







Coherent, Inc. leads the photonics industry in providing solutions that offer customers performance, cost and reliability advantages in a wide range of commercial and scientific research applications.

Founded in 1966, the company today designs and manufactures the industry's most diversified selection of laser-based photonics solutions.

Coherent's commercial customers consist of the world's leading companies from the Fortune 500, while our scientific customers include scientists and researchers from the most prominent universities around the world.

Our business focuses on five market segments: Scientific Research and Government Programs, OEM Components & Instrumentation, Microelectronics, Materials Processing, and Graphic Arts & Display.

Coherent's headquarters are located in Santa Clara, California, and we sell our products in more than 80 countries through a mix of direct sales and international distributors.

We consistently invest more than 10% of our revenues in research and development, and we maintain production, research, applications, and service facilities worldwide.

Coherent is a Standard & Poor's SmallCap 600 company and our stock is traded on the Nasdaq National Market under the symbol COHR.



## Dear Fellow Shareholders,

Coherent's fiscal year 2003 was marked by numerous challenges and changes. The much-anticipated and often-predicted global economic recovery failed to materialize in a substantial way. As a result, over the last year we had to make some tough decisions, and we did so with the conviction that we were fortifying our core business and building the foundation for strengthening our leading technologies in anticipation of an economic recovery. During the last twelve months, we launched an unprecedented realignment of our manufacturing operations and brought our costs in line with the realities of today's global economy. We also acquired two companies and initiated the privatization of a third. Needless to say, there were a lot of moving parts during the year.

In the electro-optics business segment, the microelectronics market produced four quarters of increasing demand with orders rising by 23.8% year-over-year. The bookings were spread over several applications and are best characterized as development and pre-production orders. Interest in our UV lasers for applications such as laser direct imaging of printed circuit boards and the processing of electronic components led the growth. We anticipate that volume orders will commence in fiscal 2004.

The OEM component and instrumentation market, within the electro-optics business segment, was surprisingly resilient during fiscal 2003, with orders remaining unchanged from the prior year. While many of our customers in this market were facing sluggish demand and actively trimmed inventories, our business was reasonably stable due to significant market share gains in the bioinstrumentation industry. Our family of Optically Pumped

80%
Lambda Physik

Revenue-\$81.9

Semiconductor Lasers (OPSL<sup>TM</sup>) was the cornerstone of new system architectures for customers, leading to the displacement of legacy technologies.

Orders in the materials processing market, within the electro-optics business segment, were flat despite the effects of the SARS epidemic in Asia. The first half of fiscal 2003 was marked by a steep upturn in demand for our carbon-dioxide (CO<sub>2</sub>) lasers used in non-metallic processing. The largest growth, for textile processing, occurred in China. Most of our customers in China however, ended the fiscal year with inventory positions, which we predict they will burn through by the middle of fiscal 2004.

Orders in the graphic arts and display market grew 58.6% in fiscal 2003. This ran counter to the decreasing trend in advertising spending, the major fuel for printing demand, which was near historical lows for much of the year. Print shops turned to laser-based systems to help reduce costs. Our semiconductor diode lasers, along with the diodepumped laser products, led the charge.

Orders in the scientific market, within the electrooptics business segment, grew 16.7% from the prior
year. Our scientific products remain the incubator for
dozens of emerging applications that touch all other
markets. Biological imaging remains a hotbed of
activity, where our lasers set industry standards.
Competition in the scientific market is abundant, but
we have successfully maintained our market share
and price structure due to a highly skilled sales and
service organization.

In December 2002, we acquired Molectron Detector, Incorporated (Portland, Oregon), a designer and manufacturer of laser energy measurement systems. The expanded portfolio that resulted from this acquisition represents the highest performing and broadest solution set in the industry. Following the acquisition, we merged our Auburn, California-based laser measurement business into Molectron's Portland facility, allowing us to streamline manufacturing and reduce overhead expenses.

We have a long history of providing high-performance, leading-edge technology to the scientific research community. Our products are found in laboratories around the globe, including those of several Nobel laureates. Despite this leadership position, we had a hole in our product offerings in the area of ultrafast amplifiers. Amplifiers are part of the modern research environment. They create energetic pulses of light that are a millionth of a billionth of a second in duration. In April 2003, we filled this gap by acquiring Positive Light, Incorporated (PLI), a leader in ultrafast amplifier technology. Adding PLI's products to our scientific line-up creates unrivaled breadth and depth, and offers our customers in the scientific research market a veritable one-stop shop.

While these moves contribute to our rich tradition of innovation and customer satisfaction, we also recognized that our manufacturing operations were sorely in need of an overhaul. For over two decades, we applied vertical integration to build our products, more out of necessity than desire. At the bottom rungs of the integration ladder were low gross profits and low valueadded processes, which tend to be both labor and capital intensive. In fiscal 2003, we decided to outsource all of our printed circuit board assemblies and some of our optics to contract manufacturers. This has resulted in greater flexibility, as our contract manufacturing partners are better suited to deal with shifts in our business. An added benefit of the outsourcing is that we can leverage our manufacturing partners' capital infrastructure to grow our business.

Next, we were able to drive additional synergies by eliminating duplicate infrastructure. At the beginning of fiscal 2003, we operated two sites (Santa Clara, California, and Bloomfield, Connecticut) for the development and manufacture of  $\mathrm{CO}_2$  lasers. During the year we merged all  $\mathrm{CO}_2$  operations at our facility in Bloomfield, CT. We also announced plans to exit our manufacturing operation in Glasgow, Scotland. Coherent will retain ownership of two key product lines produced there, and they will be moved to Santa Clara. These moves have contributed, and will continue to contribute, to the enhancement of our operating performance.

Evolving business dynamics led to the decision to exit a major investment. In October 2002, we terminated our remaining telecom development due to deteriorating market conditions and no clear path to profitability.

A major move in 2003 was the announced \$55 million privatization of our Lambda Physik AG subsidiary through a public tender offer. The uniquely enabling characteristics of excimer technology for the lithography and flat-panel markets—two of the largest markets for lasers, and both with ample growth opportunities—combined with the poor performance of the German capital markets provide the impetus for this decision. The tender offer was completed in July 2003, and resulted in Coherent holding 93.95% of Lambda's shares, just short of the 95% ownership required to launch a squeeze-out for the remaining 5%. We have continued open-market purchases to acquire an additional 1.05%, and expect the entire process to be concluded during fiscal 2004. We have not remained idle. The change process has begun. John Ambroseo was appointed the new CEO, and a complete turnover of the executive staff at Lambda followed. The new management team has emphasized reliability, validated the technology roadmaps and reinforced customer care. The challenges at Lambda are many, but the potential upside is compelling.

With much of the restructuring in our rearview mirror and encouraging signs from many of our end markets, we are optimistic about the growth opportunities in the new fiscal year. Our R&D investments continue to create industry-leading solutions for our valued customers. The restructuring of our manufacturing operations should lead to higher efficiency and better agility, which will translate into improved performance. Our goals for fiscal 2004 are revenue growth, market share growth, profitability and cash generation from operations. On behalf of everyone at Coherent, we thank our customers, stockholders, employees and partners for their continued support as we look forward to the year ahead.

John R. Ambroseo

President & Chief Executive Officer

John R Juhorn

Coherent, Inc.

Bernard J. Couillaud Chairman of the Board Coherent, Inc.

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# Scientific Research & Government Programs

Scientists serving both the public and private sectors are using Coherent lasers and laser measurement products to develop new applications in the areas of spectroscopy, imaging, biochemistry and physics. Government laboratories, research centers and universities throughout the world use Coherent lasers to

make precision measurements of distance and surface shape, to produce ultra-high resolution images of living cells and biological samples, and to study the minute details of molecular and atomic interactions, to name just three of many challenging opportunities. The scientific market has historically served as an ideal development market for leading-edge laser technology that routinely leads to a myriad of OEM opportunities.



# Scientific Research & Government Programs account for 31% of revenue for the Electro-Optics business segment.

## Revolutionizing Cell Biology & Neuroscience

Laser-based imaging is an extremely sensitive tool that can reveal details of

cellular development at the molecular level within a living subject. Multiphoton excitation (MPE) microscopy, in particular, is revolutionizing cell biology. This technique uses ultrafast laser pulses that are typically about one trillionth of a second long to produce high-resolution, three-dimensional images at precisely selected depths within a single cell. The near-infrared wavelengths used enable the microscope to see deeper into cells and also reduce damage to the cell, allowing imaging to be sustained for longer periods without destroying a specimen.

Coherent's Chameleon, the first, broadly tunable, fully automated ultrafast laser in a single box, is the ideal workhorse for MPE microscopy. Providing a new level of convenience for researchers, the Chameleon is also a powerful tool for many other fields of ultrafast research.



Did you know that Coherent's laser measurement instruments are enabling scientists to enhance their understanding of laser physics?



Did you know that injecting laser-polarized gas into porous underground rock can help to locate new mineral and petroleum deposits?

# OEM Components & Instrumentation

This market segment includes bioinstrumentation, medical and defense applications. Our optically pumped semiconductor lasers become part of systems designed for flow cytometry and drug discovery. Our ion lasers and diode modules are the 'engines' that make cell sorting, and DNA and protein sequencing possible. Bioinstrumentation represents an important growth opportunity for Coherent, as our lasers displace older technologies and enable entirely new applications. In the avionics and defense sectors, applications for Coherent lasers range from

harsh, flight-qualified hardware to thermal imaging.

## **Breakthroughs in Leukemia Treatment**

In a clinical laboratory, a technician is about to process a human leukemia sample for analysis. A patient's treatment hangs in the balance. The equipment used is a flow cytometer, a laser-based instrument that can identify and count individual cells in heterogeneous mixtures, at speeds of thousands of cells per second. The newest generation of flow cytometers are more

sensitive, stable, and reliable than ever before, thanks to the new Sapphire laser from Coherent. Plus, the Sapphire laser requires 90% less space, delivers 98% greater wall-plug efficiency, and dissipates 98% less heat than previous laser technology.



OEM Components & Instrumentation account for 28% of revenue for the Electro-Optics

business segment.



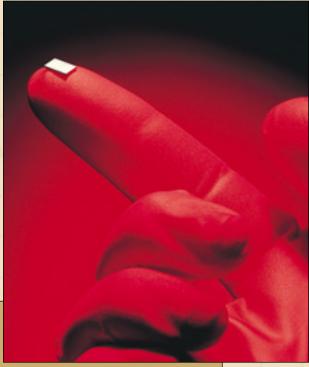
Did you know that Coherent laser diode modules and diodepumped solid-state lasers are the number one choice of leading cytometry companies?

The next time your family pet is ill, your veterinarian may have a new way to diagnose the trouble. Thanks to a unique integration of Coherent's laser diode modules and optics, the world's thinnest laser line can now be used to detect irregularities in the blood sample taken from your dog, cat or any other family pet.

# Microelectronics

The proliferation of consumer microelectronic devices, such as cell phones, computers, PDAs, flat-panel TVs and miniaturized audio equipment, has had a huge impact on our daily lives. Laser-based processes are used at many points within the manufacture and test of the microscopic circuits that make up these devices.

In some cases, lasers have even been the key enabling technology that allows the process to work. For example, Coherent lasers are crucial in shrinking the size of electronic circuits and improving manufacturing yields. Coherent lasers also enable non-destructive and non-invasive testing during key stages of the circuit manufacturing process. In addition, Coherent instruments are used to measure and understand the performance of lasers, as well as to monitor and control processes. Coherent is a key manufacturer of lasers used for drilling the tiny circuit boards that form a vital part of today's miniaturized devices.



### **Smaller, Faster Transistors**

In 1965, Intel founder Gordon Moore predicted that the transistor density on integrated circuits would double every few years. His estimate has proven true.

In 1970, the top-of-the-line Intel 4004 chip contained 2,250 transistors. Eight years later, the company's 8086 chip had 29,000 transistors. In 1989, the 486 processor featured 1,180,000 transistors. And, today's Intel Pentium 4 chip contains 55 million!

Coherent lasers are important tools in the production of smaller, faster, error-free transistors. They are used to detect minute impurities on many of the components used for integrated circuit fabrication, and to analyze the exact thickness of the many material layers that comprise a circuit. Next time you use your cell phone, remember that Coherent lasers and instruments help make modern, miniature electronic devices possible.



Did you know that an important step in making the processor and memory chips in your computer uses a Coherent Innova Ion laser?

17%

Microelectronics account for 17% of revenue for the Electro-Optics business segment.

# Materials Processing

Lasers are used for a diverse range of industrial materials processing tasks, such as marking, engraving, cutting and welding. While other companies have focused on high-power lasers for use in the increasingly competitive field of thick-metal processing, we have concentrated our development efforts on compact, low-to-medium power lasers specifically designed for the growing area of non-metal and thin-metal processing. This includes such applications as cutting and joining

of plastics, using our CO<sub>2</sub> and semiconductor lasers, as well as cutting, perforating, and scoring of packaging materials, and the creation of microholes in materials used for microelectronics and semiconductor manufacturing.



# Making Shoes that Fit Exactly Right

Lasers are used in the manufacture of many consumer products, including shoes. Major shoe manufacturers have used Coherent lasers to cut templates for marking leather; these

templates on site.

marks then guide the operator during actual leather cutting. The use of a computer-controlled laser system to cut the templates assists manufacturers in keeping up with demand, and eliminates the need for costly outsourcing of production processes. Instead, shoe companies use our lasers to produce their unique

16%

Material Processing accounts for 16% of revenue for the Electro-Optics business segment.



