Form 10-K 405 for its year ended June 30, 2001)*
 - 10.21—Amended and restated credit agreement dated May 14, 2001, between Zygo Corporation and Fleet National Bank (Exhibit 10.21 to the Company's Annual Report on Form 10-K for its year ended June 30, 2002)*
 - 10.22—Amended and restated credit agreement dated November 22, 2001 between Zygo Corporation and Fleet National Bank (Exhibit 10.22 to the Company's Annual Report on Form 10-K for its year ended June 30, 2002)*
 - 10.23—Amended and restated credit agreement dated June 26, 2002 between Zygo Corporation and Fleet National Bank (Exhibit 10.23 to the Company's Annual Report on Form 10-K for its year ended June 30, 2002)*
 - 10.24—Subcontract B514527 between The Regents of The University of California Lawrence Livermore National Laboratory and Zygo Corporation dated April 14, 2001 (Exhibit 10.24 to the Company's Annual Report on Form 10-K for its year ended June 30, 2002)*
 - 10.25—Subcontract B519044 between The Regents of The University of California Lawrence Livermore National Laboratory and Zygo Corporation dated January 14, 2002 (Exhibit 10.25 to the Company's Annual Report on Form 10-K for its year ended June 30, 2002)*
 - 10.26—Development Agreement dated September 11, 2002, between Zygo Corporation and Canon, Inc. (Exhibit 99.2 to the Company's Current Reports on Form 8-K dated September 17, 2002)*
 - 10.27—Development and Manufacturing Support Services Agreement effective December 1, 2001, between Zygo Corporation and Philips Electronics North America Corporation. (Exhibit 99.1 to the Company's Current Reports on Form 8-K dated October 22, 2002)*
 - 10.28—Master Reaffirmation and Amendment No. 3 to Loan Documents dated November 21, 2002, between Fleet National Bank and Zygo Corporation. (Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for its quarterly period ended December 27, 2002)*
 - 21. —Subsidiaries of Registrant
 - 23. —Accountants' Consent
 - 24. —Power of Attorney (included in the signature page)
 - 31.1 —Certification of Chief Executive Officer under Rule 13a-14(a)
 - 31.2 —Certification of Chief Financial Officer under Rule 13a-14(a)
 - 32.1 —Certification of Chief Executive Officer and Chief Financial Officer
- (b) Current Reports on Form 8-K during the three-month period ended June 30, 2003.
Zygo Corporation Earnings Press Release, dated April 30, 2003.

* Incorporated herein by reference.

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.

ZYGO CORPORATION
(Registrant)

Date September 24, 2003

By /s/ RICHARD M. DRESSLER
Richard M. Dressler
Vice President, Finance, Chief Financial Officer,
and Treasurer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints J. Bruce Robinson and Richard M. Dressler, jointly and severally, his attorneys-in-fact, each with the power of substitution, for each of them in any and all capacities, to sign any amendments to this Report on Form 10-K, and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, hereby ratifying and confirming all that each of said attorney's-in-fact, or his substitute or substitutes, may do or cause to be done by virtue hereof.

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 and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
..... /s/ J. BRUCE ROBINSON (J. Bruce Robinson)	Chairman, President, and Chief Executive Officer	September 24, 2003
..... /s/ RICHARD M. DRESSLER (Richard M. Dressler)	Vice President, Finance, Chief Financial Officer, and Treasurer	September 24, 2003
..... /s/ CARL A. ZANONI (Carl A. Zanoni)	Senior Vice President, Technology and Director	September 24, 2003
..... /s/ EUGENE G. BANUCCI (Eugene G. Banucci)	Director	September 24, 2003
..... /s/ PAUL F. FORMAN (Paul F. Forman)	Director	September 24, 2003
..... /s/ SAMUEL H. FULLER (Samuel H. Fuller)	Director	September 24, 2003
..... /s/ SEYMOUR E. LIEBMAN (Seymour E. Liebman)	Director	September 24, 2003
..... /s/ ROBERT G. MCKELVEY (Robert G. McKelvey)	Director	September 24, 2003
..... /s/ ROBERT B. TAYLOR (Robert B. Taylor)	Director	September 24, 2003
..... /s/ BRUCE W. WORSTER (Bruce W. Worster)	Director	September 24, 2003

ZYGO CORPORATION AND CONSOLIDATED SUBSIDIARIES
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All other schedules have been omitted since the required information is not present or not present in amounts sufficient to require submission of the schedules or the information required is included in the consolidated financial statements or notes thereto.

REPORT OF MANAGEMENT

Management is responsible for preparing our consolidated financial statements and related information that appears in this annual report. The consolidated financial statements were prepared in conformity with accounting principles generally accepted in the United States of America appropriate in the circumstances and, accordingly, include some amounts based on management's best judgments and estimates. Financial information in this Annual Report is consistent with that in the consolidated financial statements.

We maintain a system of internal controls and procedures which provides reasonable assurance, at an appropriate cost/benefit relationship, that assets are safeguarded and that transactions are authorized, recorded, and reported properly. Management believes that our system of internal controls provides reasonable assurance that assets are safeguarded against material loss from unauthorized use or disposition and that the financial records are reliable for preparing financial statements and other data and for maintaining accountability for assets.

The Audit Committee of the Board of Directors, composed solely of Directors who are not officers or employees of the Company, meets with the independent auditors and financial management periodically to discuss internal accounting controls, auditing and financial reporting matters, and to discharge its responsibilities outlined in its written charter. The Committee reviews with the independent auditors the scope and results of the audit effort. The Committee also meets with the independent auditors without management present to ensure that the independent auditors have free access to the Committee.

The independent auditors, KPMG LLP, were recommended by the Audit Committee of the Board of Directors and selected by the Board of Directors. KPMG LLP was engaged to audit the 2003, 2002, and 2001 consolidated financial statements of Zygo Corporation and its subsidiaries and conducted such tests and related procedures as deemed necessary in conformity with auditing standards generally accepted in the United States of America. The opinion of the independent auditors, based upon their audits of the consolidated financial statements, is included in this annual report.

J. BRUCE ROBINSON
*Chairman, President, and
Chief Executive Officer*

RICHARD M. DRESSLER
*Vice President, Finance,
Chief Financial Officer, and Treasurer*

REPORT OF INDEPENDENT AUDITORS

The Board of Directors and Stockholders of
ZYGO CORPORATION:

We have audited the accompanying consolidated balance sheets of Zygo Corporation and subsidiaries as of June 30, 2003 and 2002, and the related consolidated statements of operations, stockholders' equity and cash flows for each of the years in the three-year period ended June 30, 2003. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the consolidated 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 consolidated financial statements referred to above present fairly, in all material respects, the financial position of Zygo Corporation and subsidiaries as of June 30, 2003 and 2002, and the results of their operations and their cash flows for each of the years in the three-year period ended June 30, 2003, in conformity with accounting principles generally accepted in the United States of America.

As discussed in Notes 1 and 2 to the consolidated financial statements, the Company changed its method of accounting for the disposal of long-lived assets effective July 1, 2002 in accordance with Statement of Financial Accounting Standards No. 144, "Accounting for the Impairment or Disposal of Long-Lived Assets."

KPMG LLP

Hartford, Connecticut
August 18, 2003

ZYGO CORPORATION AND CONSOLIDATED SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS

	<u>June 30,</u> <u>2003</u>	<u>June 30,</u> <u>2002</u>
(Thousands of dollars, except share amounts)		
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 31,209	\$ 28,513
Restricted cash	—	1,225
Marketable securities (note 3)	14,929	720
Receivables (notes 4 and 18)	12,868	21,241
Inventories (note 5).....	18,444	23,612
Prepaid expenses	1,791	1,444
Deferred income taxes (note 16).....	5,179	4,899
Assets from discontinued unit held for sale (notes 2 and 10)	11,899	—
Total current assets	96,319	81,654
Marketable securities (note 3).....	6,712	8,014
Property, plant, and equipment, net (note 6)	26,648	55,045
Deferred income taxes (note 16)	26,364	19,981
Intangible assets, net (notes 7)	5,025	4,507
Total assets	\$161,068	\$169,201
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Current portion of long-term debt (note 10).....	\$ 11,374	\$ 837
Accounts payable	5,254	5,020
Accrued progress payments (note 18).....	2,319	368
Accrued salaries and wages	3,612	3,451
Interest rate swap liability (note 10)	1,435	832
Other accrued expenses (note 9).....	3,694	4,300
Income taxes payable	1,750	929
Total current liabilities	29,438	15,737
Long-term debt (note 10)	—	11,374
Other long-term liabilities (note 2)	609	1,115
Minority interest	1,161	970
Total liabilities	31,208	29,196
Commitments (notes 9 and 11)		
Stockholders' equity (notes 13, 14, and 15):		
Common stock, \$.10 par value per share:		
40,000,000 shares authorized (40,000,000 in 2002); 18,042,917 shares issued (17,892,564 in 2002); 17,595,712 shares outstanding (17,445,359 in 2002)	1,804	1,789
Additional paid-in capital	138,333	137,390
Retained earnings (deficit)	(2,589)	7,981
Accumulated other comprehensive income (loss):		
Currency translation effects.....	(1,623)	(1,369)
Net unrealized loss on swap agreement (note 10)	(914)	(515)
Net unrealized gain on marketable securities (note 3)	136	16
	135,147	145,292
Less treasury stock, at cost; 447,205 common shares (447,205 shares in 2002)	5,287	5,287
Total stockholders' equity	129,860	140,005
Total liabilities and stockholders' equity.....	\$161,068	\$169,201

See accompanying notes to consolidated financial statements.

ZYGO CORPORATION AND CONSOLIDATED SUBSIDIARIES
CONSOLIDATED STATEMENTS OF OPERATIONS

	<u>Fiscal Year Ended June 30,</u>		
	<u>2003</u>	<u>2002</u>	<u>2001</u>
(Thousands except per share amounts)			
Net sales (notes 18 and 19)			
Products	\$ 83,798	\$ 78,877	\$129,508
Development services	18,779	1,391	—
	<u>102,577</u>	<u>80,268</u>	<u>129,508</u>
Cost of goods sold			
Products	52,202	51,666	68,147
Development services	14,930	1,139	—
	<u>67,132</u>	<u>52,805</u>	<u>68,147</u>
Gross profit	35,445	27,463	61,361
Selling, general, and administrative expenses.....	20,320	21,922	27,438
Research and development	12,659	17,696	13,518
Amortization of goodwill and other intangibles.....	104	763	740
Automation Systems Group exit costs (note 2)	352	1,856	—
Operating profit (loss)	<u>2,010</u>	<u>(14,774)</u>	<u>19,665</u>
Gain on sale of Automation Systems Group (note2)	—	6,142	—
Other income (expense):			
Interest income	943	1,605	1,635
Miscellaneous expense, net	(293)	(428)	(487)
Total other income	<u>650</u>	<u>1,177</u>	<u>1,148</u>
Earnings (loss) before income taxes and minority interest	2,660	(7,455)	20,813
Income tax benefit (expense) (note 16).....	(626)	3,652	(6,330)
Minority interest.....	(459)	(476)	(582)
Earnings (loss) from continuing operations	<u>1,575</u>	<u>(4,279)</u>	<u>13,901</u>
Discontinued TeraOptix operations, net of tax (note 2).....	(2,493)	(7,454)	(3,242)
Charges related to the disposal of TeraOptix, net of tax (note 2) ..	(9,652)	—	—
Loss from discontinued operations.....	<u>(12,145)</u>	<u>(7,454)</u>	<u>(3,242)</u>
Net earnings (loss)	<u>\$ (10,570)</u>	<u>\$ (11,733)</u>	<u>\$ 10,659</u>
Basic—Earnings (loss) per share:			
Continuing operations	<u>\$ 0.09</u>	<u>\$ (0.24)</u>	<u>\$ 0.90</u>
Discontinued operations	<u>\$ (0.69)</u>	<u>\$ (0.43)</u>	<u>\$ (0.21)</u>
Net earnings (loss)	<u>\$ (0.60)</u>	<u>\$ (0.67)</u>	<u>\$ 0.69</u>
Diluted—Earnings (loss) per share:			
Continuing operations	<u>\$ 0.09</u>	<u>\$ (0.24)</u>	<u>\$ 0.86</u>
Discontinued operations	<u>\$ (0.69)</u>	<u>\$ (0.43)</u>	<u>\$ (0.20)</u>
Net earnings (loss)	<u>\$ (0.60)</u>	<u>\$ (0.67)</u>	<u>\$ 0.66</u>
Weighted average number of shares:			
Basic	<u>17,539</u>	<u>17,414</u>	<u>15,398</u>
Diluted	<u>17,696</u>	<u>17,414</u>	<u>16,063</u>

See accompanying notes to consolidated financial statements.

ZYGO CORPORATION AND CONSOLIDATED SUBSIDIARIES
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY

	<u>Total</u>	<u>Comp. Income (Loss)</u>	<u>Retained Earnings (Deficit)</u>	<u>Accum. Other Comp. Income (Loss)</u>	<u>Common Stock</u>	<u>Treasury Stock</u>	<u>Paid-In Capital</u>
(Thousands of dollars)							
Balance at June 30, 2000.....	\$ 78,229		\$ 9,055	\$ (273)	\$1,444	\$ (301)	\$ 68,304
Comprehensive income (loss)							
Net earnings	10,659	<u>10,659</u>	10,659				
Other comprehensive income (loss), net of tax							
Unrealized gain on marketable securities ...	128	128					
Unrealized gain on swap agreement	31	31					
Foreign currency translation effect	(1,604)	<u>(1,604)</u>					
Other comprehensive loss		<u>(1,445)</u>		(1,445)			
Comprehensive income.....		<u><u>9,214</u></u>					
Repurchased common stock	(4,716)					(4,716)	
Secondary offering.....	51,824				292		51,532
Exercise of employee stock options and related tax effect	<u>14,588</u>				<u>44</u>		<u>14,544</u>
Balance at June 30, 2001.....	<u>\$149,139</u>		<u>\$ 19,714</u>	<u>\$ (1,718)</u>	<u>\$1,780</u>	<u>\$(5,017)</u>	<u>\$134,380</u>
Comprehensive income (loss)							
Net loss	(11,733)	<u>(11,733)</u>	(11,733)				
Other comprehensive income (loss), net of tax							
Unrealized loss on marketable securities	(21)	(21)					
Unrealized loss on swap agreement	(546)	(546)					
Foreign currency translation effect	417	<u>417</u>					
Other comprehensive loss		<u>(150)</u>		(150)			
Comprehensive loss.....		<u><u>(11,883)</u></u>					
Repurchased common stock adjustment.....	(270)					(270)	
Non-cash compensation charges related to stock options.....	83						83
Employee stock purchase	1,098				8		1,090
Exercise of employee stock options and related tax effect	<u>1,838</u>				<u>1</u>		<u>1,837</u>
Balance at June 30, 2002.....	<u>\$140,005</u>		<u>\$ 7,981</u>	<u>\$ (1,868)</u>	<u>\$1,789</u>	<u>\$(5,287)</u>	<u>\$137,390</u>
Comprehensive income (loss)							
Net loss	(10,570)	<u>(10,570)</u>	(10,570)				
Other comprehensive income (loss), net of tax							
Unrealized gain on marketable securities ...	120	120					
Unrealized loss on swap agreement	(399)	(399)					
Foreign currency translation effect	(254)	<u>(254)</u>					
Other comprehensive loss		<u>(533)</u>		(533)			
Comprehensive loss.....		<u><u>(11,103)</u></u>					
Non-cash compensation charges related to stock options.....	70						70
Employee stock purchase	731				12		719
Exercise of employee stock options and related tax effect	<u>157</u>				<u>3</u>		<u>154</u>
Balance at June 30, 2003.....	<u><u>\$129,860</u></u>		<u><u>\$ (2,589)</u></u>	<u><u>\$ (2,401)</u></u>	<u><u>\$1,804</u></u>	<u><u>\$(5,287)</u></u>	<u><u>\$138,333</u></u>

See accompanying notes to consolidated financial statements.

ZYGO CORPORATION AND CONSOLIDATED SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS

	Fiscal Year Ended June 30,		
	2003	2002	2001
(Thousands of dollars)			
Cash provided by (used for) operating activities:			
Net earnings (loss).....	\$(10,570)	\$(11,733)	\$10,659
Adjustments to reconcile net earnings (loss) to cash provided by (used for) operating activities:			
Loss from discontinued operations	12,145	7,454	3,242
Depreciation and amortization	5,623	6,098	3,760
Gain on sale of Automation Systems Group	—	(6,142)	—
Loss on disposal of assets	489	2,320	869
Deferred income taxes	(236)	(1,336)	5,322
Non-cash compensation charges related to stock options.....	70	83	—
Changes in operating accounts:			
Receivables	7,528	2,681	(5,774)
Costs in excess of billings	—	(690)	3,941
Inventories	4,353	(568)	(11,832)
Prepaid expenses	(367)	(131)	3,798
Accounts payable and accrued expenses	2,721	(7,801)	3,220
Minority interest.....	459	476	520
Net cash provided by (used for) continuing operations	22,215	(9,289)	17,725
Net cash used for discontinued operations	(4,607)	(8,470)	(7,788)
Net cash provided by (used for) operating activities.....	<u>17,608</u>	<u>(17,759)</u>	<u>9,937</u>
Cash used for investing activities:			
Additions to property, plant, and equipment	(5,037)	(11,381)	(13,902)
Purchase of marketable securities	(15,842)	(8,001)	(2,155)
Investments in other assets	(957)	(493)	(1,861)
Proceeds from the sale of assets	—	673	—
Proceeds from sale of Automation Systems Group, net of cash sold (\$88)	—	12,077	—
Restricted cash with interest from sale of Automation Systems Group	1,225	(1,225)	—
Proceeds from the sale of marketable securities	—	4,248	2,250
Proceeds from maturity of marketable securities	3,075	2,155	1,180
Net cash used for continuing operations	(17,536)	(1,947)	(14,488)
Net cash provided by (used for) discontinued operations	2,841	(6,259)	(19,077)
Net cash used for investing activities	<u>(14,695)</u>	<u>(8,206)</u>	<u>(33,565)</u>
Cash provided by (used for) financing activities:			
Dividend payments to minority interest	(268)	(469)	—
Employee stock purchase	731	1,098	—
Exercise of employee stock options.....	157	1,838	996
Issuance of common stock	—	—	51,824
Repurchase of common stock	—	(270)	(4,716)
Net cash provided by continuing operations	620	2,197	48,104
Net cash provided by (used) for discontinued operations	(837)	(349)	12,556
Net cash provided by (used for) financing activities	<u>(217)</u>	<u>1,848</u>	<u>60,660</u>
Net increase (decrease) in cash and cash equivalents.....	2,696	(24,117)	37,032
Cash and cash equivalents, beginning of year.....	28,513	52,630	15,598
Cash and cash equivalents, end of year	<u>\$ 31,209</u>	<u>\$ 28,513</u>	<u>\$52,630</u>