Did you know that Coherent CO<sub>2</sub> lasers are used for cutting the perforations in automobile airbags?

# Graphic Arts & Display

Digital imaging is having a profound impact on the commercial printing and graphic arts industries, and the laser is increasingly being used in this context to reduce costs, shorten delivery times and increase end product quality. For example, computer-to-plate technology utilizes a laser to directly expose a printing plate, which decreases the time to print by eliminating the more costly approach of photographic imaging. This allows the

## **Lasers Enable Printer Efficiency**

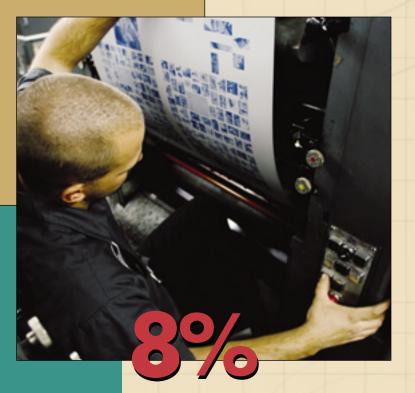
In a midwestern United States print shop, a press crew is preparing to print 50,000 copies of a 6-color, 48-page, high-quality fashion catalog. The artwork for this catalog arrived late due to final editing changes, but the printer is still expected to mail the catalog on schedule. Traditionally, the pressmen would first need to image the artwork to film, deliver a color proof to the customer for sign-off, and then use the approved film to make plates—only then could printing begin. Still, problems can occur: for example, film shrinkage might cause extra time to be spent achieving proper registration among the different colors. But that's the past. Today, with Coherent's CO<sub>2</sub>,

diode-pumped solid-state, high power infra-red diode, and low power visible diode lasers, this same printer can image directly to the printing plates, by-passing both the film and approval steps, and requiring only minutes to get perfect copies coming off the press.

printer to increase his business without adding capital or staff. Digital photo finishing, film writing and laser display are other applications where Coherent is helping accelerate the transition to a more efficient and digital world.



Did you know that Coherent Compass and Sapphire lasers are used in both digital photo finishing and digital film writing?



Graphic Arts & Display account for 8% of revenue for the Electro-Optics business segment.

Did you know that over 60% of all computer-to-plate equipment contains Coherent lasers?



# Lambda Physik

#### Industry

Lambda Physik's excimer lasers, when incorporated into manufacturing systems, such as a laser annealer, are used to manufacture flat-panel displays.

#### Lithography

Lower wavelengths and very narrow spectral bandwidths of Lambda Physik excimer lasers allow semiconductor capital equipment manufacturers to utilize high numerical aperture lenses for higher resolution, thus allowing the creation of smaller and smaller patterns on a semiconductor device.

#### Science & Medicine

From research in microablation and pulsed laser deposition to optical communication and laser spectroscopy, to remote sensing and combustion analysis, Lambda Physik lasers are found in scientific laboratories around the world. They're also used in a wide variety of medical applications, including ophthalmology, dermatology,

## **Conservators Use Lasers to Restore Aged Paintings**

Excimer lasers offer a unique method for cleaning delicate artwork. Traditional art conservation is based on mechanical cleaning (scalpels) and chemical techniques (solvents). These methods are difficult to control, and rely on the skill

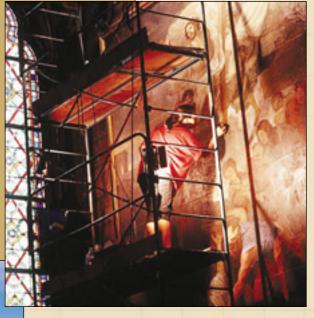
level of the conservator. Thus, a painting can be damaged due to excessive penetration of solvents into the paint layers, or the proverbial "slip of a knife." Furthermore, conventional cleaning is often inadequate to deal with complex conservation problems, such as the removal of highly polymerized, aged varnish. In the past, infrared lasers were used, but their light can penetrate into the paint layers, causing damage. In contrast, ultraviolet (UV) laser light is absorbed only in the upper layer of the paint surface, so it can remove dirt and old varnish, micron by micron, without damaging the paint. That's why Lambda Physik UV excimer lasers are used to restore dark and damaged paintings to very

Did you know that a Lambda Physik COMPex laser is used to monitor the ozone hole above Antarctica?

near their original

condition.

angioplasty, microsurgery, medical diagnostics and therapy, and medical device manufacturing.



Industry accounts for 46% of revenue for the Lambda Physik business segment.

Lithography accounts for 33% of revenue for the Lambda Physik business segment.



Science & Medicine accounts for 21% of revenue for the Lambda Physik business segment.

#### UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

## **FORM 10-K**

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ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 For the Fiscal Year Ended September 27, 2003

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☐ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

Commission File Number: 0-5255



#### COHERENT, INC.

#### **Delaware**

(State or other jurisdiction of incorporation or organization)

#### 94-1622541

(I.R.S. Employer Identification No.)

#### 5100 Patrick Henry Drive, Santa Clara, California 95054

(Address of principal executive offices) (Zip Code)

Registrant's telephone number, including area code: (408) 764-4000

Securities registered pursuant to Section 12(b) of the Act:

Name of each exchange
Title of each class

None

None

None

None

Securities registered pursuant to Section 12(g) of the Act: Common Stock, \$.01 par value Common Stock Purchase Rights

(Title of Class)

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  $\boxtimes$  No  $\square$ 

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. ⊠

As of December 1, 2003, 30,045,727 shares of common stock were outstanding. The aggregate market value of the voting shares (based on the closing price reported by the NASDAQ National Market System on March 29, 2003) of Coherent, Inc., held by nonaffiliates was \$404,045,278. For purposes of this disclosure, shares of common stock held by persons who own 5% or more of the outstanding common stock and shares of common stock held by each officer and director have been excluded in that such persons may be deemed to be "affiliates" as that term is defined under the Rules and Regulations of the Act. This determination of affiliate status is not necessarily conclusive.

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

#### DOCUMENTS INCORPORATED BY REFERENCE

Portions of the definitive proxy statement to be filed prior to January 26, 2004, pursuant to Regulation 14A of the Securities Exchange Act of 1934 are incorporated by reference into Part III of this Form 10-K.

#### PART I.

This Annual Report on Form 10-K contains forward-looking statements. These forward-looking statements include, without limitation, predictions regarding our future:

- net sales;
- results of operations;
- gross profits;
- research and development projects and expenses;
- selling, general and administrative expenses;
- amount of after-tax restructuring, impairment and other charges;
- warranty reserves;
- · legal proceedings;
- claims against third parties for infringement of our proprietary rights;
- benefits from our acquisition of Positive Light, Inc.;
- liquidity and sufficiency of existing cash, cash equivalents and short-term investments for near-term requirements;
- development and acquisition of new technology and intellectual property;
- write-downs for excess or obsolete inventory;
- competitors and competitive pressures;
- growth of applications for our products and increase of market share;
- obtain components and materials in a timely manner;
- identify alternative sources of supply for components;
- achieve adequate manufacturing yields;
- impact of recent acquisitions;
- leverage of power and energy management products into our next generation products;
- operating efficiencies and minimization of redundant costs;
- compliance with environmental regulations;
- opportunities with high potential;
- participation in the bio-agent detection market;
- leveraging of our technology portfolio and application engineering;
- optimize our leadership position in existing markets;
- collaborative customer and industry relationships;
- emphasis on supply chain management;
- growth of direct digital imaging applications;
- use of financial market instruments:
- simplifications of our foreign legal structure and reduction of our presences in certain countries; and
- focus on long-term improvement of return on invested capital.

In addition, we include forward-looking statements under the "Our Strategy" and "Future Trends" sections set forth below in "Business."

You can identify these and other forward-looking statements by the use of the words such as "may," "will," "could," "would," "should," "expects," "plans," "anticipates," "relies," "believes," "estimates," "predicts," "intends," "potential," "continue," or the negative of such terms, or other comparable terminology. Forward-looking statements also include the assumptions underlying or relating to any of the foregoing statements.

Our actual results could differ materially from those anticipated in these forward-looking statements as a result of various factors, including those set forth below in "Business," "Management's Discussion and Analysis of Results of Operations and Financial Condition" and under the heading "Risk Factors." All forward-looking statements included in this document are based on information available to us on the date hereof. We undertake no obligation to update these forward-looking statements as a result of events or circumstances or to reflect the occurrence of unanticipated events.

#### ITEM 1. BUSINESS

#### **GENERAL**

#### **Business Overview**

Our fiscal year ends on the Saturday closest to September 30. Fiscal years 2003, 2002 and 2001 ended on September 27, September 28 and September 29, respectively. For convenience, we use September 30 as our fiscal year-end dates throughout this Form 10-K in order to correspond to the accompanying consolidated financial statements.

We are one of the world's leading suppliers of photonics-based solutions in a broad range of commercial and scientific research applications. We design, manufacture and market lasers, laser-based systems, precision optics and related accessories for a diverse group of customers. Since inception in 1966, we have grown through internal expansion and through strategic acquisitions of complementary technologies, intellectual property, manufacturing processes and product offerings.

We have two reportable business segments: Electro-Optics and Lambda Physik, which work with customers to provide cost-effective photonics-based solutions. Our Electro-Optics segment focuses on markets such as semiconductor and related manufacturing, materials processing, original equipment manufacturer (OEM) laser components and instrumentation, scientific research and government programs and graphic arts and display. Lambda Physik AG (Lambda Physik), our 94.3% owned subsidiary with headquarters located in Göttingen, Germany, focuses on markets including lasers for the production of thin film transistors (TFT) used in flat panel displays, microlithography applications in the semiconductor industry, ink jet printers, automotive, environmental research, scientific research, medical OEMs, materials processing and micro-machining applications.

We were originally incorporated in California on May 26, 1966 and reincorporated in Delaware on October 1, 1990.

Additional information about Coherent, Inc. (referred to herein as the Company, we, our, or Coherent) is available on our web site at <a href="https://www.coherent.com">www.coherent.com</a>. We make available, free of charge on our web site, access to our Annual Report on Form 10-K, our quarterly reports on Form 10-Q, our current reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended, as soon as reasonably practicable after we file them electronically with or furnish them to the Securities and Exchange Commission (SEC). Information contained on our web site is not part of this Annual Report on Form 10-K or our other filings with the SEC.

#### INDUSTRY BACKGROUND

The word "laser" is an acronym for "light amplification by stimulated emission of radiation." A laser works by causing an energy source to excite, or pump, an optical gain medium, converting the energy from the source into an emission of photons, the fundamental particles of light. These photons stimulate the release of more photons in the gain medium as they are reflected back and forth between the mirrors that make up the laser's resonator. The resulting build-up in the number of photons is usually emitted in the form of a light beam, the laser beam, through a partially reflective mirror at the output end of the laser.

The four types of lasers commonly available today are gas, liquid, semiconductor and solid-state, each of which derives its classification from the lasing material it uses. Laser beams can be emitted in either continuous waves or in pulses with varying repetition rates, can have different operating wavelengths and emission bandwidths, and can emit light in a wide range of energies and powers. Depending on the application, lasers can be designed for a specific power, pulse width, repetition rate and wavelength. In addition, the laser's cost of ownership can dictate its suitability for a particular application.

As lasers become less expensive, smaller and more reliable, they are increasingly replacing conventional tools and enabling technological advances in a variety of applications and industries including microtechnologies and nanotechnologies; semiconductor inspection; microlithography; measurement, test and repair of electronic circuits; medical and biotechnology; consumer electronics; industrial process and quality control; materials processing; imaging and printing; display; and research and development. Ultraviolet (UV) lasers are profiting from the trend towards miniaturization, which is a driver of innovation and growth in many markets. The short wavelength of lasers that emit light in the UV spectral region make it possible to produce extremely small structures with maximum precision consistent with the latest state of the art technology.

#### **OUR STRATEGY**

We strive to develop innovative and proprietary products and solutions that meet the needs of our customers and that are based on our core expertise in lasers and optical technologies. In pursuit of our strategy, we intend to:

- Leverage our technology portfolio and application engineering to lead the proliferation of photonics into broader markets
   We will continue to identify opportunities in which our technology portfolio and application engineering can be used to offer innovative solutions and gain access to new markets.
- Optimize our leadership position in existing markets There are a number of markets where we have historically been at the forefront of technological development and product deployment and from which we have derived a substantial portion of our revenues. We plan to optimize our financial returns from these markets.
- Maintain and develop additional strong collaborative customer and industry relationships We believe that the Coherent brand name and reputation for product quality, technical performance and customer satisfaction will help us to further develop our loyal customer base. We plan to maintain our current customer relationships and develop new ones with customers that are industry leaders and work together with these customers to design and develop innovative product systems and solutions as they develop new technologies.
- **Develop and acquire new technologies** We will continue to enhance our market position through our existing technologies and develop new technologies through our internal research and development efforts, as well as through the acquisition of additional complementary technologies, intellectual property, manufacturing processes and product offerings.
- Emphasize supply chain management We will continue to focus on operational efficiency through an emphasis on supply chain management with the explicit intent of improving gross margins and increasing inventory turns.
- Focus on long-term improvement of Return on Invested Capital We will continue to focus on long-term improvement of return on invested capital.

#### APPLICATIONS

Our products address a broad range of applications. Both of our reportable business segments are focused on several areas of the photonics market including: microelectronics, graphic arts and display, materials processing, scientific research and government programs and OEM components and instrumentation.

#### Microelectronics

The use of semiconductors has expanded beyond computer systems to a wide array of applications such as telecommunications and data communication systems, automotive products, consumer goods, medical products, household appliances, industrial automation and control systems.