See accompanying notes to consolidated financial statements.

ZYGO CORPORATION AND CONSOLIDATED SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

June 30, 2003, 2002, and 2001

(Dollars in thousands, except for per share amounts)

Note 1: Summary of Significant Accounting Policies

Description of Operations and Principles of Consolidation

Zygo Corporation is a worldwide developer and supplier of high performance metrology instruments, high precision optics, optical assemblies, and automation for the semiconductor and industrial markets. The accompanying consolidated financial statements include the accounts of Zygo Corporation and its subsidiaries ("ZYGO," "we," "us," or "Company"). All material transactions and accounts with the subsidiaries have been eliminated from the consolidated financial statements.

Cash and Cash Equivalents

We consider cash and investments in securities with maturities at the date of purchase of three months or less to be cash and cash equivalents.

Marketable Securities

We consider investments in securities with maturities at the date of purchase in excess of three months as marketable securities. Marketable securities primarily consist of corporate bonds, government agency securities, and tax-exempt bonds. All securities held by us at June 30, 2003 and 2002, were classified as available-for-sale and recorded at fair value or held to maturity and recorded at cost. Unrealized holding gains and losses, net of the related tax effect, on available-for-sale securities are excluded from earnings and are reported as a separate component of stockholders' equity until realized.

Inventories

Inventories are stated at the lower of cost (determined on a first-in, first-out basis) or market.

Property, Plant, and Equipment

Property, plant, and equipment are stated at cost. Maintenance and repairs are charged to expense as incurred. Management evaluates, on an ongoing basis, the carrying value of our property, plant, and equipment and makes adjustments when impairments are identified. Depreciation is based on the estimated useful lives of the various classes of assets and is computed using the straight-line method.

Intangible Assets

Intangible assets include patents, trademarks, and license agreements. The cost of intangible assets is amortized on a straight-line basis, which ranges from 4-20 years.

Valuation of Long-Lived Assets

In accordance with Statement of Financial Accounting Standards ("SFAS") No. 144, "Accounting for the Impairment or Disposal of Long-Lived Assets," the carrying value of intangible assets and other long-lived assets is reviewed on a regular basis for the existence of facts or circumstances, both internally and externally, that may suggest impairment. Some factors considered important, which could trigger an impairment review, include a significant decrease in the market value of an asset, a significant change in the extent or manner in which an asset is

ZYGO CORPORATION AND CONSOLIDATED SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

June 30, 2003, 2002, and 2001

(Dollars in thousands, except for per share amounts)

used, a significant adverse change in the business climate that could affect the value of an asset, an accumulation of costs for an asset in excess of the amount originally expected, a current period operating or cash flow loss combined with a history of operating or cash flow losses or a projection that demonstrates continuing losses, and a current expectation that, more likely than not, a long-lived asset will be disposed of significantly before the end of its estimated useful life.

If such circumstances exist, the carrying value of long-lived assets are evaluated to determine if impairment exists based upon estimated undiscounted future cash flows over the remaining useful life of the assets and comparing that value to the carrying value of the assets. If the carrying value of the assets is greater than the estimated future cash flows, the assets are written down to the estimated fair value. The estimated fair value of the assets is based on a current market value of the assets. If a current market value is not readily available, a projected discounted cash flow method is applied using a discount rate determined by management to be commensurate with the risk inherent in the current business model. Our cash flow estimates contain management's best estimates, using appropriate and customary assumptions and projections at the time.

Income Taxes

Income taxes are accounted for under the asset and liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and operating loss and tax credit carryforwards. Deferred tax assets and liabilities are measured using enacted rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date.

Revenue Recognition

We recognize revenue based on guidance provided in Securities and Exchange Commission ("SEC") Staff Accounting Bulletin ("SAB") No. 101, "Revenue Recognition in Financial Statements." We recognize revenue when persuasive evidence of an arrangement exists, delivery has occurred or services have been rendered, there is no significant risk pertaining to customer acceptance, our price is fixed or determinable, and collectibility is reasonably assured.

Research and Development

Research and development costs are expensed as incurred.

Earnings Per Share

Basic and diluted earnings per share are calculated in accordance with Statement of Financial Accounting Standards No. 128, "Earnings Per Share."

The following table sets forth the reconciliation of weighted average shares outstanding and diluted weighted average shares outstanding:

	<u>June 30,</u> <u>2003</u>	<u>June 30,</u> <u>2002</u>	<u>June 30,</u> <u>2001</u>
Weighted average shares outstanding	17,539,000	17,414,000	15,398,000
Dilutive effect of stock options	<u>157,000</u>	<u>—</u>	<u>665,000</u>
Diluted weighted average shares outstanding ..	17,696,000	17,414,000	16,063,000

ZYGO CORPORATION AND CONSOLIDATED SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

June 30, 2003, 2002, and 2001

(Dollars in thousands, except for per share amounts)

For the fiscal year ended June 30, 2002, the Company recorded a net loss from continuing operations. Due to the net loss from continuing operations, stock options of 319,000 for the fiscal year ended 2002 were excluded from the computation because of the anti-dilutive effect on earnings per share.

Stock Based Compensation

We have three stock-based compensation plans, which are described in note 14. We apply Accounting Principles Board (“APB”) Opinion No. 25, “Accounting for Stock Issued to Employees,” and related interpretations in accounting for our plans. Since all options were granted with a exercise price equal to the fair market value on the date of grant, no compensation cost has been recognized for our fixed option plans. Pro forma information regarding net earnings and earnings per share is required by SFAS No. 123, “Accounting for Stock-Based Compensation,” which requires that the information be determined as if we have accounted for our stock options granted in fiscal years beginning after December 15, 1994 under the fair value method of the statement.

The fair value of options at date of grant was estimated using the Black-Scholes model. Our pro forma information is as follows:

	<u>June 30, 2003</u>	<u>June 30, 2002</u>	<u>June 30, 2001</u>
Net earnings (loss), as reported	\$(10,570)	\$(11,733)	\$10,659
Deduct: Total stock-based employee compensation expense determined under fair value based method for all awards, net of related tax effects	<u>(5,209)</u>	<u>(8,896)</u>	<u>(7,223)</u>
Pro forma net (loss) earnings	<u>\$(15,779)</u>	<u>\$(20,629)</u>	<u>\$ 3,436</u>
Net earnings (loss) per share			
Basic—as reported.....	<u>\$ (0.60)</u>	<u>\$ (0.67)</u>	<u>\$ 0.69</u>
Basic—pro forma.....	<u>\$ (0.90)</u>	<u>\$ (1.18)</u>	<u>\$ 0.22</u>
Diluted—as reported	<u>\$ (0.60)</u>	<u>\$ (0.67)</u>	<u>\$ 0.66</u>
Diluted—pro forma.....	<u>\$ (0.90)</u>	<u>\$ (1.18)</u>	<u>\$ 0.21</u>

The above pro forma information is based on historical activity and may not represent future trends.

Fair Value of Financial Instruments

SFAS No. 107, “Disclosures about Fair Value of Financial Instruments,” requires that reporting entities provide, to the extent practicable, the fair value of financial instruments, both assets and liabilities. The carrying amounts of cash, accounts receivable, accounts payable, and accrued expenses approximate fair value because they are short-term in nature.

Use of Estimates

Management has made a number of estimates and assumptions relating to the reporting of assets, liabilities, revenues and expenses and the disclosure of contingent assets and liabilities to prepare these consolidated financial statements in conformity with accounting principles generally accepted in the United States of America. On an ongoing basis, management evaluates its

ZYGO CORPORATION AND CONSOLIDATED SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

June 30, 2003, 2002, and 2001

(Dollars in thousands, except for per share amounts)

estimates and judgments, including those related to bad debts, inventories, long-lived assets, income taxes, and warranty obligations. Actual results could differ from those estimates.

Reclassifications

Certain amounts included in the consolidated financial statements for the prior years have been reclassified to conform with the current year presentation.

Recently Issued Accounting Pronouncements

In June 2002, the Financial Accounting Standards Board (“FASB”) issued SFAS No. 146, “Accounting for Costs Associated with Exit or Disposal Activities,” which addresses financial accounting and reporting for costs associated with the exit or disposal activities. SFAS No. 146 nullifies Emerging Issues Task Force Issue 94-3, “Liability Recognition for Certain Employee Termination Benefits and Other Costs to Exit an Activity (including Certain Costs Incurred in a Restructuring).” SFAS No. 146 requires companies to record liabilities for exit or disposal activities in the period in which they are incurred, except for certain types of transactions. SFAS No. 146 is effective for exit or disposal activities that are initiated after December 31, 2002. The adoption of SFAS No. 146 did not have a material effect on our results of operations or financial position.

In November 2002, the FASB issued FASB Interpretation No. (“FIN”) 45, “Guarantor’s Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others.” FIN 45 requires that upon issuance of a guarantee, a guarantee must recognize a liability for the fair value of an obligation assumed under a guarantee. FIN 45 also requires additional disclosures by a guarantor in its interim and annual financial statements about the obligations associated with guarantees that have been issued. The recognition provisions of FIN 45 are effective for any guarantees issued or modified after December 31, 2002. The disclosure requirements are effective for financial statements of interim and annual periods ending after December 15, 2002. The adoption of FIN 45 did not have a material effect on our results of operations or financial position.

In December 2002, the FASB issued SFAS No. 148, “Accounting for Stock-Based Compensation—Transition and Disclosure,” which addresses the alternative methods of transition for a voluntary change to the fair value based method of accounting for stock-based employee compensation. In addition, SFAS No. 148 amends the disclosure requirements of SFAS No. 123 to require prominent disclosures in both annual and interim financial statements about the method of accounting for stock-based employee compensation and the effect of the method used on reported results. If the company adopts the recognition provisions of SFAS No. 148 in a fiscal year beginning before December 16, 2003, that change in accounting principle must be reported using one of three methods: Prospective Method, Modified Prospective Method, or Retroactive Restatement Method. If a company adopts the recognition provisions of SFAS No. 148 for fiscal years beginning after December 16, 2003, only the Modified Prospective Method or Retroactive Restatement Method may be used. In absence of a single accounting method for stock-based employee compensation, SFAS No. 148 requires disclosures of comparable information for all companies regardless of whether, when, or how a company adopts the fair value based method of accounting. SFAS No. 148 is effective for fiscal years ending after December 15, 2002 and interim periods beginning after December 15, 2002. We have adopted the disclosure requirements of this SFAS.

In January 2003, the FASB issued FIN 46, “Consolidation of Variable Interest Entities.” In general, a variable interest entity is a corporation, partnership, trust, or any other legal structure used for business purposes that either (a) does not have equity investors with voting rights or

ZYGO CORPORATION AND CONSOLIDATED SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

June 30, 2003, 2002, and 2001

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(b) has equity investors that do not provide sufficient financial resources for the entity to support its activities. FIN 46 requires a variable interest entity to be consolidated by a company if that company is subject to a majority of the risk of loss from the variable interest entity's activities or entitled to receive a majority of the entity's residual returns or both. The consolidation requirements of FIN 46 apply immediately to variable interest entities created after January 31, 2003. The consolidation requirements apply to older entities in the first fiscal year or interim period beginning after June 15, 2003, regardless of when the variable interest entity was established. The adoption of FIN 46 did not have a material affect on our results of operations or financial position.

In April 2003, the FASB issued SFAS No. 149, "Amendment of Statement 133 on Derivative Instruments and Hedging Activities," which amends and clarifies financial accounting and reporting for derivative instruments. SFAS No. 149 became effective for us in July 2003. The adoption of SFAS No. 149 is not expected to have a material affect on our results of operations or financial position.

In May 2003, the FASB issued SFAS No. 150, "Accounting for Certain Financial Instruments with Characteristics of both Liabilities and Equity," which establishes standards for how an issuer classifies and measures certain financial instruments with characteristics of both liabilities and equity. Generally, the statement is effective for financial instruments entered into or modified after May 31, 2003 and is otherwise effective for at the beginning of the first interim period beginning after June 15, 2003. The adoption of SFAS No. 150 is not expected to have a material affect on our results of operations or financial position.

Note 2: Divestitures and Discontinued Operations

On December 12, 2001, we sold our Automation Systems Group in Longmont, Colorado, to Brooks Automation, Inc. of Chelmsford, Massachusetts, in a cash transaction, for \$12,165. Substantially all of the assets were sold to Brooks and substantially all of the liabilities were assumed by Brooks. The gain on the sale was \$6,142 before related exit costs of \$1,856 to be paid from the proceeds, inventory write-downs of \$808, and tax expense of \$1,322. In fiscal 2003, we recorded an additional \$352 of charges related to the remaining term on the lease of space formerly occupied by the Automation Systems Group.

In fiscal 2003, we recognized an after-tax loss of \$9,652 (net of a tax benefit of \$5,101) for the planned disposition of our former TeraOptix business unit ("TeraOptix"). The charges related to the disposal of TeraOptix consisted of impairment charges and estimated selling expenses recorded on the equipment and facility of \$12,880, estimated severance payments of \$850, a write-down to fair market value of the inventory of \$650, and \$373 of other costs and write-downs related to the disposition of the remaining assets. The remaining value of the facility of \$11,899 at June 30, 2003 represents the estimated fair market value based on a third-party appraisal. The estimated fair market value is subject to future market conditions. This asset is classified under current assets as assets of discontinued unit held for sale. We are presently marketing the facility for sale and proceeds from any sale of the facility will be used to pay down a related mortgage loan and swap agreement. The mortgage loan and swap agreement have been classified as current liabilities based on our intention to pay down the debts with the sale proceeds. As of June 30, 2003, the mortgage balance was \$11,374 and the swap agreement liability was \$1,435. If we are able to sell the facility for its estimated value, an additional \$910 of cash on hand would be used to pay down the related debts. Factors which could influence the actual amount of cash used to pay the related debts include a selling price which differs from the current estimated value, the timing of the sale of the

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facility, and changes in the value of the swap agreement, which is based on financial market conditions.

The results and loss on disposal of the TeraOptix business unit have been presented as separate line items in the accompanying consolidated statements of operations as discontinued operations, net of tax, for all periods presented. The components of cash flow from discontinued operations are as follows:

	<u>June 30,</u> <u>2003</u>	<u>June 30,</u> <u>2002</u>	<u>June 30,</u> <u>2001</u>
Cash flow from operating activities from discontinued operations:			
Loss from discontinued operations	\$(2,493)	\$(7,454)	\$ (3,242)
Depreciation and amortization	—	1,153	236
Deferred income taxes	(1,405)	(3,685)	(2,876)
Receivables	662	1,294	(1,366)
Inventories	165	(159)	(550)
Prepaid expenses.....	20	59	(77)
Accounts payable and accrued expenses	<u>(1,556)</u>	<u>322</u>	<u>87</u>
Net cash used for operating activities from discontinued operations	<u>\$(4,607)</u>	<u>\$(8,470)</u>	<u>\$ (7,788)</u>
Cash flow from investing activities from discontinued operations:			
Additions to property, plant, and equipment	\$ —	\$(6,259)	\$(19,077)
Proceeds from sale of assets	<u>2,841</u>	<u>—</u>	<u>—</u>
Net cash provided by (used for) investing activities from discontinued operations.....	<u>\$ 2,841</u>	<u>\$(6,259)</u>	<u>\$(19,077)</u>
Cash flow from financing activities from discontinued operations:			
Proceeds (payment) of long-term debt	\$ (837)	\$ (349)	\$ 12,556
Net cash provided by (used for) financing activities from discontinued operations.....	<u>\$ (837)</u>	<u>\$ (349)</u>	<u>\$ 12,556</u>

Note 3: Marketable Securities

Marketable securities consisted primarily of corporate bonds, government agency securities and tax-exempt bonds issued by various federal, state and municipal agencies for both 2003 and 2002. Marketable securities at June 30, 2003 and 2002 are reported either at fair value or at cost depending on their classification. The gross unrealized gains on marketable securities of \$213 and \$22 at June 30, 2003 and 2002, respectively, are shown net of their related tax effects, resulting in balances of \$136 and \$16, respectively, as a separate component of stockholders' equity. As of June 30, 2003, we transferred our marketable securities from available-for-sale to held-to-maturity. Accordingly, the gross unrealized gains, net of tax, of \$136 in stockholders' equity as of June 30, 2003 will be amortized over the remaining life of the securities.

Dividend and interest income is recognized when earned. Realized gains and losses are included in earnings and are derived using the specific identification method for determining the cost of securities sold.