Semiconductor manufacturers are continually seeking to improve their process and design technologies to manufacture smaller, more powerful and more reliable devices at a lower cost per function. A major factor in fabricating such devices is the ability to reduce circuit geometries, measured in nanometers (a billionth of a meter), and defined in terms of critical, or smallest, feature size. Reduced circuit geometries permit semiconductor manufacturers to increase the number of integrated components per area of silicon.

Lasers are particularly useful in manufacturing products that require fine precision and small feature sizes, such as semiconductor and microelectronic devices where beam shape and delivered power are important. We provide lasers to semiconductor equipment manufacturers for use in lithography, mask writing, wafer inspection, mask repair and packaging processes for their semiconductor manufacturing systems.

#### Deep ultraviolet (DUV) lithography

Lithography is one of the most critical and expensive steps in the manufacturing process of complex semiconductor devices fabricated on silicon wafers. This process requires a system that projects light through a photomask containing the master image of a particular circuit layer onto a light sensitive material coated on the wafer. The critical feature size of a semiconductor device depends upon the resolution capability of the lithography system. Resolution capability is a function of the projected wavelength of the light source and the numerical aperture of the lens. A shorter wavelength or higher numerical aperture enables smaller feature sizes.

Lithography tools have physical resolution limits approximating the wavelength of their light source. Mercury arc lamps, which have been the primary illumination source used for the last decade, can produce critical feature sizes down to only 0.25 microns. Currently, the only known method capable of reducing semiconductor geometries below 0.25 microns is with DUV lasers.

We currently provide, through our 94.3% owned Lambda Physik subsidiary, NovaLine lasers with stable, line-narrowed, 2 kilohertz (kHz) operation at 248 nanometers (nm) (30 W); 4 kHz operation at 193nm (20 W); and the innovative 157nm laser which exceeds 20 W of output power and enables optical lithography down to 50nm. Lambda Physik was the first to produce 193nm production-quality lasers and was the first to provide an R&D 157nm litho laser for material testing. We are also involved with XTREME technologies GmbH (Xtreme Technologies), a joint venture between Lambda Physik and Jenoptik AG, to produce extreme ultra violet (EUV) light sources capable of handling feature sizes of 35nm and below. In April 2003, Xtreme Technologies shipped the first prototype of an EUV light source, which was significantly earlier than expected.

#### Laser direct imaging of photomasks and printed circuit boards.

The photomask used in the lithography process is made by a laser beam that directly "writes" a circuit pattern of a semiconductor chip onto a piece of chrome-coated quartz glass. The mask, which is conceptually similar to a negative in photography, is used in lithography systems to make numerous copies of the pattern image on semiconductor wafers. The direct write process is also used to write circuit patterns directly on printed circuit boards. Our *Paladin*, *Innova Sabre* and *Innova SabreFreD* ion lasers are used in laser systems for these applications.

#### Semiconductor inspection, measurement, test and repair

As semiconductor device geometries decrease in size, devices become increasingly susceptible to smaller defects during each phase of the manufacturing process. One of the semiconductor industry's responses to the increasing vulnerability of semiconductor devices to smaller defects has been to employ defect detection and inspection that is closely linked to the manufacturing process. Automated inspection systems are used to detect and locate defects as small as 0.1 microns, which may not be observable by conventional optical microscopes. These detection systems use advanced image processing and innovative laser scanning technologies to achieve high sensitivity and speed.

Detecting the presence of defects is only the first step in preventing their recurrence. After detection, the defects must be examined in order to identify their size and shape and the process step in which the defect occurred. This examination is called defect classification. Identification of the sources of defects in the lengthy and complex semiconductor manufacturing process has become essential for maintaining high yield production. Semiconductor manufacturing has become an around-the-clock operation and it is important for inspection, measurement and testing products to be reliable and have long lifetimes.

Our AZURE, Compass 315M, Compass 415M and Verdi diode-pumped solid-state, or DPSS, lasers are used to detect defects in photomasks, semiconductor chips and printed circuit boards. The Innova iLine argon ion laser is used to inspect the photomasks and patterned wafers. Our Vector laser is used to repair defects that may occur in the photomask or semiconductor device.

The fabrication process typically creates numerous patterned layers on each wafer. Laser-based systems have been developed to measure the characteristics of metal or opaque layers in order to determine the functionality and conformance of these devices. Our *Vitesse* laser generates an ultrafast laser light pulse that produces a localized temperature rise in the materials, which generates a sound wave, a portion of which is reflected back to the surface. By measuring the returning echoes, the laser system can detect layer thickness, adhesion and composition.

#### Flat panel display

The high volume consumer market is driving the production of flat panel displays in applications such as digital cameras, personal digital assistants (PDAs), mobile telephones, car navigation systems, laptop computers and television monitors. The most common type of flat panel display is the active-matrix crystal display, which uses a matrix of TFT switches to control each pixel of the screen.

The crystallization of amorphous silicon to polycrystalline silicon induced by excimer lasers, commonly referred to as excimer laser annealing (ELA), is a pivotal technology for the next generation of TFT devices. In the ELA process, the excimer laser light is absorbed into the amorphous silicon without heating the underlying substrate. As a result, it is possible to use inexpensive glass substrates, instead of quartz, which makes the ELA process more economical than previous techniques. Because the ELA technique leaves the substrate virtually unaffected, there are many potential applications for the ELA process, including the use of plastic as a substrate material, which would enable electronics to be integrated directly into plastic housings. The *Lambda STEEL*, developed and marketed by Lambda Physik, is a high-powered 310 W excimer laser designed for industrial TFT annealing.

Our Avia and Diamond lasers are also used in the production of flat panel displays for cutting, patterning, marking and yield improvement.

#### Advanced packaging and interconnects

Lasers are now being used in hole drilling of printed circuit boards and other advanced component materials like flexible circuits, polyester

and polymide. Historically, holes in printed circuit boards have been made using mechanical drilling techniques. However, mechanical drills cannot produce holes less than 50 microns, forcing manufacturers to use laser-based solutions. Solid-state lasers are increasingly being utilized for this application.

We have developed the  $Avia^{TM}$  DPSS laser,  $Diamond^{TM}$  carbon dioxide, or  $CO_2$ , and  $GEM^{TM}$  QS  $CO_2$  family of lasers for this application. The ability of our pulsed lasers to operate at very high repetition rates translates into faster drilling speeds and increased throughput in materials processing applications. Lasers also produce smaller, cleaner holes than conventional cutting tools, and laser beams do not wear down from use, as do conventional drills.

Lasers are also increasingly being used in scribing, machining and drilling microelectronic materials and components and in microelectronics manufacturing to adjust electronic components. Our *Vector*, *Avia*, *Diamond* and *GEM QS* lasers are used for these applications.

#### Graphic arts and display

The printing industry has traditionally depended upon silver-halide films and chemicals to engrave printing plates. This chemical engraving process is accomplished in several time consuming steps. Working with professionals in the printing industry, we design semiconductor and diode-pumped lasers that are used in complex computer-to-plate printing systems that simplify the engraving process.

Our *Compass 315M* and *415M* DPSS and semiconductor lasers are widely used for computer-to-plate printing, an environmentally-friendly process that saves production time by writing directly to plates.

Our *Innova* ion lasers and *Paladin* DPSS lasers are used to write data on master disks that are used to mass-produce compact disks and digital video disks for consumer use.

Our *Sapphire*<sup>TM</sup> 460 laser is 90% smaller, consumes 98% less power and dissipates 98% less heat than a comparable air-cooled argon-ion laser. It is used for graphic arts applications, including photo finishing and film writing, and the emerging area of laser projection used for cinema and television.

Our diode laser bars, recognized as an industry leader in both high slope efficiency and high temperature performance, have enabled new applications in both the commercial and military markets, including imaging in the reprographics market.

#### **Materials processing**

Lasers are widely accepted today as part of many important manufacturing applications. While many laser companies have developed high power lasers for the increasingly competitive area of metal processing, we have chosen to concentrate our efforts on developing compact low to medium power lasers specifically for the growing area of nonmetals processing and micromachining. This includes such applications as the cutting and joining of plastics using both our CO<sub>2</sub> and semiconductor lasers, the cutting, perforating and scoring of paper and packaging materials, and various cutting and patterning applications in the textile industry.

Our fiscal 2001 acquisition of DeMaria Electro-Optics Systems, Inc. (DEOS) has also enabled us to play a leading role as an OEM supplier to the laser marking and coding industry. This area is growing as laser marking is starting to seriously compete with ink jet coding as a result of both aesthetic and environmental pressures. In fiscal 2003, we were successful with lasers used commercially for cutting and fading fabric and for processing leather in the garment industry.

At the end of the size and wavelength spectrum, the AVIA UV lasers are now being used extensively in the processing and micromachining of a wide range of materials (and industries) including both silicon and glass. These technically important materials are being laser processed to produce medical devices, microelectromechanical systems (MEMS) and in flat panel display and semiconductor manufacturing.

In June 2002, Lambda Physik received its first order for excimer lasers used in the treatment of engine cylinder surfaces in the automotive industry.

Our *LPX* excimer laser models are high working cycle excimer lasers, offering high repetition rates for scientific and industrial applications. They are used for marking surface mounts and medical devices, stripping thin wires in disk drives, cleaning bare semiconductor wafers and writing fiber braggs on optical telecommunications.

#### Scientific research and government programs

The scientific market historically has provided an ideal test market for leading-edge laser technology, including water-cooled gas lasers,

high-energy flash lamp-pumped Yttrium Aluminum Garnet (YAG) lasers, and ultrafast systems. Our installed base is of tens of thousands of lasers. Current applications for lasers in the scientific market include pump lasers for ultrafast (UF) and continuous wave (CW) systems, CW tunable systems, UF oscillator and amplifiers, Non-linear generation systems (SHG, THG, and OPO's). Main scientific applications include biology (multiphoton and confocal microscopy), physics (atomic and molecular spectroscopy, atom cooling, non-linear optics, X-ray generation, solid state and semiconductor studies), chemistry (quantum control, time-resolved and Raman spectroscopy) and engineering (material processing, remote sensing, metrology).

Our *Mira* Titanium Sapphire laser and *RegA* regenerative amplifier are examples of ultrafast laser systems used for these applications.

Our *Innova* ion lasers are also sold to instrument manufacturers, the largest component of which is bio-instrumentation, for applications such as cell sorting, DNA and protein sequencing as well as drug and clinical screening.

Our OPS laser, the *Sapphire*, is sold for several bio-instrumentation applications, including flow cytometry, drug discovery and DNA sequencing.

Our *Chameleon* laser combines a unique blend of features and hands-off performance, making it an ideal workhorse for Multi-Photon Excitation (MPE) microscopy and a powerful tool for many other fields of ultrafast research, such as time-resolved photoluminescence, nonlinear spectroscopy, fluorescence upconversion, quantum optics, materials characterization and terahertz imaging.

Our MBR and 899 CW tunable lasers provide unsurpassed resolution and stability for spectroscopy applications.

Our diode-pumped *Verdi* laser has established itself as the benchmark in reliability for any pumping application where Ti:Sapphire lasers like our *Mira*, *RegA* and 899 are used. A number of *Verdi* lasers are currently used as laboratory workhorses to pump Coherent lasers, as well as lasers from our competitors.

Our DEOS subsidiary provides custom waveguide CO<sub>2</sub> lasers, far-infrared lasers and other systems to a wide variety of commercial and government customers. In some cases, these custom products are only slightly modified versions of our standard commercial and scientific laser products. In other cases, a custom product may incorporate significant modifications, while still building on the design expertise acquired in the development of our high-volume commercial laser products. We are also heavily involved in the development of optically pumped far-infrared (FIR) lasers, like the *SIFIR-50*, a THz laser system. These designs utilize many aspects of our highly reliable, sealed resonator technologies to produce compact, dependable, turn-key systems with FIR operation.

Our fiscal 2003 acquisition of Positive Light, Inc. (PLI), a recognized leading designer and manufacturer of advanced solid-state lasers for the scientific and industrial markets, provides us access to one of the largest scientific markets, the high-energy UF amplifier systems, which covers energy ranges from 1 mJ and above and peak powers up to 50 Terawatt. PLI products are used for a variety of physics and chemistry applications, inclusive of X-ray generation and non-linear optics. PLI products are complementary to our UF products and pump lasers, and synergy between these product lines is expected to take place.

#### **OEM** components and instrumentation

Our substantial experience with optics, optical coatings, and diode lasers for optical pumping and harmonic generation enable our OEM components business. We provide value-added optical solutions and both directly-coupled and fiber-coupled optical pumping diode laser packages to laser manufacturers participating in other OEM markets such as materials processing, scientific, and medical.

Instrumentation is one of our more mature commercial applications. Representative applications within this segment include flow cytometry, high-throughput screening for pharmaceutical discovery, genomic and proteomic analysis, Raman spectroscopy, forensics, veterinary science, and bio-threat detection. Our optically-pumped (OPS) laser, the *Sapphire*, is sold for several bio-instrumentation applications including DNA sequencing, flow cytometry and drug discovery. Our *Innova* ion lasers are also sold to bio-instrument manufacturers for applications such as cell sorting, DNA and protein sequencing, as well as drug and clinical screening.