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The amortized cost, gross unrealized holding gains (losses), and fair value of held-to-maturity securities at June 30, 2003 and 2002 were as follows:

	<u>Amortized Cost</u>	<u>Gross Unrealized Holding Gains</u>	<u>Gross Unrealized Holding Losses</u>	<u>Fair Value</u>
At June 30, 2003				
Corporate, federal, state and local municipal bonds	<u>\$21,641</u>	<u>\$—</u>	<u>\$—</u>	<u>\$21,641</u>
At June 30, 2002				
Corporate, federal, state and local municipal bonds	<u>\$ 629</u>	<u>\$ 1</u>	<u>\$—</u>	<u>\$ 630</u>

The amortized cost, gross unrealized holding gains (losses), and fair value of available-for-sale securities at June 30, 2002 were as follows:

	<u>Amortized Cost</u>	<u>Gross Unrealized Holding Gains</u>	<u>Gross Unrealized Holding Losses</u>	<u>Fair Value</u>
Corporate, federal, state and local municipal bonds	<u>\$8,094</u>	<u>\$75</u>	<u>\$(64)</u>	<u>\$8,105</u>

There were no gross realized gains or losses recorded in 2003. There were \$59 gross realized gains recorded in 2002.

Maturities of investment securities classified as available-for-sale were as follows at June 30, 2002:

	<u>June 30, 2002</u>	
	<u>Amortized Cost</u>	<u>Fair Value</u>
Due within one year	\$ 44	\$ 91
Due after one year through five years	<u>8,050</u>	<u>8,014</u>
	<u>\$8,094</u>	<u>\$8,105</u>

Maturities of investment securities classified as held-to-maturity were as follows at June 30, 2003 and 2002:

	<u>June 30, 2003</u>		<u>June 30, 2002</u>	
	<u>Amortized Cost</u>	<u>Fair Value</u>	<u>Amortized Cost</u>	<u>Fair Value</u>
Due within one year	\$14,929	\$14,929	\$629	\$630
Due after one year through five years	<u>6,712</u>	<u>6,712</u>	<u>—</u>	<u>—</u>
	<u>\$21,641</u>	<u>\$21,641</u>	<u>\$629</u>	<u>\$630</u>

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Note 4: Accounts Receivable

At June 30, 2003 and 2002, accounts receivable were as follows:

	<u>June 30, 2003</u>	<u>June 30, 2002</u>
Trade (note 18).....	\$12,284	\$20,737
Other.....	921	1,453
	13,205	22,190
Allowance for doubtful accounts.....	<u>(337)</u>	<u>(949)</u>
	<u>\$12,868</u>	<u>\$21,241</u>

Note 5: Inventories

At June 30, 2003 and 2002, inventories were as follows:

	<u>June 30, 2003</u>	<u>June 30, 2002</u>
Raw materials and manufactured parts	\$10,103	\$15,114
Work in process	7,816	8,477
Finished goods.....	525	21
	<u>\$18,444</u>	<u>\$23,612</u>

Note 6: Property, Plant, and Equipment

At June 30, 2003 and 2002, property, plant, and equipment, at cost, were as follows:

	<u>June 30, 2003</u>	<u>June 30, 2002</u>	<u>Estimated Useful Life (Years)</u>
Land	\$ 615	\$ 2,940	—
Building and improvements	11,355	26,134	15–40
Machinery, equipment and office furniture	39,545	47,640	3–8
Leasehold improvements	166	237	1–5
Construction in progress	<u>2,222</u>	<u>2,878</u>	—
	53,903	79,829	
Less accumulated depreciation	<u>(27,255)</u>	<u>(24,784)</u>	
	<u>\$ 26,648</u>	<u>\$ 55,045</u>	

Depreciation expense for the fiscal years ended June 30, 2003, 2002, and 2001 was \$5,325, \$5,335, and \$2,963, respectively.

Note 7: Intangible Assets

Intangible assets, at cost, at June 30, 2003 and 2002 were as follows:

	<u>June 30, 2003</u>	<u>June 30, 2002</u>
Intangible assets.....	\$ 6,336	\$ 8,329
Accumulated amortization.....	<u>(1,311)</u>	<u>(3,822)</u>
	<u>\$ 5,025</u>	<u>\$ 4,507</u>

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Intangible amortization expense was \$298 for the fiscal year ended June 30, 2003 and is estimated to be approximately \$200 in fiscal years 2004-2008. Intangible amortization expense for the fiscal years ended June 30, 2002 and 2001 was \$763 and \$797, respectively, which included goodwill amortization of \$263 and \$242, respectively. As of June 30, 2002, the Company's goodwill was fully amortized. Amortization expense related to certain intangible assets is included in cost of goods sold in the consolidated statements of operations.

Note 8: Bank Line of Credit

We have a \$3,000 unsecured bank line of credit bearing interest at our choice of either the prime rate (4.25% at June 30, 2003) or the one month LIBOR rate plus a variable interest rate of 1.0% to 2.5%, based on a pricing grid related to a certain debt ratio, adjusted quarterly (3.7% at June 30, 2003). The line of credit is available through November 20, 2003. At June 30, 2003 and 2002, no amounts were outstanding under the bank line of credit.

Note 9: Warranty

A limited warranty is provided on our products for periods typically ranging from 3 to 12 months and allowances for estimated warranty costs are recorded during the period of sale. The determination of such allowances requires management to make estimates of product return rates and expected costs to repair or replace products under warranty. If actual return rates or repair and replacement costs, or both, differ significantly from management's estimates, adjustments to recognize additional expense may be required.

The following is a reconciliation of the beginning and ending balances of our accrued warranty liability, which is included in the "Other accrued expenses" line item in the consolidated balance sheets:

	<u>June 30,</u> <u>2003</u>	<u>June 30,</u> <u>2002</u>
Beginning balance	\$ 830	\$1,003
Reductions for payments made	(1,153)	(717)
Changes in accruals related to warranties issued in the current period	1,346	779
Changes in accrual related to pre-existing warranties	<u>192</u>	<u>(235)</u>
Ending balance	<u>\$ 1,215</u>	<u>\$ 830</u>

Note 10: Long-Term Debt

In May 2001 we entered into a mortgage on the facility located in Westborough, Massachusetts. The mortgage amount was \$12,560 at an interest rate of the one month LIBOR rate plus a variable interest rate of 1.0% to 2.5%, based on a pricing grid related to a certain debt ratio, adjusted quarterly. The mortgage agreement contains financial covenants which, among others, relate to debt service and consolidated debt ratios. In June 2002, the mortgage agreement was amended to revise the financial covenants and adjust the variable interest rate pricing grid, such that the variable interest rate can fluctuate between 1.0% and 2.5% based on the debt ratio. At June 30, 2003, the one month LIBOR rate plus variable rate was 3.7%. The mortgage is amortizing on a 15-year schedule requiring level monthly principal and interest payments and is payable in full in May 2007. We made interest only payments through February 2002. As of June 30, 2003, current portion of long-term debt was \$11,374. Principal payments for fiscal years

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2004-2006 will be \$837 annually and the principal payment for the fiscal year 2007 will be \$8,862, including a balloon payment of \$8,164 due in May 2007.

In conjunction with the mortgage, we entered into a \$12,560 notional principal interest rate swap that effectively converted the variable rate LIBOR-based payments to a fixed rate of 6.0% for the duration of the mortgage. In addition, the variable interest rate based on a pricing grid related to a certain debt ratio will continue to be applied to the outstanding mortgage amount. The effective interest rate at June 30, 2003 and 2002 was 8.5%. In accordance with SFAS No. 133, as amended, we recorded a liability to reflect the fair value of the interest rate swap of \$1,435. This amount, net of taxes of \$521, is reflected with a corresponding debit to the stockholders' equity of \$914.

Interest payments on debt were \$1,021, \$1,158, and \$107 in fiscal 2003, 2002, and 2001, respectively.

Note 11: Leases

We lease certain manufacturing equipment and facilities under operating leases, some of which include cost escalation clauses, expiring on various dates through 2007. Total lease expense, net, charged to operations was \$1,453 in 2003, \$1,603 in 2002, and \$1,562 in 2001. At June 30, 2003, the minimum future lease commitments under noncancellable leases payable over the remaining lives of the leases, net of sublease rentals, are as follows:

<u>Year Ending June 30,</u>	<u>Minimum Future Lease Commitments</u>
2004	\$1,617
2005	1,187
2006	713
2007	<u>7</u>
Total minimum lease payments.....	<u>\$3,524</u>

Note 12: Profit-Sharing Plan

We maintain a deferred profit-sharing plan under which substantially all full-time employees are eligible to participate. The profit-sharing plan consists of a cash distribution and a contribution to our 401(k) program. Profit-sharing contributions are determined annually at the discretion of the Board of Directors. We also maintain a 401(k) tax deferred payroll deduction program and an Employee Stock Ownership Program. Under the 401(k) program, employees may contribute a tax-deferred amount of up to 15% of their compensation, as defined. We may contribute to the 401(k) program an amount determined annually at the discretion of the Board of Directors. Under the Employee Stock Ownership Program, we may, at the discretion of the Board of Directors, contribute our own stock or contribute cash to purchase our own stock. The purchased stock's fair market value can not exceed the maximum amount of employee stock ownership credit as determined under Section 416 of the Internal Revenue Code. Our contribution expenses related to the plans for the years ended June 30, 2003, 2002, and 2001, amounted to \$359, \$476, and \$3,707, respectively.