#### Flow cytometry

Flow cytometry is a laser-based, micro fluorescence technique for analyzing single cells or populations of cells in a heterogeneous mixture. Its numerous applications include cell biology, immunology, reproductive biology, oncology, and infectious disease such as Acquired Immune Deficiency Syndrome (AIDS). Flow cytometry is both a powerful research tool and an indispensable mainstream clinical diagnostic and prognostic tool. Commercially available instruments typically measure more than six simultaneous discriminating factors at analysis speeds of thousands of cells per second and many instruments have the capability to selectively sort individual cells for subsequent analysis or cell culture. The recent design trend in flow cytometry is toward more compact, powerful, and reliable instruments. Our *Sapphire* solid-state 488nm laser, *Compass* 215M and *Radius* laser diode modules are the lasers of

choice in the current generation of cutting-edge instrumentation replacing the bulkier, inefficient and sometimes unreliable air-cooled argon-ion and helium neon laser systems that were used in the past.

#### Genomics and Proteomics

Laser-based fluorescence techniques abound within the study of Genomics and Proteomics (human genome and proteome) and allied fields. As with the flow cytometry application, a challenge to manufacturers of analytical devices is to produce instruments of increasing complexity and capability, while at the same time minimizing their size. This is particularly important in fields such as these, where often times many instruments are deployed in a single location for the purpose of parallel processing. Our *Sapphire*, *Compass 215M* and *Radius* lasers are used in instrument techniques ranging from DNA sequencing to micro array scanners, to labon-chip and fluorescence correlation spectroscopy.

#### Raman spectroscopy

Raman spectroscopy is the spectral measurement of inelastic scattering of monochromatic radiation from molecular species. Depending on the molecular species, physical state thereof, and the experimental paradigm, laser sources for Raman can range from infrared to UV. Raman measurements are useful for process monitoring, environmental monitoring, and biomedical applications, to name a few. Our *Innova* and *Compass* product lines are widely deployed in Raman applications, both at the commercial and scientific level. Exciting new research at the university level also suggests that our powerful tunable deep-UV source, the *Indigo*, will prove to be a very useful tool in deciphering protein secondary structure.

#### Bio-agent detection

A number of laser-based techniques for point source and standoff detection of pathogens or other bio-toxins are being explored in the government and private sectors. Systems of this type could be deployed to guard military facilities, major sporting events or other large gatherings of citizens, or vital infrastructure components such as subways, airports, or industrial hubs. We have a number of laser systems under evaluation for such systems, and are well positioned to actively participate in this segment.

#### **Forensics**

Lasers have been employed in criminal forensics for a number of decades. Applications include latent fingerprint detection and trace evidence illumination and identification. In the past, laser usage was often limited to forensics labs due to the physical size and complexities of the lasers. Portable models seldom generated enough output for use in high ambient light conditions, and for large-scale sweeps of the crime scene. Owing to recent advances in optical output versus physical size, forensic scientists now have the capability to bring an unprecedented level of latent fingerprint and trace evidence detection directly to the crime scene. Our *Incriminator* \*\*TM 532nm 10 W\* fiber-coupled laser system directly addresses the needs of large-scale criminal investigation organizations by providing a superior combination of high brightness and portability to bear on the most difficult forensic analysis.

#### Medical OEM

We sell a variety of components and lasers to medical laser companies in end-user applications such as ophthalmology, aesthetic, surgical, therapeutic and dentistry. *Innova* ion laser tubes and our *GEM* series CO<sub>2</sub> lasers are widely deployed in ophthalmic, aesthetic and surgical markets. Additionally, our *Compass 215M* series and *Sapphire 488* series lasers are deployed in the retinal scanning market in diagnostic imaging systems.

#### **FUTURE TRENDS**

#### Microelectronics

The semiconductor industry appears to be entering the initial phase of a growth cycle, however, the recovery thus far has been cautious at best. New technologies that were put on hold in the past several years are slowly starting to be deployed and we are not yet seeing the benefit of high volume requests for new products. As these new technologies are increasingly laser based, the new growth cycle in the semiconductor industry bodes well for the expansion of laser markets.

#### Graphic arts and display

If the adoption of newer digital technologies in the graphic arts market continues to remain robust as it was in fiscal 2003, we anticipate that this will have the continued effect of driving purchases of new printing technology. In the display market, there is substantial interest in laser projection for both large venues (digital cinema) and consumer television. While this technology is still in

an early stage, it is expected that it will drive substantial development for low cost, mass producible laser devices.

#### Materials processing

Anticipated drivers for expansion in the materials processing market include requirements for smaller features and expansion into new geographical areas. The market for materials processing in Asian countries grew substantially in early 2003, which was then curbed by the SARS epidemic. Growth has recently resumed at a rate similar to the rate experienced prior to the SARS epidemic and we anticipate this growth to continue in future years.

#### Scientific research and government programs

The scientific research market has historically grown at a rate similar to the growth rate experienced in the general U.S. economy and we anticipate this trend to continue into fiscal 2004. We expect that new applications in ultrashort pulses and in bio-research will be the drivers of anticipated growth within the scientific research market. Additionally, we anticipate that our acquisition of PLI will enable us to enhance growth in the scientific market through additional product offerings.

#### **OEM** components and instrumentation

The instrumentation market has seen a migration from the use of mature laser technologies, mainly ion lasers, to new technologies primarily based on solid state and semiconductors. Because of this migration, new markets are expected to surface in areas such as security, including the detection of bio-agents and the monitoring of people and goods. These markets are likely to require an increased number of lasers. The majority of these activities are still in the research and development stage and we expect only a moderate impact on the laser industry in fiscal 2004, with increases anticipated in future years.

#### **PRODUCTS**

We design, manufacture and market lasers, laser-based systems, precision optics and related accessories for a diverse group of customers. The following table shows selected products together with their applications, the markets they serve and the technologies upon which they are based.

Market Segment	Application	Products	Technology
Microelectronics	DUV lithography	NovaLine series	Excimer
	Mask writing	SabreFreD	Frequency doubled ion
		Innova	Ion
	Semiconductor inspection	Vitesse	Ultrafast
		Compass series	DPSS
		Enterprise	Ion, DPSS, OPS
		AZURE, Indigo	DPSS
		Sapphire	OPS
	Marking	Avia	DPSS
	Flat panel display (TFT annealing)	Lambda STEEL series	Excimer
	Advanced packaging and interconnects	Avia	DPSS
		Diamond & Gem Series	$CO_2$
		FAP family	Semiconductor
Graphic arts and display	Computer-to-plate printing	Single-stripe diodes	Semiconductor
1 1 7	1 1 2	Fiber coupled diodes	Semiconductor
		Diode bars	Semiconductor
		Compass series	DPSS
	Writing data to master disks	Innova family	Ion
		AZURE	DPSS
		Radius	Semiconductor
	Entertainment	Innova family	Ion
		Viper	DPSS
	Photo finishing	Sapphire	OPS
	5.5	Compass	DPSS
	Laser projection	Sapphire	OPS
Materials processing	Marking, welding, engraving, cutting and drilling	FAP family	Semiconductor
returning processing		Diamond	$CO_2$
		Gator family	DPSS
	Automotive production	Lambda STEEL series	Excimer
	Rapid prototyping	Avia	DPSS
Scientific research and	Pump source for solid-state lasers	FAP family, Diode bars	Semiconductor
government programs	Tump source for some state fasers	Diode bars	Semiconductor
government programs	Pump source for Ultrafast and CW Tunable lasers	Verdi, Vitesse, Evolution	DPSS
	Regenerative amplification	Legend	DPSS
	regenerative amplification	Terawatt	Ultrafast
	Multiphoton excitation microscopy	Mira, Chameleon	Ultrafast
	Pollution analysis	COMpex	Excimer
		OPTex, COMPex	Exciner
	Metrology (measuring technology)	NovaTech	
	Su cotus a com-	COMPex	Excimer
	Spectroscopy		Excimer
		Gator family,	DPSS
		Chameleon, Indigo	DPSS
		Mira, RegA, OPO	Ultrafast
		899, MBR, MBD	CW Tunable
	N . 1 1	Innova family	Ion
	Physical chemistry	COMPex	Excimer
	Photochemistry	COMPex	Excimer
	Laser diagnostics and measurement	Modemaster	Electronics
		Fieldmaster	Electronics
		Labmaster	Electronics

Market Segment	Application	Products	Technology
Scientific research and government programs (continued)	Thermal imaging	Infrared optics	Optical fabrication and coating
	Laser components	Optics for lasers	Optical fabrication and coating
OEM components and	Confocal microscopy	Enterprise	Ion
instrumentation		Sapphire	OPS
	DNA sequencing	Compass	DPSS
		Sapphire	OPS
	Flow cytometry/cell sorting	Innova family	Ion
		Compass	DPSS
		Sapphire	OPS
		Radius	Laser Diode Module
	Drug discovery	Innova family	Ion
		Compass	DPSS
		Sapphire	OPS
		Radius	Laser Diode Module
	Raman spectroscopy	Innova family	Ion
		Compass	DPSS
	Forensics	Incriminator	DPSS
		Innova family	Ion
	Laser Doppler velocimetry	Verdi	DPSS
		Innova family	Ion
	Bio-agent detection	Compass, AVIA	DPSS
		Radius	Laser Diode Module
	Fluorescence spectroscopy	Innova family	Ion
		Compass	DPSS
		Sapphire	OPS
		Radius	Laser Diode Module
	Medical (OEM)	OPTex, COMPex	Excimer
		Diode bars	Semiconductor
		Innova family	Ion
		Compass	DPSS
		Sapphire	OPS
		Diamond	$CO_2$

We design, manufacture and market a wide variety of lasers, laser-based systems and optical components and instruments, some of which are described below.

#### Semiconductor lasers

Semiconductor lasers use the same principles as more conventional types of lasers but miniaturize the entire assembly into a monolithic structure using semiconductor wafer fabrication processes. The advantages of this type of laser include smaller size, longer life, enhanced reliability and greater efficiency. We manufacture a wide range of semiconductor laser products with wavelengths ranging from 650nm to 1000nm and output powers ranging from less than 1 W for individual emitters to 60 W for bars, to several hundred watts for stacked bars. These products are available in various forms of complexity including the following: bar diodes on heat sinks, fiber-coupled single emitters and bars, stacked bars and fully integrated modules and microprocessor-controlled units that contain power supplies and active coolers. Our infrared semiconductor lasers, which are manufactured from proprietary materials grown in our facility in Tampere, Finland, differ from most other lasers in that they contain no aluminum in the active region. This provides our lasers with longer lifetimes and the ability to operate at broader temperature ranges.

Our OPS laser is a semiconductor chip that is pumped by a semiconductor laser. A wide range of wavelengths can be achieved by varying the materials used in this device and doubling the frequency of the laser beam. The OPS is a compact, rugged, high power, single-mode laser that has promise in the optical telecommunications industry. Our frequency doubled OPS lasers are all solid-state devices operating continuously in the blue region of the optical spectrum, and are particularly well suited to the bio-instrumentation and graphic art markets.

Another primary application for our semiconductor lasers is for use in computer-to-plate printing machines. These machines contain a series of semiconductor lasers that are used to direct the printing of computer images directly to paper without the need for film or

developing chemicals.

Our semiconductor lasers are also used in machine-processing applications such as soldering connections on printed circuit boards and welding flat panel displays and in medical applications for the treatment of the wet "classical" form of age-related macular degeneration and hair removal. They are also used as the pump laser in DPSS laser systems that are manufactured by us and several of our competitors.

#### Diode-pumped solid-state lasers

DPSS lasers use semiconductor lasers to pump a crystal to produce a laser beam. By changing the energy, optical components and the types of crystals used in the laser, different wavelengths and types of laser light can be produced.

The efficiency, reliability, longevity and relatively low cost of DPSS lasers make them ideally suited for a wide range of OEM and end-user applications, particularly those requiring 24-hour operations. Our DPSS systems are compact, self-contained, sealed units. Unlike conventional tools and other lasers, our DPSS lasers require minimal maintenance since they do not have internal controls or components that require adjusting and cleaning to maintain consistency. They are also less affected by environmental changes in temperature and humidity, which can alter alignment and inhibit performance in many systems.

We manufacture a variety of types of DPSS lasers for different applications including semiconductor inspection; advanced packaging and interconnects; repair, test and measurement; computer-to-plate printing; writing data to master disks; entertainment; photo finishing: marking, welding, engraving, cutting and drilling; drug discovery; forensics; laser Doppler velocimetry; bio-agent detection; medical; rapid prototyping; DNA sequencing; flow cytometry; laser pumping and spectroscopy.

#### SALES AND MARKETING

We market our products domestically through a direct sales force. Our foreign sales are made principally to customers in Europe, Japan and other Asia-Pacific countries. We sell internationally through direct sales personnel located in Japan, the United Kingdom, Germany, Italy, Austria, France, Belgium, the Netherlands, Korea and the People's Republic of China, as well as through independent representatives in other parts of the world. Foreign sales accounted for 61% and 60% of our total net sales in fiscal 2003 and fiscal 2002, respectively. Sales made to independent representatives and distributors are generally priced in U.S. dollars. Foreign sales that we make directly to customers are generally priced in local currencies and are therefore subject to currency exchange fluctuations. Foreign sales are also subject to other normal risks of foreign operations, such as protective tariffs, export and import controls and political instability. Our products are broadly distributed, and no one customer accounted for more than 10% of total net sales during fiscal 2003, 2002 or 2001.

We maintain a customer support and field service staff in major markets within the United States, Europe, Japan and other Asia-Pacific countries. This organization works closely with customers, customer groups and independent representatives in servicing equipment, training customers to use our products and exploring additional applications of our technologies.

We typically provide one-year parts and service warranties on our lasers, laser-based systems, optical and laser components and related accessories and services. Warranties on some of our products and services may be longer than one year. To date, warranty reserves, as reflected on our consolidated balance sheets, have generally been sufficient to cover product warranty repair and replacement costs.

#### RESEARCH AND DEVELOPMENT

We are committed to the development of new products, as well as the improvement and refinement of existing products. We are primarily focusing our research and development efforts on the development of microelectronics, materials processing and bio-instrumentation markets and excimer lasers for DUV lithography. Research and development expenditures for fiscal 2003 were \$50.8 million, or 12% of net sales, compared to \$52.6 million, or 13% of net sales, for fiscal 2002 and \$53.0 million, or 11% of net sales, for fiscal 2001. We maintain separate research and development staffs for both of our reportable business segments. We work closely with customers, both individually and through our sponsored seminars, to develop products to meet customer application and performance needs. In addition, we are working with leading research and educational institutions to develop new photonics-based solutions. In the first quarter of fiscal 2003, we terminated the activities of our Coherent Telecom-Actives Group (CTAG) operating segment. Expenditures for research and development related to CTAG were \$1.9 million in fiscal 2003, \$6.3 million in fiscal 2002 and \$5.0 million in fiscal 2001.

In fiscal 2002, we formed a Technical Advisory Board to facilitate our assessment of new and emerging technologies across a broad range of disciplines affecting the field of photonics. The Technical Advisory Board is comprised of outside experts in various disciplines within the photonics universe and will assist our internal Technology Council in the evaluation of emerging opportunities and lend their expertise to our technology review process. The inaugural membership of the Technical Advisory Board included Dr. Martin Fejer of Stanford University, Dr. David Hanna from the University of Southampton, Dr. Detlef Hommel from the University of Bremen and Dr. Erich Ippen from Massachusetts Institute of Technology, each of whom has accepted a two year appointment.

#### MANUFACTURING

#### **Strategies**

One of our core manufacturing strategies is to tightly control our supply of key parts, components and assemblies. We believe this is essential in order to maintain high quality products and enable rapid development and deployment of new products and technologies.

Committed to quality and customer satisfaction, we design and produce many of our own components and sub-assemblies in order to retain quality control. We provide customers with 24-hour technical expertise and quality that is ISO certified at our principal manufacturing sites. In June 2003, we transferred our printed circuit board manufacturing activities in Auburn, California, to a global electronics contract manufacturer, Venture, which has factories in North America, Asia and Europe. We also completed the restructuring of our CO<sub>2</sub> operations, resulting in the consolidation of all CO<sub>2</sub> manufacturing operations at our Bloomfield, Connecticut location.

We have designed and implemented proprietary manufacturing tools, equipment and techniques in an effort to provide products that differentiate us from our competitors. These proprietary manufacturing techniques are utilized in a number of our product lines, including both ion and CO<sub>2</sub> laser production, optics fabrication, optics coating and assembly operations, as well as the wafer growth for our semiconductor laser product family.

Raw materials or sub-components required in the manufacturing process are generally available from several sources. However, we currently purchase several key components and materials, including exotic materials and crystals, used in the manufacture of our products from sole source or limited source suppliers. Some of these suppliers are relatively small private companies that may discontinue their operations at any time. We typically purchase our components and materials through purchase orders and we have no guaranteed supply arrangement with any of these suppliers. We may fail to obtain these supplies in a timely manner in the future. We may experience difficulty identifying alternative sources of supply for certain components used in our products. Once identified, we would experience further delays from evaluating and testing the products of these potential alternative suppliers. Furthermore, financial or other difficulties faced by these suppliers or significant changes in demand for these components or materials could limit their availability. Any interruption or delay in the supply of any of these components or materials, or the inability to obtain these components and materials from alternate sources at acceptable prices and within a reasonable amount of time, would impair our ability to meet scheduled product deliveries to our customers and could cause customers to cancel orders.

We rely exclusively on our own production capability to manufacture certain strategic components, optics and optical systems, semiconductor lasers, lasers and laser-based systems. Because we manufacture, package and test these components, products and systems at our own facilities, and such items may not be readily available from other sources, any interruption in our manufacturing would adversely affect our business. In addition, our failure to achieve adequate manufacturing yields at our manufacturing facilities may materially and adversely affect our operating results and financial condition.

#### **Operations**

Our electro-optical products are manufactured at sites in Santa Clara, Auburn and Los Gatos, California; Portland, Oregon; East Hanover, New Jersey; Bloomfield, Connecticut; Lübeck, Germany; Leicester, England; Glasgow, Scotland; and Tampere, Finland. Our ion and CO<sub>2</sub> lasers; a portion our DPSS lasers (*Verdi*, *Avia* and *Vitesse*); semiconductor lasers; and ultrafast scientific lasers are manufactured in Santa Clara and Los Gatos, California; Bloomfield, Connecticut; and Glasgow, Scotland. Our optical component products and laser instrumentation products are manufactured at our facilities in Auburn, California and Leicester, England. We manufacture exotic crystals in East Hanover, New Jersey. We make DPSS lasers at our facility in Lübeck, Germany, including the *315M* and *501Q* lasers. Our facility in Tampere, Finland grows the aluminum-free materials that are incorporated into our semiconductor lasers. We make a range of advanced solid-state lasers used in developing applications, including scientific research and semiconductor test equipment, in Glasgow, Scotland.

As part of our efforts to consolidate manufacturing operations, we are currently negotiating the sale of our Glasgow, Scotland operations.

Our excimer laser products, including the lasers used in DUV lithography systems, are manufactured at Lambda Physik's, MicroLas' and Optomech's facilities in Göttingen, Germany. Lambda Physik's DPSS product is manufactured in Göttingen, Germany.

#### INTELLECTUAL PROPERTY

We rely on a combination of patent, copyright, trademark and trade secret laws and restrictions on disclosure to protect our intellectual property rights. We currently hold approximately 340 U.S. and foreign patents and we have approximately 91 additional pending patent applications that have been filed. The issued patents cover various products in all of the major markets that we serve.

We cannot assure you that our patent applications will be approved, that any patents that may be issued will protect our intellectual

property or that any issued patents will not be challenged by third parties. Other parties may independently develop similar or competing technology or design around any patents that may be issued to us. We cannot be certain that the steps we have taken will prevent the misappropriation of our intellectual property, particularly in foreign countries where the laws may not protect our proprietary rights as fully as in the United States.

We believe that we own or have the right to use the basic patents covering our products. However, the laser industry is characterized by a very large number of patents, many of which are of questionable validity and some of which appear to overlap with other issued patents. As a result, there is a significant amount of uncertainty in the industry regarding patent protection and infringement. A U.S. patent application is published eighteen months after the claimed priority date unless it is stated by the applicant that the application will not be filed in a foreign country, in which case the application is maintained in secrecy until a patent is issued. Foreign-filed patent applications are maintained in secrecy for up to eighteen months. Because of this we can conduct only limited searches to determine whether our technology infringes any patents held by others.

In recent years, there has been a significant amount of litigation in the United States involving patents and other intellectual property rights. In the future, we may be a party to litigation to protect our intellectual property or as a result of an alleged infringement of others' intellectual property. These claims and any resulting lawsuit, if successful, could subject us to significant liability for damages and invalidation of our proprietary rights. These lawsuits, regardless of their success, would likely be time-consuming and expensive to resolve and would divert management time and attention. Any potential intellectual property litigation also could force us to do one or more of the following:

- stop selling, incorporating or using our products that use the infringed intellectual property;
- obtain from the owner of the infringed intellectual property right a license to sell or use the relevant technology, which license may not be available on reasonable terms, or at all; or
- redesign the products that use the infringed intellectual property.

If we are forced to take any of these actions, our business may be seriously harmed. Although we carry general liability insurance, our insurance may not cover potential claims of this type or may not be adequate to indemnify us for all liability that may be imposed.

We may, in the future, initiate claims or litigation against third parties for infringement of our proprietary rights to protect these rights or to determine the scope and validity of our proprietary rights or the proprietary rights of competitors. These claims could result in costly litigation and the diversion of our technical and management personnel.

#### **COMPETITION**

Competition is very intense in the various laser markets in which we provide products. In the microelectronics, materials processing, scientific research and government programs and graphic arts and display markets we compete against a number of companies, including Thermo Electron Corporation's Spectra-Physics Lasers business unit; JDS Uniphase Corp.; Cymer, Inc.; Gigaphoton, Inc.; Rofin-Sinar Technologies, Inc.; Lightwave Electronics Corp.; and Excel Technology, Inc. Some of our competitors are large companies that have significant financial, technical, marketing and other resources. These competitors may be able to devote greater resources than we can to the development, promotion, sale and support of their products. Several of our competitors that have large market capitalizations or cash reserves are better positioned than we are to acquire other companies in order to gain new technologies or products that may displace our product lines. Any of these acquisitions could give our competitors a strategic advantage. Any business combinations or mergers among our competitors, forming larger competitors with greater resources, could result in increased competition, price reductions, reduced margins or loss of market share, any of which could materially and adversely affect our business, results of operations and financial condition.

Additional competitors may enter the market, and we are likely to compete with new companies in the future. We expect to encounter potential customers that, due to existing relationships with our competitors, are committed to the products offered by these competitors. As a result of the foregoing factors, competitive pressures may result in price reductions, reduced margins and loss of market share.

#### **BACKLOG**

At September 30, 2003, our backlog of orders scheduled for shipment was approximately \$127.7 million, compared to \$124.4 million at September 30, 2002 and \$134.8 million at September 30, 2001. Orders used to compute backlog are generally cancelable without substantial penalties. Historically, the rate of cancellation experienced by us has not been significant. However, in fiscal 2001, a significant global economic downturn in most of the markets in which we participate resulted in a number of order cancellations and postponements. Therefore, since orders are cancelable, the backlog of orders at any one time is not necessarily indicative of future revenues. We anticipate filling the present backlog within the next 12 months. Backlog at September 30, 2003 was higher than backlog at September 30, 2002 in our Lambda Physik reportable segment. Backlog at September 30, 2001 in both operating segments. Backlog at

September 30, 2001 was also lower than at September 30, 2000 in both operating segments.

#### **EMPLOYEES**

As of September 30, 2003, we had 2,136 full-time employees. Approximately 314 of our employees are involved in research and development; 1,252 of our employees are involved in operations, manufacturing, service and quality assurance; and 570 of our employees are involved in sales, marketing, finance, legal and other administrative functions. Our success will depend in large part upon our ability to attract and retain employees. We face competition in this regard from other companies, research and academic institutions, government entities and other organizations.

#### **ACQUISITIONS**

During fiscal 2003, we acquired Molectron Detector, Inc. (Molectron) of Portland, Oregon and PLI of Los Gatos, California for approximately \$11.5 million and \$38.9 million in cash, respectively. Molectron designs and manufactures laser test and measurement equipment used across all photonics-based applications and markets. We expect that the acquisition of Molectron will enable us to leverage their well-regarded power and energy management products into our next generation products in both the scientific research and commercial markets. PLI designs and manufactures advanced solid-state lasers for the scientific research and industrial markets. We anticipate that the acquisition of PLI will enable us to gain market share in the scientific research and industrial markets through additional product and service offerings.

In fiscal 2003, we initiated a tender offer to purchase the remaining 5,250,000 (39.62%) outstanding shares of our Lambda Physik subsidiary for approximately \$10.50 per share. As a result of the tender offer and the purchase of additional outstanding shares subsequent to the tender offer, as of September 30, 2003 we own 94.26% of the outstanding shares of Lambda Physik. We expect that the acquisition of these additional shares will enable us to increase operating efficiencies by providing management and technical expertise, as well as minimizing redundant administrative costs.

#### RESTRUCTURINGS AND CONSOLIDATION

In fiscal 2003, we undertook several initiatives aimed at both changing business strategy and improving operational efficiencies. Changes in business strategy included the termination of the activities of CTAG. In an attempt to improve operational efficiencies, we outsourced the production of printed circuit boards, reassessed the planned utilization of certain long-lived assets at various operating sites and consolidated the activities of a foreign subsidiary. As a direct result of these initiatives, we recognized \$31.1 million in restructuring, impairment and other charges in fiscal 2003. These initiatives are discussed further in "Management's Discussion and Analysis of Results of Operations and Financial Condition."

#### **GOVERNMENT REGULATION**

#### Environmental regulation

Our operations are also subject to various federal, state and local environmental protection regulations governing the use, storage, handling and disposal of hazardous materials, chemicals, various radioactive materials and certain waste products. In the United States, we are subject to the federal regulation and control of the Environmental Protection Agency. Comparable authorities are involved in other countries. We believe that compliance with federal, state and local environmental protection regulations will not have a material adverse effect on our capital expenditures, earnings and competitive and financial position.

Although we believe that our safety procedures for using, handling, storing and disposing of such materials comply with the standards required by state and federal laws and regulations, we cannot completely eliminate the risk of accidental contamination or injury from these materials. In the event of such an accident involving such materials, we could be liable for damages and such liability could exceed the amount of our liability insurance coverage and the resources of our business.

#### SEGMENT INFORMATION

Financial information relating to segment operations for the three years ended September 30, 2003, 2002 and 2001, is set forth in Note 18, "Segment Information" of the Notes to Consolidated Financial Statements.

#### FINANCIAL INFORMATION ABOUT FOREIGN AND DOMESTIC OPERATIONS AND EXPORT SALES

Financial information relating to foreign and domestic operations for the three years ended September 30, 2003, 2002 and 2001, is set forth in Note 18, "Segment Information" of the Notes to Consolidated Financial Statements.