Note 13: Stock Compensation Plans

As of June 30, 2003, we have three stock-based compensation plans, which are described below (see note 14). In accordance with SFAS No. 123, a table illustrating the effect on net

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earnings (loss) per share as if the Black-Scholes fair value method had been applied to all stock options is presented in note 1.

The fair value of these options at the date of grant was estimated with the following weighted-average assumptions for 2003, 2002 and 2001:

	<u>June 30, 2003</u>	<u>June 30, 2002</u>	<u>June 30, 2001</u>
Risk free rate of interest	2.9%	4.3%	5.0%
Dividend yield	0.0%	0.0%	0.0%
Volatility factor	74%	76%	77%
Expected life of option	4.5 years	4.5 years	4.8 years

Weighted average fair values at date of grant for options granted during fiscal 2003, 2002, and 2001 were \$3.86, \$7.91, and \$39.85, respectively.

On June 26, 2001, the Board of Directors granted a warrant to purchase 25,000 shares of our common stock to the Zetetic Institute, a non-profit organization that provides assistance to us in connection with certain research and development activities. The warrant has an exercise price of \$18.64 per share, the closing price of the common stock on the date of the grant, and will vest, in equal annual increments, over the four-year period following the date of grant.

Note 14: Stock Option Plans

Employee Stock Option Plan

The Zygo Corporation Amended and Restated Non-Qualified Stock Option Plan permitted the granting of non-qualified options to purchase a total of 4,850,000 shares (adjusted for splits) of common stock at prices not less than the fair market value on the date of grant. There are no shares available for future grant under this plan as of June 30, 2003, as the Plan expired on September 3, 2002. Options generally became exercisable at the rate of 25% of the shares each year commencing one year after the date of grant.

	<u>June 30, 2003</u>	
	<u>Shares</u>	<u>Weighted Average Exercise Price</u>
Outstanding at beginning of year	1,950,719	\$44.527
Granted	247,875	\$ 6.538
Exercised	(34,124)	\$ 1.993
Expired or canceled	(678,044)	\$50.730
Outstanding at end of year	1,486,426	\$36.338
	<u>June 30, 2002</u>	
	<u>Shares</u>	<u>Weighted Average Exercise Price</u>
Outstanding at beginning of year	1,778,308	\$50.223
Granted	325,075	\$12.870
Exercised	(2,125)	\$10.425
Expired or canceled	(150,539)	\$44.774
Outstanding at end of year	1,950,719	\$44.527

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	June 30, 2001	
	Shares	Weighted Average Exercise Price
Outstanding at beginning of year	798,299	\$10.020
Granted	1,386,436	\$61.810
Exercised	(347,463)	\$ 3.508
Expired or canceled	(58,964)	\$58.527
Outstanding at end of year	1,778,308	\$50.223

Non-Employee Director Stock Option Plan

The Zygo Corporation Amended and Restated Non-Employee Director Stock Option Plan permits the granting of non-qualified options to purchase a total of 620,000 shares (adjusted for splits) of common stock at prices not less than the fair market value on the date of grant. Under the terms of the Plan, as amended on September 24, 1999, each new non-employee director (other than a person who was previously an employee of the Company or any of its subsidiaries) is granted an option to purchase 8,000 shares of Common stock, generally, on his or her first day of service as a non-employee director; and each other non-employee director is granted an option to purchase 3,000 shares of Common stock on an annual basis. All options are fully exercisable on the date of grant and have a 10-year term. The Plan, as amended, will expire on November 17, 2009. There are 55,000 shares available for future grant under the plan as of June 30, 2003.

	June 30, 2003	
	Shares	Weighted Average Exercise Price
Outstanding at beginning of year	195,000	\$14.880
Granted	34,000	\$ 6.559
Exercised	(3,000)	\$ 6.150
Expired or canceled	—	\$ —
Outstanding at end of year	226,000	\$13.744

	June 30, 2002	
	Shares	Weighted Average Exercise Price
Outstanding at beginning of year	182,000	\$13.996
Granted	23,000	\$16.276
Exercised	(10,000)	\$ 2.000
Expired or canceled	—	\$ —
Outstanding at end of year	195,000	\$14.880

	June 30, 2001	
	Shares	Weighted Average Exercise Price
Outstanding at beginning of year	249,000	\$ 5.792
Granted	23,000	\$55.873
Exercised	(90,000)	\$ 2.000
Expired or canceled	—	\$ —
Outstanding at end of year	182,000	\$13.996

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2002 Equity Incentive Plan

The Zygo Corporation 2002 Equity Incentive Plan permits the granting of incentive stock options, non-qualified stock options, or restricted stock to purchase a total of 1,500,000 shares of common stock. The exercise price per share of common stock covered by an option may not be less than the par value per share on the date of grant, and in case of an incentive stock option, the exercise price may not be less than the fair market value per share on the date of grant. The Plan will expire on August 27, 2012. The Board of Directors may also amend the Plan to authorize the grant of other types of equity based awards, without further action by our stockholders.

	June 30, 2003	
	Shares	Weighted Average Exercise Price
Outstanding at beginning of year	—	\$ —
Granted	72,163	\$6.044
Exercised	—	\$ —
Expired or canceled	(100)	\$6.051
Outstanding at end of year	72,063	\$6.044

The following table summarizes information about all fixed stock options outstanding at June 30, 2003:

Range of Exercise Prices	Options Outstanding			Options Exercisable	
	Number Outstanding as of June 30, 2003	Weighted Average Remaining Contractual Life	Weighted Average Exercise Price	Number Exercisable as of June 30, 2003	Weighted Average Exercise Price
\$ 2.00–\$ 2.00	141,000	1.2	\$ 2.00	141,000	\$ 2.00
\$ 5.20–\$ 7.67	361,038	9.1	\$ 6.48	46,000	\$ 6.87
\$ 7.90–\$11.75	214,000	5.5	\$10.51	189,513	\$10.56
\$12.23–\$18.00	255,418	7.7	\$13.63	103,706	\$14.68
\$18.64–\$27.38	267,883	6.8	\$19.97	166,040	\$20.62
\$28.22–\$40.38	8,475	7.4	\$32.10	4,625	\$32.09
\$42.44–\$63.44	54,750	6.6	\$45.50	39,950	\$45.29
\$64.63–\$90.81	481,925	7.0	\$85.23	252,968	\$85.17
\$ 2.00–\$90.81	1,784,489	6.8	\$32.24	943,802	\$32.90

Note 15: Employee Stock Purchase Plan

In November 2000, we adopted a non-compensatory Employee Stock Purchase Plan (“ESPP”). Under the ESPP, employees who elect to participate have the ability to purchase common stock at a 15% discount from the market value of such stock. The ESPP permits an enrolled employee to make contributions to purchase shares of common stock by having withheld from his or her salary an amount between 1% and 10% of compensation. The total number of shares of common stock that may be issued under the ESPP is 500,000. At June 30, 2003 and 2002, we had withheld \$382 and \$532, respectively, for the purchases of shares under this plan; and in July 2003 and 2002, issued shares of common stock of approximately 43,000 and 64,000, respectively.

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Note 16: Income Taxes

Total income tax expense (benefit) for each year is as follows:

	Fiscal Year Ended June 30,		
	2003	2002	2001
Income from continuing operations.....	\$ 626	\$(3,652)	\$ 6,330
Discontinued TeraOptix operations.....	(1,614)	(3,248)	(2,876)
Disposal of TeraOptix.....	(5,101)	—	—
Amounts charged to stockholders' equity.....	(282)	(389)	(13,285)
	\$(6,371)	\$(7,289)	\$ (9,831)

Income tax expense attributable to income from continuing operations consists of:

	Fiscal Year Ended June 30,		
	2003	2002	2001
Currently payable:			
Federal.....	\$ —	\$(3,118)	\$ —
State.....	138	4	—
Foreign.....	724	798	1,008
	862	(2,316)	1,008
Deferred:			
Federal.....	(238)	(1,336)	4,910
State.....	2	—	412
Foreign.....	—	—	—
	(236)	(1,336)	5,322
Income tax (benefit) from continuing operations.....	\$ 626	\$(3,652)	\$ 6,330

Income tax refunds, net of payments, amounted to \$2,449, \$149, and \$1,979 in fiscal 2003, 2002, and 2001, respectively.

The total income tax expense (benefit) differs from the amount computed by applying the applicable U.S. federal income tax rate of 35% in each of the fiscal years 2003, 2002, and 2001 to earnings before income taxes for the following reasons:

	Fiscal Year Ended June 30,		
	2003	2002	2001
Computed "expected" tax expense (benefit).....	\$ 931	\$(2,609)	\$7,285
Increases (reductions) in taxes resulting from:			
State taxes, net of federal income tax benefit.....	384	—	272
Tax exempt interest income.....	(5)	(29)	(43)
Export tax incentives.....	(81)	—	(10)
Research credit.....	(822)	(1,126)	(918)
Other, net.....	219	112	(256)
	\$ 626	\$(3,652)	\$ 6,330

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The tax effects of temporary differences that give rise to significant portions of the deferred tax assets and deferred tax liabilities as of June 30, 2003 and 2002 are presented below:

	<u>June 30, 2003</u>	<u>June 30, 2002</u>
Deferred tax assets:		
Accounts receivable	\$ 122	\$ 358
Accrued liabilities	1,999	1,965
Inventory valuation	2,046	1,066
Plant and equipment	942	—
One-time charges	—	1,725
Intangibles	242	262
Federal and state NOLs and credits	28,325	26,207
Contributions	<u>52</u>	<u>46</u>
	33,728	31,629
Less valuation allowance	<u>1,820</u>	<u>3,803</u>
Deferred tax asset	<u>31,908</u>	<u>27,826</u>
Deferred tax liabilities:		
Prepaid expenses	(288)	(208)
Plant and equipment	—	(2,731)
Unrealized gain on marketable securities	<u>(77)</u>	<u>(7)</u>
Deferred tax liability	<u>(365)</u>	<u>(2,946)</u>
Net deferred tax asset	<u>\$31,543</u>	<u>\$24,880</u>

The net current deferred tax assets and net non-current deferred tax assets as recorded on the balance sheet as of June 30, 2003 and 2002 are as follows:

	<u>June 30, 2003</u>	<u>June 30, 2002</u>
Net current deferrred tax asset	\$ 5,179	\$ 4,899
Net noncurrent deferred tax asset	<u>26,364</u>	<u>19,981</u>
Net deferred tax asset	<u>\$31,543</u>	<u>\$24,880</u>

During 2003, we wrote off certain fully reserved state NOLs and credits related to our discontinued operations. The write off of these deferred tax assets, along with the change in valuation allowance have been included in discontinued operations.

Management believes it is more likely than not that the remaining net deferred tax assets of \$31,543 will be realized as the results of future operations are expected to generate sufficient taxable income to do so.

At June 30, 2003, our share of the cumulative undistributed earnings of foreign subsidiaries was \$1,107. No provision has been made for U.S. or additional foreign taxes on the undistributed earnings of foreign subsidiaries because we intend to continue to reinvest these earnings. Determination of the amount of unrecognized deferred tax liability associated with these earnings is not practicable.

At June 30, 2003, we have federal and state net operating loss carryforwards of approximately \$56,904 and \$51,858, respectively, and various state credit carryforwards of \$3,261, which are available to reduce income taxes in various jurisdictions through 2023. We also have a federal

ZYGO CORPORATION AND CONSOLIDATED SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

June 30, 2003, 2002, and 2001

(Dollars in thousands, except for per share amounts)

general business credit carryforward of approximately \$5,492, which is available to reduce federal taxable income, if any, through 2023.

Note 17: Segment Reporting

We operate in two principal business segments globally: Semiconductor and Industrial. The segment data is presented below in a manner consistent with management's internal measurement of the business. Segment data for fiscal 2002 and 2001 were restated to reflect our exit from the telecommunications segment.

	<u>June 30,</u> <u>2003</u>	<u>June 30,</u> <u>2002</u>	<u>June 30,</u> <u>2001</u>
Semiconductor			
Sales	\$ 59,247	\$37,483	\$ 84,561
Gross profit	19,601	9,909	38,737
Gross profit as a % of sales	33%	26%	46%
Industrial			
Sales	\$ 43,330	\$42,785	\$ 44,947
Gross profit	15,844	17,554	22,624
Gross profit as a % of sales	37%	41%	50%
Total			
Sales	\$102,577	\$80,268	\$129,508
Gross profit	35,445	27,463	61,361
Gross profit as a % of sales	35%	34%	47%

Separate financial information by segment for total assets, capital expenditures, and depreciation and amortization is not available and is not evaluated by the chief operating decision-maker.

Substantially all of our operating results, assets, depreciation, and amortization are U.S. based. Sales by geographic area were as follows:

	<u>Fiscal Year Ended June 30,</u>		
	<u>2003</u>	<u>2002</u>	<u>2001</u>
Americas (primarily United States)	\$ 31,093	\$37,932	\$ 64,557
Far East:			
Japan	54,690	21,200	45,194
Pacific Rim	<u>6,490</u>	<u>8,054</u>	<u>7,423</u>
Total Far East	61,180	29,254	52,617
Europe and Other (primarily Europe)	<u>10,304</u>	<u>13,082</u>	<u>12,334</u>
Total	<u>\$102,577</u>	<u>\$80,268</u>	<u>\$129,508</u>

Note 18: Related Party Transactions

Sales to Canon Inc., a stockholder representing approximately 7% ownership at June 30, 2003, and Canon Sales Co., Inc., a distributor of certain of our products in Japan and a subsidiary of Canon Inc., amounted to \$52,773 (51% of net sales), \$17,636 (22% of net sales), and \$43,336 (33% of net sales), for the years ended June 30, 2003, 2002, and 2001, respectively. Selling prices of products sold to Canon Inc. and Canon Sales Co., Inc. are based, generally, on the normal terms given to distributors. Revenues generated from a development contract are recorded on a cost-plus basis. At June 30, 2003 and 2002, there was approximately, in the aggregate, \$3,972 and \$2,683,

ZYGO CORPORATION AND CONSOLIDATED SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

June 30, 2003, 2002, and 2001

(Dollars in thousands, except for per share amounts)

respectively, of trade accounts receivable from Canon Inc. and Canon Sales Co., Inc. At June 30, 2003, there was approximately \$1.0 million of accrued progress payments from Canon.

In September 2002, we entered into a contract with Canon Inc. related to the development of certain interferometers. The contract currently has a value of \$29,690 and generally covers the period to June 2004, subject to meeting certain milestones during that period. During fiscal 2003 and 2002, we recognized revenue in the semiconductor segment of \$18,779 and \$1,391, respectively, for this contract.

Note 19: Material Contracts

In May 1997, we entered into a contract with the University of California's Lawrence Livermore National Laboratory ("LLNL"), whereby we are a primary supplier of large plano optical components for the National Ignition Facility ("NIF"). In April 2001 and January 2002, we entered into related contracts with LLNL to supply additional optical components to NIF. Revenues under the NIF contract, which is presently a fixed price contract, are recorded as deliveries are made. Revenues recognized in fiscal 2003, 2002, and 2001 amounted to \$4,711, \$3,834, and \$3,308, respectively.

ZYGO CORPORATION AND CONSOLIDATED SUBSIDIARIES
SELECTED CONSOLIDATED QUARTERLY FINANCIAL DATA (UNAUDITED)

	For the Fiscal Year Ended June 30, 2003			
	<u>September 27,</u>	<u>December 27,</u>	<u>March 28,</u>	<u>June 30,</u>
(Thousands except per share amounts)				
Net sales.....	\$ 20,409	\$26,310	\$29,010	\$26,848
Gross profit.....	\$ 7,366	\$ 8,995	\$ 9,502	\$ 9,582
Earnings (loss) from continuing operations.....	\$ (848)	\$ 390	\$ 780	\$ 1,253
Loss from discontinued operations	(11,034)	(228)	(299)	(584)
Net earnings (loss).....	<u>\$ (11,882)</u>	<u>\$ 162</u>	<u>\$ 481</u>	<u>\$ 669</u>
Basic—earnings (loss) per share:				
Continuing operations	<u>\$ (0.05)</u>	<u>\$ 0.02</u>	<u>\$ 0.04</u>	<u>\$ 0.07</u>
Discontinued operations	<u>\$ (0.63)</u>	<u>\$ (0.01)</u>	<u>\$ (0.01)</u>	<u>\$ (0.03)</u>
Net earnings (loss)	<u>\$ (0.68)</u>	<u>\$ 0.01</u>	<u>\$ 0.03</u>	<u>\$ 0.04</u>
Diluted—earnings (loss) per share:				
Continuing operations	<u>\$ (0.05)</u>	<u>\$ 0.02</u>	<u>\$ 0.04</u>	<u>\$ 0.07</u>
Discontinued operations	<u>\$ (0.63)</u>	<u>\$ (0.01)</u>	<u>\$ (0.01)</u>	<u>\$ (0.03)</u>
Net earnings (loss)	<u>\$ (0.68)</u>	<u>\$ 0.01</u>	<u>\$ 0.03</u>	<u>\$ 0.04</u>