#### ITEM 2. PROPERTIES

At September 30, 2003, our primary locations were as follows:

Our corporate headquarters and major Electro-Optics manufacturing and office facility is located in Santa Clara, California, consisting of approximately 8.5 acres of land and a 200,000 square-foot building that we own.

Additional Electro-Optics manufacturing and office facilities are located in Auburn, Los Gatos and San Jose, California and Portland, Oregon. The Auburn facilities consist of four buildings totaling 254,380 square-feet, all of which we own on leased land, with land leases expiring from 2021 through 2046. The Los Gatos facility consists of an 18,000 square-foot building leased through December 2003. The San Jose facility consists of a 28,800 square-foot building leased through February 2007 with a five-year renewal option. The Portland facility consists of a 25,064 square-foot building leased through June 2007.

During fiscal 1993, we sold the net assets of Coherent General, Inc. The sale did not include land consisting of approximately 36 acres (11 developed acres) and facilities consisting of an approximately 65,000 square-foot building owned by us in Sturbridge, Massachusetts. This building is currently vacant and is being held as an investment as it did not meet the necessary criteria to be classified as an asset held for sale at September 30, 2003.

Coherent GmbH's office facility in Dieburg, Germany consists of a 31,306 square-foot building leased through December 2007, with a five-year renewal option.

Coherent Lübeck's manufacturing and office facilities in Lübeck, Germany consists of (1) a 32,507 square-foot building leased through June 2005 and (2) a 21,980 square-foot building leased through December 2009 with an option to purchase the building at the end of the lease term.

Coherent Optics Europe Ltd.'s manufacturing and office facilities consist of two leased buildings (four units) in Leicester, England totaling 34,537 square-feet leased until December 2007.

Coherent Tutcore's manufacturing and office facility in Tampere, Finland, where we manufacture semiconductor wafers, consists of approximately 5 acres of land and a 40,970 square-foot building that we own.

Coherent Japan's office facilities include a 17,550 square-foot building in Tokyo leased through April 2005 and a 2,156 square-foot building in Osaka leased through March 2004.

Coherent Scotland's manufacturing and office facility in Glasgow, Scotland consists of a 30,000 square-foot building that we own.

Lasertec BV's manufacturing and office facility in Barendrecht, Netherlands consists of a 2,992 square-foot building leased until April 2006.

Crystal Associates' manufacturing and office facility, located in East Hanover, New Jersey, consists of a 30,000 square-foot building leased through October 2005.

Coherent DEOS' manufacturing and office facility, located in Bloomfield, Connecticut, consists of a 48,046 square-foot building leased through December 2012.

Lambda Physik AG's manufacturing and office facility in Göttingen, Germany, which also houses Optomech, consists of four owned buildings totaling 119,500 square-feet on 7.6 acres of owned land.

Lambda Physik's primary domestic office facility is located in Fort Lauderdale, Florida, consisting of a 27,868 square-foot building leased until December 2008. Additionally, two other domestic leased buildings of approximately 1,000 square-feet each are located in San Diego, California and Boise, Idaho and are leased through June 2005 and November 2005, respectively.

Lambda Physik Japan's office facilities in Yokohama, Japan, consist of a 7,080 square-foot building leased through October 2004 and two building sites totaling 940 square-feet under varying leases expiring from July 2004 through April 2006.

MicroLas Laser System GmbH's manufacturing and office facility in Göttingen, Germany, consists of a 32,232 square-foot building leased until December 2006.

We maintain sales and service offices under varying leases expiring from 2005 through 2014 in Korea, China, France, Italy, the United

Kingdom and the Netherlands.

We lease 216,000 square-feet of office, research and development and manufacturing space in Santa Clara, California, a portion of which we are subleasing to Lumenis, Ltd. The lease was originally set to expire in February 2007; however, in the first quarter of fiscal 2004, we entered into an irrevocable agreement to purchase the facility for \$24.6 million (see Note 11, "Commitments and Contingencies" in our Notes to Consolidated Financial Statements).

We consider our facilities to be both suitable and adequate to provide for current and near term requirements.

#### ITEM 3. LEGAL PROCEEDINGS

Certain claims and lawsuits have been filed or are pending against us. In the opinion of management, all such matters have been adequately provided for, are without merit, or are of such kind that if disposed of unfavorably, would not have a material adverse effect on our consolidated results of operations or financial position.

We, along with several other companies, have been named as a party to a remedial action order issued by the California Department of Toxic Substance Control relating to soil and groundwater contamination at and in the vicinity of the Stanford Industrial Park in Palo Alto, California, where our former headquarters facility is located. The responding parties to the Regional Order (including Coherent) have completed Remedial Investigation and Feasibility Reports, which were approved by the State of California. The responding parties have installed four remedial systems and have reached agreement with responding parties on final cost sharing.

We were was also named, along with other parties, to a remedial action order for the Porter Drive facility site itself in Stanford Industrial Park. The State of California has approved the Remedial Investigation Report, Feasibility Study Report, Remedial Action Plan Report and Final Remedial Action Report, prepared by us for this site. We have been operating remedial systems at the site to remove subsurface chemicals since April 1992. During fiscal 1997, we settled with the prior tenant and neighboring companies, on allocation of the cost of investigating and remediating the site at 3210 Porter Drive, Palo Alto and the bordering site at 3300 Hillview Avenue, Palo Alto.

Management believes that our probable, nondiscounted net liability at September 30, 2003 for remaining costs associated with the above environmental matters is \$0.5 million, which has been previously accrued. This amount consists of total estimated probable costs of \$0.6 million (\$0.1 million included in other current liabilities and \$0.5 million included in other long-term liabilities) reduced by minimum probable recoveries of \$0.1 million included in other assets from other parties named to the order.

#### ITEM 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS

Not applicable.

#### **PART II**

#### ITEM 5. MARKET FOR THE REGISTRANT'S COMMON EQUITY AND RELATED STOCKHOLDER MATTERS

Our common stock is quoted on the NASDAQ National Market under the symbol "COHR." The following table sets forth the high and low closing prices for each quarterly period during the past two fiscal years as reported on the NASDAQ National Market.

_	Quarters Ended							
_	Year ended September 30, 2003			Year ended September 30, 2002			2	
<del>-</del>	Dec. 28	Mar. 29	June 28	Sept. 27	Dec. 29	Mar. 30	June 29	Sept. 28
Closing Price:								
High	\$21.63	\$21.94	\$25.50	\$28.44	\$31.70	\$35.46	\$34.75	\$28.43
Low	\$16.17	\$17.47	\$18.75	\$22.77	\$26.27	\$26.98	\$26.99	\$18.64

The number of stockholders of record as of December 1, 2003 was 1,664. No cash dividends have been declared or paid since Coherent was founded and we have no present intention to declare or pay cash dividends. Our agreements with the banks restrict the payment of dividends on our Common Stock. See Note 9, "Short-term Borrowings" in our Notes to Consolidated Financial Statements.

#### **Equity Compensation Plans**

The following table provides information regarding the Company's outstanding stock options in plans approved by stockholders compared to those stock options issued outside of stockholder-approved plans as of September 30, 2003:

	Number of Shares to be Issued Upon Exercise of Outstanding Options	Weighted Average Exercise Price of Outstanding Options	Number of Shares Remaining Available for Future Issuance
Equity compensation plans approved by stockholders:			
Stock Option Plans and Non-Employee Director's Plan (a) (b)	4,957,300	\$31.22	1,577,796
Employee Stock Purchase Plan	-	-	914,556
Productivity Incentive Plan	-	-	76,829
Equity compensation plans not approved by stockholders:	<u>-</u>	<u> </u>	
Total	4,957,300	\$31.22	2,569,181
·			

- (a) Consists of five plans: 2001 Stock Option Plan, 1995 Stock Option Plan, 1987 Stock Option Plan, 1998 Non-Employee Director's Stock Option Plan and 1990 Non-Employee Director's Stock Option Plan.
- (b) All shares remaining available for future issuance are related to the 2001 Stock Option Plan, 1995 Stock Option Plan and 1998 Non-Employee Director's Stock Option Plan.

#### ITEM 6. SELECTED CONSOLIDATED FINANCIAL DATA

The following selected consolidated financial data for each of the last five fiscal years have been derived from our audited financial statements. The following selected consolidated financial data reflects our former Medical segment as discontinued operations. See Note 3, "Discontinued Operations" of Notes to Consolidated Financial Statements.

The information set forth below is not necessarily indicative of results of future operations and should be read in conjunction with "Management's Discussion and Analysis of Results of Operations and Financial Condition and" and the Consolidated Financial Statements and Notes to Consolidated Financial Statements.

_	Years ended						
Consolidated financial data	Sept. 27, 2003(5)	Sept. 28, 2002(4)	Sept. 29, 2001(3)	Sept. 30, 2000(2)	Oct. 2, 1999(1)		
		(In thousar	nds, except per sh	are data)			
Net sales	\$406,235	\$397,324	\$477,945	\$383,983	\$320,480		
Gross profit	148,768	161,006	199,773	176,284	140,057		
Income (loss) from continuing operations	\$(46,533)	\$(70,837)	\$27,485	\$61,224	\$16,229		
Income (loss) from continuing operations per share (6):							
Basic	\$(1.58)	\$(2.46)	\$0.99	\$2.42	\$0.68		
Diluted	\$(1.58)	\$(2.46)	\$0.95	\$2.24	\$0.66		
Shares used in computation (6):							
Basic	29,448	28,786	27,709	25,252	23,957		
Diluted	29,448	28,786	28,817	27,319	24,633		
Total assets (excluding discontinued operations)	\$709,365	\$804,257	\$874,517	\$591,313	\$352,376		
Long-term obligations	27,911	43,345	58,159	68,647	74,745		
Other long-term liabilities	29,008	55,860	53,097	32,143	15,626		
Minority interest in subsidiaries	7,475	49,602	49,367	48,855	3,945		
Stockholders' equity	\$543,858	\$557,243	\$598,295	\$461,769	\$277,098		

- (1) Includes a \$2.7 million after-tax charge for the write-off of purchased in-process research and development.
- (2) Includes a \$33.5 million after-tax gain on issuance of stock by our Lambda Physik AG subsidiary.
- (3) Includes a \$5.8 million after-tax charge for write-offs of inventory and open purchase commitments in our Lambda Physik segment. Also includes a \$1.6 million after-tax charge for the write-off of purchased in-process research and development associated with the acquisitions of DEOS and MicroLas.
- (4) Includes a \$79.2 million after-tax impairment charge on our Lumenis common stock; a \$6.7 million after-tax asset impairment charge resulting primarily from a decision to cease most of our activities related to the telecom passives component market; a \$3.0 million tax benefit relating to a refund of prior year taxes; \$1.0 million after-tax gain on sale of real estate; \$0.7 million after-tax and minority interest royalty revenues; and a \$0.7 million after-tax and minority interest non-recurring favorable inventory adjustment.
- (5) Includes a \$10.2 million impairment charge on our Lumenis common stock; a \$9.2 million after-tax charge related to the termination of activities in our Telecom-Actives group; a \$7.9 million after-tax charge for the write-down of manufacturing facilities and equipment to net realizable value due to excess capacity and consolidation of operations; a \$6.3 million charge for the write-off of purchased inprocess research and development associated with our acquisition of Positive Light, Inc and step acquisition of Lambda Physik; a \$5.6 million valuation allowance against Lambda Physik's deferred tax assets; a \$2.7 million after-tax impairment charge to write down our Lincoln, California facility to net realizable value; a \$2.3 million after-tax charge to write down our loan to Picometrix, Inc. to net realizable value; a \$1.8 million, net of minority interest, impairment charge to write off goodwill associated with Lambda Physik's lithography business; severance costs at Lambda Physik of \$1.3 million, after-tax and net of minority interest; a \$1.0 million after-tax charge related to early lease termination costs associated with our Santa Clara, California facility; a \$2.1 million tax benefit relating to refund of prior years' taxes; a customer contract settlement fee of \$2.0 million, after-tax and net of minority interest received by Lambda Physik; and a gain of \$1.5 million related to the sale of 5.2 million shares of Lumenis, Ltd.
- (6) See Note 2, "Significant Accounting Policies" and Note 17, "Earnings (Loss) Per Share" of Notes to Consolidated Financial Statements for an explanation of the determination of the number of shares used in computing income (loss) per share.

# TEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF RESULTS OF OPERATIONS AND FINANCIAL CONDITION

The following discussion of our financial condition and results of operations should be read in conjunction with our Consolidated Financial Statements and related notes included in Item 8, "Financial Statements and Supplementary Data" in this Annual Report on Form 10-K. This discussion contains forward-looking statements, which involve risk and uncertainties. Our actual results could differ materially from those anticipated in the forward looking statements as a result of certain factors, including but not limited to those discussed in "Risk Factors" and elsewhere in this Annual Report on Form 10-K. See "Special Note Regarding Forward Looking Statements" at the beginning of the Annual Report on Form 10-K.

#### **OVERVIEW**

On November 6, 2002, we decided to terminate the activities of our Coherent Telecom-Actives Group (CTAG), an operating segment that had been aggregated with our Photonics Group in our Electro-Optics reportable segment. Based on new market information and insights and the status of our development projects at CTAG obtained subsequent to September 30, 2002, we determined that our return on investment for at least the next several years would have been unsatisfactory and, therefore, additional investments were no longer justified. The charge related to our CTAG operating segment in fiscal 2003 resulted from the \$6.5 million write-down of equipment and leasehold improvements to net realizable value; a \$6.8 million accrual for the estimated contractual obligation for lease and other facility costs of the building, net of estimated sublease income, in San Jose, California, formerly occupied by CTAG; the \$1.4 million write-off of our option to purchase Picometrix, Inc. (Picometrix) and \$0.1 million of other restructuring costs.

In the fourth quarter of fiscal 2002, management decided that, given our exit from the passive telecom market and the outsourcing of the production of printed circuit boards, our manufacturing facility located in Lincoln, California was not needed to support our operations and committed to sell certain land, buildings and improvements and equipment with a total carrying value of \$12.4 million. In fiscal 2003, the proposed sale of the facility met the necessary criteria to be classified as assets held for sale under Statement of Financial Accounting Standards (SFAS) No. 144, "Accounting for the Impairment or Disposal of Long-Lived Assets" (SFAS 144). Accordingly, the carrying values of the land, buildings and improvements and equipment were adjusted to their respective fair values less costs to sell of \$9.0 million and \$0.3 million, respectively, and as a result, we recorded an impairment charge of \$3.1 million (\$2.7 million after-tax) during fiscal 2003. The determinations of fair values were based on quoted market prices and comparable sales of similar assets. On July 30, 2003, we completed the sale of the land, buildings and improvements and equipment and received net proceeds of \$9.2 million.

On November 22, 2002, we terminated our option to purchase Picometrix and wrote-off the value of the option (\$1.4 million) in our restructuring, impairment and other charges for our CTAG operating segment, as noted above. As a result of our decision to terminate our option, the note receivable from Picometrix was payable to us in full on May 26, 2003. During the first quarter of fiscal 2003, we evaluated the collectibility of the Picometrix note receivable, including the ability of Picometrix to make the required interest and principal payments and determined that the estimated net realizable value of the note was \$0.9 million, and accordingly recorded an impairment loss of \$3.7 million (\$2.3 million after-tax) during the quarter then ended. To date, no amount has been paid on the principal balance of the note receivable, as we have not called the note. At September 30, 2003, we evaluated the collectibility of the note, including the ability of Picometrix to make the required interest and principal payments, and concluded that the net realizable value of the note was \$0.9 million.

On December 6, 2002, we acquired Molectron Detector, Inc. (Molectron) of Portland, Oregon for approximately \$11.5 million in cash. Molectron designs and manufactures laser test and measurement equipment used across all photonics-based applications and markets. We expect that the acquisition will enable us to leverage Molectron's well-regarded power and energy management products into our next generation products in both the scientific and commercial markets. The acquisition was accounted for as a purchase and, accordingly, we recorded \$5.5 million as goodwill and \$6.1 million as other intangibles for the excess of the purchase price over the fair value of net tangible assets acquired. The other intangibles, principally existing technology, customer base and trade name are amortized over the estimated useful lives of 1 to 10 years.

As of the first quarter of fiscal 2003, the market value of our investment in Lumenis, Ltd. (Lumenis) common stock had declined to \$9.9 million. This decline was deemed to be other-than-temporary and an impairment loss of \$10.2 million was recognized in the first quarter of fiscal 2003. We recorded no net tax benefit related to the \$10.2 million impairment loss, as we recorded a \$4.1 million valuation allowance against this capital loss deferred tax asset.

During the second quarter of fiscal 2003, we recorded a goodwill impairment charge of \$2.4 million (\$1.8 million net of minority interest) related to Lambda Physik's lithography business as a result of significant changes in the economic outlook for this business.

On April 1, 2003, we acquired Positive Light, Inc. (PLI) of Los Gatos, California for approximately \$35.0 million in cash (net of cash

acquired of \$3.9 million). PLI designs and manufactures advanced solid-state lasers for the scientific and industrial markets. The acquisition was accounted for as a purchase and, accordingly, we recorded \$18.9 million as goodwill and \$10.9 million as other intangibles for the excess of the purchase price over the fair value of net tangible assets and \$4.4 million as in-process research and development (IPR&D) acquired. The other intangibles, principally existing technology, customer base, trade name, backlog and a non-compete agreement are amortized over the estimated useful lives of 1 to 8 years.

On June 3, 2003, we initiated a tender offer to purchase the remaining 5,250,000 (39.62%) outstanding shares of our Lambda Physik subsidiary for approximately \$10.50 per share. The offer period was originally set to expire on July 15, 2003, however, as a result of our decision to waive our requirement of owning a minimum of 95% of the total shares of Lambda Physik subsequent to the tender offer, the offer period was extended to July 30, 2003. As of the closing date of the offer period, we purchased 4,448,569 outstanding shares of Lambda Physik for approximately \$47.4 million, resulting in a total ownership percentage of 93.95% (inclusive of shares previously owned). We purchased an additional 32,472 of outstanding shares of Lambda Physik for approximately \$0.3 million subsequent to the offering period, resulting in a total ownership percentage of 94.26% (inclusive of shares previously owned) as of September 30, 2003. We have accounted for this transaction as a step acquisition using the purchase method. We immediately charged \$1.9 million to expense for amounts representing purchased IPR&D and recorded \$4.2 million of identifiable intangible assets. Identifiable intangible assets include existing technology, trade name, backlog, customer base and patents and are amortized over the estimated useful lives of six months to ten years. At September 30, 2003, we had \$8.3 million held in an escrow account that is restricted for the sole purpose of acquiring the remaining outstanding shares of Lambda Physik and are included in non-current restricted cash, cash equivalents and short-term investments on our consolidated balance sheets.

In the fourth quarter of fiscal 2003, management reassessed the planned utilization of certain long-lived assets of our operating sites in Auburn, California and Tampere, Finland, and determined that we had excess manufacturing capacity. As a result, management committed to a plan to sell certain equipment with a carrying value of \$5.7 million and to dispose of certain building improvements with a carrying value of \$1.0 million. The proposed sale of the equipment met the necessary criteria to be classified as assets held for sale under SFAS 144. Accordingly, the carrying value of the equipment was adjusted to its current fair value less costs to sell of \$0.8 million. The building improvements were determined to have no future benefit and were abandoned in the fourth quarter of fiscal 2003. As a result, we recorded an impairment charge of \$5.9 million (\$3.5 million after-tax) in fiscal 2003.

In the fourth quarter of fiscal 2003, management initiated plans to consolidate the activities of a foreign subsidiary located in Glasgow, Scotland in an attempt to increase operating efficiency. Management determined that the carrying value of long-lived assets located at this subsidiary exceeded their estimated future undiscounted cash flows. Accordingly, long-lived assets with a carrying value of \$6.3 million were written down to their estimated fair value of \$2.9 million, resulting in an impairment charge of \$3.4 million in fiscal 2003. Additionally, certain long-lived assets that were classified as held for use at our Barendrecht, the Netherlands subsidiary were impaired, resulting in a charge of \$0.3 million.

In the fourth quarter of fiscal 2003, we were not in compliance with certain financial covenants associated with the operating lease arrangement for our Santa Clara, California facility. In October 2003, we entered into an irrevocable agreement to purchase the facility for \$24.6 million, and subsequently received a waiver for this violation from the lessor effective as of September 30, 2003. As of September 30, 2003, the estimated fair value of the facility was \$1.7 million less than the purchase price of \$24.6 million and we have recorded such amount in other current liabilities. During the first quarter of 2004, we purchased the facility for \$24.6 million.

In the fourth quarter of fiscal 2003, we recorded income from discontinued operations of \$0.6 million, net of tax, related to a tax benefit for the refund of prior year taxes relating to our former Medical segment.

#### RESULTS OF OPERATIONS—YEARS ENDED SEPTEMBER 30, 2003, 2002 AND 2001

#### Consolidated Summary

Loss from continuing operations for fiscal 2003 was \$46.5 million, or \$1.58 per diluted share, including restructuring, impairment and other charges of \$35.2 million (\$24.8 million after-tax), an impairment charge related to the write-down of our shares of Lumenis of \$10.2 million, a write-off of \$6.3 million for purchased IPR&D relating to the acquisitions of PLI and 33.88% of Lambda Physik, a \$5.6 million net of minority interest charge to reflect the establishment of a valuation allowance against Lambda's deferred tax assets and severance costs at Lambda Physik of \$2.5 million (\$1.3 million after-tax and net of minority interest), partially offset by a settlement fee of \$4.4 million (\$2.0 million after-tax and net of minority interest) received by Lambda Physik related to the cancellation of a customer contract dating back to the fourth quarter of fiscal 2001, gains of \$2.1 million relating to refunds of prior year taxes and a gain of \$1.5 million related to the sale of 5.2 million shares of Lumenis.

During fiscal 2002, loss from continuing operations was \$70.8 million, or \$2.46 per diluted share, including impairment charges of \$115.3 million (\$85.9 million after-tax), a \$3.0 million tax benefit related to a refund of prior year taxes, a gain on sale of real estate of \$1.7 million (\$1.0 million after-tax), royalty revenue of \$2.0 million (\$0.7 million after-tax and net of minority interest) and a non-

recurring favorable inventory adjustment of \$1.6 million (\$0.7 million after-tax and net of minority interest). During fiscal 2001, our income from continuing operations was \$27.5 million, or \$0.95 per diluted share, including a \$10.7 million (\$5.8 million after-tax and net of minority interest) charge for excess inventory and open purchase order commitments at Lambda Physik and a \$2.5 million (\$1.6 million after-tax) write-off of purchased IPR&D.

The fiscal 2003 restructuring, impairment and other charges of \$35.2 million (\$24.8 million after-tax) include a \$14.8 million (\$9.2 million after-tax) restructuring and impairment charge related to the termination of activities of our CTAG operating segment, impairment charges of \$9.6 million (\$7.9 million after-tax) relating to manufacturing facilities and equipment due to excess capacity and consolidation of operations, a \$3.7 million (\$2.3 million after-tax) allowance against our note receivable from Picometrix, a \$3.1 million (\$2.7 million after-tax) write-down of our Lincoln, California facility to estimated net realizable value at December 28, 2002, goodwill impairment of \$2.4 million (\$1.8 million net of minority interest) and \$1.7 million (\$1.0 million after-tax) of early lease termination costs relating to our operating lease for our facility in Santa Clara, California, partially offset by the recovery of \$0.1 million in excess of estimated net realizable value for assets previously impaired and classified as held for sale.

The fiscal 2002 impairment charges include a \$104.2 million (\$79.2 million after-tax) write-down of the value of the Lumenis stock we acquired as a result of the April 2001 sale of our Medical segment to Lumenis, as well as an \$11.0 million (\$6.7 million after-tax) charge for equipment impairment due to management's decision to cease most of our activities related to the telecom passives component market.

The fiscal 2003 decrease in loss from continuing operations as compared to fiscal 2002 was primarily attributable to the prior year's impairment charges, the current year's gain on settlement contracts, the current year's gain on sale of Lumenis shares, partially offset by the current year's restructuring, impairment and other charges, lower gross margins as a percentage of sales, current year's impairment charge on Lumenis shares, current year's IPR&D charges, current year's valuation allowance against Lambda's deferred tax assets, current year's severance costs at Lambda Physik, lower interest and dividend income, the prior year's gain on sales of real estate, prior year's royalty revenue and prior year's favorable inventory adjustment.

The fiscal 2002 decrease in income from continuing operations as compared to fiscal 2001 was primarily attributable to the fiscal 2002 impairment charges, lower sales volumes, lower gross margins as a percentage of sales and lower interest and dividend income, partially offset by the fiscal 2001 charge for excess inventory and open purchase order commitments at Lambda Physik, the fiscal 2002 tax benefit related to a refund of prior year taxes, the fiscal 2001 IPR&D charge, the fiscal 2002 gain on sale of real estate, the non-recurring favorable inventory adjustment in fiscal 2002 and the cessation of goodwill amortization due to the adoption of SFAS No. 142 "Goodwill and Other Intangible Assets" (SFAS 142) in fiscal 2002.

#### Net Sales

The following table sets forth for the periods indicated the amount of net sales for our operating segments and net sales as a percentage of total net sales.

	Years ended September 30,					
_	2003		20	02	2001	
		Percentage of total	Percentage of total			Percentage of total
	Amount	net sales	Amount	net sales	Amount	net sales
			(Dollars in	thousands)		
Consolidated:						
Domestic	\$157,171	38.7%	\$159,247	40.1%	\$213,365	44.6%
Foreign	249,064	61.3%	238,077	59.9%	264,580	55.4%
Total	\$406,235	100.0%	\$397,324	100.0%	\$477,945	100.0%
Electro-Optics:						
Domestic	\$142,310	35.0%	\$140,371	35.3%	\$172,833	36.2%
Foreign	181,998	44.8%	167,251	42.1%	183,997	38.5%
Total	\$324,308	79.8%	\$307,622	77.4%	\$356,830	74.7%
Lambda Physik:						
Domestic	\$14,861	3.7%	\$18,876	4.8%	\$40,532	8.4%
Foreign	67,066	16.5%	70,826	17.8%	80,583	16.9%
Total	\$81,927	20.2%	\$89,702	22.6%	\$121,115	25.3%

#### Consolidated

During fiscal 2003, net sales increased by \$8.9 million, or 2%, to \$406.2 million from \$397.3 million in fiscal 2002 as a result of increased sales volumes in the Electro-Optics segment, partially offset by decreased sales volumes in the Lambda Physik segment. Foreign sales increased \$11.0 million, or 5%, while domestic sales decreased \$2.1 million, or 1%. Foreign sales were 61% of net sales in fiscal 2003 and 60% in fiscal 2002.

During fiscal 2002, net sales decreased by \$80.6 million, or 17%, to \$397.3 million from \$477.9 million in fiscal 2001 as a result of decreased sales volumes in both reportable segments. Domestic sales decreased at a higher rate than foreign sales for a total decrease of \$54.1 million, or 25%. Foreign sales were 60% of net sales in fiscal 2002 and 55% in fiscal 2001.