	For the Fiscal Year Ended June 30, 2002(1)			
	<u>September 30,</u>	<u>December 30,</u>	<u>March 31,</u>	<u>June 30,</u>
(Thousands except per share amounts)				
Net sales.....	\$19,707	\$17,868	\$20,185	\$22,508
Gross profit.....	\$ 6,986	\$ 5,214	\$ 7,023	\$ 8,240
Earnings (loss) from continuing operations.....	\$ (1,146)	\$ (1,476)	\$ (1,934)	\$ 277
Loss from discontinued operations	(1,225)	(1,543)	(1,788)	(2,898)
Net earnings (loss).....	<u>\$ (2,371)</u>	<u>\$ (3,019)</u>	<u>\$ (3,722)</u>	<u>\$ (2,621)</u>
Basic—earnings (loss) per share:				
Continuing operations	<u>\$ (0.07)</u>	<u>\$ (0.08)</u>	<u>\$ (0.11)</u>	<u>\$ 0.02</u>
Discontinued operations	<u>\$ (0.07)</u>	<u>\$ (0.09)</u>	<u>\$ (0.10)</u>	<u>\$ (0.17)</u>
Net earnings (loss)	<u>\$ (0.14)</u>	<u>\$ (0.17)</u>	<u>\$ (0.21)</u>	<u>\$ (0.15)</u>
Diluted—earnings (loss) per share:				
Continuing operations	<u>\$ (0.07)</u>	<u>\$ (0.08)</u>	<u>\$ (0.11)</u>	<u>\$ 0.02</u>
Discontinued operations	<u>\$ (0.07)</u>	<u>\$ (0.09)</u>	<u>\$ (0.10)</u>	<u>\$ (0.17)</u>
Net earnings (loss)	<u>\$ (0.14)</u>	<u>\$ (0.17)</u>	<u>\$ (0.21)</u>	<u>\$ (0.15)</u>

(1) The selected consolidated quarterly financial data for the periods ended June 30, 2002 have been reclassified to conform with the fiscal presentation of the discontinued operations and loss on disposal of TeraOptix.

INDEPENDENT AUDITORS' REPORT ON SCHEDULE II

The Board of Directors
ZYGO CORPORATION

Under date of August 18, 2003, we reported on the consolidated balance sheets of Zygo Corporation and subsidiaries as of June 30, 2003 and 2002, and the related consolidated statements of operations, stockholders' equity and cash flows for each of the years in the three-year period ended June 30, 2003 as contained in the 2003 annual report to stockholders. In connection with our audits of the aforementioned consolidated financial statements, we also audited the related consolidated financial statement schedule listed in the accompanying index. This financial statement schedule is the responsibility of the Company's management. Our responsibility is to express an opinion on this financial statement schedule based on our audits.

In our opinion, this financial statement schedule, when considered in relation to the basic consolidated financial statements taken as a whole, presents fairly, in all material respects, the information set forth therein.

KPMG LLP

Hartford, Connecticut
August 18, 2003

ZYGO CORPORATION AND CONSOLIDATED SUBSIDIARY

SCHEDULE II—VALUATION AND QUALIFYING ACCOUNTS

Years ended June 30, 2003, 2002, and 2001

<u>Description</u>	<u>Balance at Beginning of Period</u>	<u>Provision</u>	<u>Write-Offs</u>	<u>Balance at End of Period</u>
<u>(Thousands of dollars)</u>				
Year Ended June 30, 2003:				
Allowance for doubtful accounts.....	\$ 949	\$ 270	\$ 882	\$ 337
Valuation allowance on net deferred tax assets	\$3,803	\$ —	\$1,983	\$1,820
Year Ended June 30, 2002:				
Allowance for doubtful accounts.....	\$ 381	\$ 599	\$ 31	\$ 949
Valuation allowance on net deferred tax assets	\$1,653	\$2,150	\$ —	\$3,803
Year Ended June 30, 2001:				
Allowance for doubtful accounts.....	\$ 234	\$ 246	\$ 99	\$ 381
Valuation allowance on net deferred tax assets	\$ —	\$1,653	\$ —	\$1,653

EXHIBIT INDEX

**Exhibit
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Number**

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21.	— Subsidiaries of Registrant.....	
23.	— Accountants' Consent	
31.1	— Certification of Chief Executive Officer under Rule 13a-14(a)	
31.2	— Certification of Chief Financial Officer under Rule 13a-14(a)	
32.1	— Certification of Chief Executive Officer and Chief Financial Officer	

SUBSIDIARIES OF ZYGO CORPORATION (DELAWARE)

Technical Instrument Company (California)

100% owned by Registrant (effective as of August 8, 1996)

Syncotec Neue Technologien und Instrumente GmbH

100% owned by Technical Instrument Company (effective as of September 1, 1997)

NexStar Corporation (Colorado)

100% owned by Registrant (effective as of September 12, 1996)

TechniStar Corporation (Delaware)

25% owned by NexStar Corporation

Sight Systems, Inc. (California)

100% owned by Registrant (effective as of August 19, 1997)

Zygo TeraOptix, Inc. (Delaware)

100% owned by Registrant (effective as of May 5, 2000)

Zygo KK

100% owned by Registrant (effective as of October 1, 1999)

Zygo PTE Ltd

100% owned by Registrant (effective as of January 1, 1998)

ZygoLOT GmbH

60% owned by Registrant (effective as of October 2, 1999)

Six Brookside Drive (Connecticut)

100% owned by Registrant (effective as of January 9, 1998)

ACCOUNTANTS' CONSENT

The Board of Directors and Stockholders of
ZYGO CORPORATION:

We consent to incorporation by reference in Registration Statements No. 333-44333, No. 33-62087, No. 33-57060, No. 33-20880, and No. 33-34619 on Forms S-8 of Zygo Corporation of our reports dated August 18, 2003, with respect to the consolidated balance sheets of Zygo Corporation and subsidiaries as of June 30, 2003 and 2002 and the related consolidated statements of operations, stockholders' equity, and cash flows and related schedule for each of the years in the three-year period ended June 30, 2003, which reports appear in or are incorporated by reference into the June 30, 2003 Annual Report on Form 10-K of Zygo Corporation. Our report refers to a change in the method of accounting for the disposal of long-lived assets effective July 1, 2002 in accordance with Statement of Financial Accounting Standards No. 144, "Accounting for the Impairment or Disposal of Long-Lived Assets."

KPMG LLP

Hartford, Connecticut
September 23, 2003

**CERTIFICATION OF DISCLOSURE
IN THE REGISTRANT'S ANNUAL REPORT**

I, J. Bruce Robinson, certify that:

1) I have reviewed this annual report on Form 10-K of Zygo Corporation;

2) Based on my knowledge, this annual report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this annual report;

3) Based on my knowledge, the financial statements, and other financial information included in this annual report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this annual report;

4) The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the registrant and have:

a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this annual report is being prepared;

b) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this annual report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this annual report based on such evaluation; and

c) Disclosed in this annual report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5) The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent functions):

a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: September 24, 2003

..... /s/ J. BRUCE ROBINSON
J. Bruce Robinson
Chairman, President, and Chief Executive Officer

**CERTIFICATION OF DISCLOSURE
IN THE REGISTRANT'S ANNUAL REPORT**

I, Richard M. Dressler, certify that:

1) I have reviewed this annual report on Form 10-K of Zygo Corporation;

2) Based on my knowledge, this annual report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this annual report;

3) Based on my knowledge, the financial statements, and other financial information included in this annual report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this annual report;

4) The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the registrant and have:

a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this annual report is being prepared;

b) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this annual report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this annual report based on such evaluation; and

c) Disclosed in this annual report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5) The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent functions):

a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: September 24, 2003

...../s/ RICHARD M. DRESSLER.....

Richard M. Dressler

*Vice President, Finance, Chief Financial Officer,
and Treasurer*

**CERTIFICATION OF CHIEF EXECUTIVE OFFICER AND CHIEF FINANCIAL OFFICER
PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

I, J. Bruce Robinson, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that the Annual Report of Zygo Corporation on Form 10-K for the fiscal year ended June 30, 2003 fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and that information contained in such Annual Report on Form 10-K fairly presents, in all material respects, the financial condition and results of operations of Zygo Corporation.

A signed original of this written statement required by Section 906 has been provided to Zygo Corporation and will be retained by Zygo Corporation and furnished to the Securities and Exchange Commission or its staff upon request.

By: /s/ J. BRUCE ROBINSON
Name: J. Bruce Robinson
Title: Chairman, President and Chief Executive
Officer

I, Richard M. Dressler, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that the Annual Report of Zygo Corporation on Form 10-K for the fiscal year ended June 30, 2003 fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and that information contained in such Annual Report on Form 10-K fairly presents, in all material respects, the financial condition and results of operations of Zygo Corporation.

A signed original of this written statement required by Section 906 has been provided to Zygo Corporation and will be retained by Zygo Corporation and furnished to the Securities and Exchange Commission or its staff upon request.

By: /s/ RICHARD M. DRESSLER
Name: Richard M. Dressler
Title: Vice President, Finance, Chief Financial
Officer, and Treasurer