#### **Electro-Optics**

Electro-Optics net sales increased by \$16.7 million, or 5%, in fiscal 2003 to \$324.3 million from \$307.6 million in fiscal 2002. Foreign sales increased by \$14.8 million, or 9%, and domestic sales increased by \$1.9 million, or 1%, from fiscal 2002. Sales increased primarily due to the acquisitions of Molectron and PLI and across all five primary market segments: microelectronics, graphic arts and display, materials processing, scientific research and government programs, and OEM components and instrumentation. Net sales within the scientific and government lines of business improved by approximately \$4.8 million, or 5%, compared to fiscal 2002 primarily as a result of the increase in sales from PLI, partially offset by a decline in other scientific business. The microelectronics market application net sales increased \$3.9 million, or 8%, from fiscal 2002 due to improving fundamentals in the semiconductor equipment and consumer electronics markets. Graphic arts and display benefited from a transition to more environmentally friendly digital processes in both the computer-to-plate and photo-finishing applications, resulting in a \$3.4 million, or 16% increase in sales from fiscal 2002. The materials processing market application net sales increased \$2.3 million, or 5%, from fiscal 2002 as the laser replaced conventional machine tools for cutting, marking, and coding, and benefited from an increase in sales to Asia, although growth was somewhat tempered as a result of the spread of SARS in the region. Our OEM components and instrumentation net sales increased \$2.2 million, or 2%, resulting from increased demand and sales of bio-instrumentation products offset by a decline in sales to Lumenis. Additionally, the strengthening of the Euro and Yen against the U.S. dollar also resulted in an increase to net sales. Although we experienced increases in orders received over the past several quarters and we continued to have a sizeable backlog of orders, current market conditions make it difficult to predict future orders.

Electro-Optics net sales decreased by \$49.2 million, or 14%, in fiscal 2002 to \$307.6 million from \$356.8 million in fiscal 2001. Domestic sales decreased by \$32.5 million, or 19%, and foreign sales decreased by \$16.7 million, or 9%, in fiscal 2002. Sales decreased primarily due to lower sales volumes in semiconductor and related manufacturing markets, including semiconductor lasers for non-metal printed circuit board (PCB) and hole drilling applications, as well as lower optical telecommunications sales volumes.

#### Lambda Physik

Lambda Physik net sales decreased by \$7.8 million, or 9%, in fiscal 2003 to \$81.9 million from \$89.7 million in fiscal 2002. Domestic sales decreased by \$4.0 million, or 21%, and foreign sales decreased by \$3.8 million, or 5%. Net sales decreased primarily due to lower sales volumes in the industrial market due to weakness in the flat panel business, lower royalty revenue and lower demand with medical OEM customers, partially offset by the strengthening of the Euro against the U.S. dollar and higher sales volumes in the lithography market due to the introduction of the new 193nm wavelength lasers, following a period of decline caused by the downturn of the semiconductor industry.

Lambda Physik net sales decreased by \$31.4 million, or 26%, in fiscal 2002 to \$89.7 million from \$121.1 million in fiscal 2001. Domestic sales decreased by \$21.6 million, or 53%, and foreign sales decreased by \$9.8 million, or 12%. The decrease in sales was primarily due to weakness in the overall lithography market, as well as lower demand with medical OEM customers, partially offset by \$2.0 million in fiscal 2002 royalty revenue.

In fiscal 2003, one customer accounted for 18% of Lambda Physik's net sales while another customer accounted for 11% of Lambda Physik net sales. In fiscal 2002, one customer accounted for 32% of Lambda Physik's net sales. In fiscal 2001, two customers accounted for 16% each of Lambda Physik's net sales and one customer accounted for 10% of Lambda Physik's net sales.

#### Gross Profit

#### Consolidated

The consolidated gross profit rate decreased by 3.9% to 36.6% in fiscal 2003 from 40.5% in fiscal 2002. The decrease in the gross profit rate was primarily due to lower shipments of higher margin industrial systems in the Lambda Physik segment, lower shipments of higher

margin commercial solid state products in the Electro-Optics segment, higher manufacturing expenses as a percentage of sales in the Lambda Physik segment due to lower sales volumes, higher inventory valuation reserve requirements due to a lower forecasted outlook for the lithography business and higher warranty expenses in both segments.

Our consolidated gross profit rates have been and will continue to be affected by a variety of factors including foreign and domestic sales mix, manufacturing efficiencies, excess and obsolete inventory write-downs, warranty costs, pricing by competitors or suppliers, new product introductions, production volume, customization and reconfiguration of systems, foreign currency fluctuations and field service margins.

The consolidated gross profit rate decreased by 1.3% to 40.5% in fiscal 2002 from 41.8% in fiscal 2001. The decrease in the gross profit rate was primarily due to lower sales of higher margin commercial solid-state products and underutilization of capacity in the Electro-Optics segment, partially offset by higher margins in the Lambda Physik segment. The increase in gross profit rate in the Lambda Physik segment was primarily due to the fiscal 2001 unusual charge of \$13.9 million for excess inventory and open purchase order commitments (11.4% negative impact on fiscal 2001 margin) and the fiscal 2002 \$2.0 million royalty revenue (1.5% favorable impact on fiscal 2002 margin) offset by lower volume of higher margin lithography shipments, underutilization of capacity and lower margins on service revenue.

#### **Electro-Optics**

The gross profit rate decreased by 2.4% to 39.3% in fiscal 2003 from 41.7% in fiscal 2002. The decrease was primarily due to lower sales of higher margin commercial solid-state products and higher warranty expense due to the introduction of several more complex products.

The gross profit rate decreased by 3.9% to 41.7% in fiscal 2002 from 45.6% in fiscal 2001. The decrease was primarily due to lower sales of higher margin commercial solid-state products and under-utilization of capacity due to lower sales volumes.

#### Lambda Physik

The gross profit rate decreased by 10.5% to 26.2% in fiscal 2003 from 36.7% in fiscal 2002. The decrease in gross profit rate was primarily due to lower shipments of higher margin industrial systems, higher manufacturing expenses as a percentage of sales due to lower sales volumes, higher inventory write-downs due to a lower forecasted outlook for the lithography business and higher warranty expenses in the industrial business.

The gross profit rate increased by 6.6% to 36.7% in fiscal 2002 from 30.1% in fiscal 2001. The increase in the gross profit rate was primarily due to the fiscal 2001 unusual charge of \$13.9 million for excess inventory and open purchase order commitments (11.4% negative impact on fiscal 2001 margin) and the fiscal 2002 \$2.0 million royalty revenue (1.5% favorable impact), partially offset by lower volume of higher margin lithography shipments, underutilization of capacity and lower margins on service revenue.

#### **Operating Expenses**

	Years Ended September 30,						
	20	03	20	02	2001		
	Percentage of total Amount net sales		Amount	Percentage of total net sales	Amount	Percentage of total net sales	
=							
Research and development	\$ 50,751	12.5%	\$ 52,613	13.2%	\$ 52,961	11.1%	
In-process research and development	6,338	1.6%	-	-	2,471	0.5%	
Selling, general and administrative	103,929	25.6%	94,114	23.7%	104,746	21.9%	
Restructuring, impairment and other charges	35,163	8.6%	11,015	2.8%	-	-	
Intangibles amortization	5,147	1.3%	3,427	0.9%	5,262	1.1%	
Total operating expenses	\$201,328	49.6%	\$161,169	40.6%	\$165,440	34.6%	

Fiscal 2003 total operating expenses, including restructuring, impairment and other charges of \$3.2 million and IPR&D charges of \$6.3 million, increased by \$40.2 million, or 25%, from fiscal 2002. As a percentage of net sales, total operating expenses increased to 49.6% in fiscal 2003 from 40.6% in fiscal 2002. Exclusive of the fiscal 2003 restructuring, impairment and other charges and IPR&D charges and the fiscal 2002 restructuring, impairment and other charges, operating expenses increased \$9.7 million, or 6%, and increased to 39.3% of net sales in fiscal 2003 from 37.8% in fiscal 2002.

Fiscal 2002 operating expenses decreased by \$4.3 million, or 3%, from fiscal 2001. As a percentage of net sales, operating expenses increased to 40.6% of net sales in fiscal 2002 from 34.6% in fiscal 2001. Exclusive of the fiscal 2002 restructuring, impairment and other charges and the fiscal 2001 write-off of purchased IPR&D, operating expenses decreased by \$12.8 million, or 8%, but as a percentage of net sales increased to 37.8% from 34.1%.

#### Research and development

Fiscal 2003 research and development expenses decreased by \$1.9 million, or 4%, from fiscal 2002 and decreased to 12.5% from 13.2% of net sales. The decrease is primarily due to the termination of our CTAG operations in the first quarter of fiscal 2003 and lower spending on projects in our Electro-Optics segment, partially offset by increased research and development activities related to individually addressable semiconductor laser bar products in our Electro-Optics segment and the strengthening of the Euro against the U.S. dollar in our Lambda Physik segment. Fiscal 2003 and 2002 research and development expenses include \$1.9 million and \$6.3 million, respectively, for our CTAG operating segment, which was terminated in the first quarter of fiscal 2003.

Fiscal 2002 research and development expenses decreased by \$0.3 million, or 1%, from fiscal 2001 but increased to 13.2% from 11.1% of net sales. The dollar decrease was primarily due to the implementation of cost savings programs, partially offset by increased spending on telecom projects, as well as the integration of DEOS, which we acquired in the third quarter of fiscal 2001. The increase as a percentage of net sales is due to the decrease in fiscal 2002 net sales. Fiscal 2002 and 2001 research and development expenses include \$6.3 million and \$5.0 million, respectively, for our terminated CTAG operating segment.

#### In-process research and development

Fiscal 2003 IPR&D expense of \$6.3 million resulted from our acquisition of PLI (\$4.4 million) and our acquisition of an additional 33.88% of the minority interest ownership of Lambda Physik (\$1.9 million). The values assigned to purchased IPR&D were determined by identifying research projects in areas for which technological feasibility were not established and that had no alternative future use. The values were determined by estimating the costs to develop the acquired in-process technologies into commercially viable products, estimating the resulting net cash flows from such projects, and discounting the net cash flows back to their present value.

#### Selling, general and administrative

Fiscal 2003 selling, general and administrative expenses increased by \$9.8 million, or 10%, from fiscal 2002 and increased as a percentage of net sales from 23.7% to 25.6%. The increase was primarily due to consulting and depreciation expense related to our investments in information technology systems, the acquisitions of Molectron and PLI, severance costs in our Lambda Physik segment and increased sales commissions as a result of higher sales volumes, partially offset by lower incentive compensation and cost containment efforts.

Fiscal 2002 selling, general and administrative expenses decreased by \$10.6 million, or 10%, from fiscal 2001, but increased as a percentage of net sales from 21.9% to 23.7%. The dollar decrease was primarily due to lower commissions as a result of lower sales volume and lower employment-related expenses due to headcount reductions and lower incentive compensation, partially offset by increased investments in information technology. The increase as a percentage of net sales is due to the decrease in fiscal 2002 net sales.

#### Restructuring, impairment and other charges

In fiscal 2003, restructuring, impairment and other charges consists of: (1) a \$14.8 million charge related to the termination of our CTAG operations for the write-down of equipment to net realizable value; an accrual for the estimated contractual obligation for lease and other facility costs of the building formerly occupied by CTAG, net of sublease income; and the write-down of our option to purchase Picometrix; (2) \$9.6 million of charges relating to manufacturing facilities and equipment due to excess capacity and consolidation of operations; (3) a \$3.7 million charge to write-down the value of our note receivable from Picometrix to net realizable value; (4) a \$3.1 million charge to write-down our Lincoln, California land, buildings and improvements and equipment to their estimated net realizable value; (5) a charge of \$2.4 million due to the write-off of goodwill associated with Lambda Physik's lithography business; and (6) \$1.7 million of early lease termination costs relating to our operating lease for our facility in Santa Clara, California, partially offset by the recovery of \$0.1 million in excess of estimated net realizable value for assets previously impaired and classified as held for sale.

In fiscal 2002 we recognized an impairment loss of \$11.0 million related to the write-off of equipment due to management's decision to cease most of our activities related to the telecom passives component market. A significant portion of the assets impaired was acquired in connection with capacity expansions in anticipation of future demand and was not placed in service.

#### **Intangibles amortization**

Fiscal 2003 intangibles amortization expense increased by \$1.7 million, or 50%, primarily due to the acquisitions of PLI, Molectron

and an additional 33.88% of Lambda Physik in fiscal 2003.

Fiscal 2002 intangibles amortization expenses decreased by \$1.8 million, or 35%, primarily due to the cessation of goodwill amortization due to the adoption of SFAS 142, partially offset by the amortization of intangibles resulting from the acquisitions of MicroLas, DEOS and Crystal Associates, Inc.

# Other income (expense)

Other expense, net, decreased by \$92.5 million in fiscal 2003 to \$4.9 million from \$97.4 million in fiscal 2002. Fiscal 2003 and fiscal 2002 other expense, net, includes charges of \$10.2 and \$104.2 million, respectively, due to the write-down of our investment in Lumenis common stock (investment write-down) due to other-than-temporary impairments. Exclusive of the investment write-downs, other income, net of other expense, decreased \$1.5 million primarily due to \$4.7 million lower interest and dividend income due to lower interest rates and lower cash balances and the non-recurring gain on sale of real estate of \$1.7 million in fiscal 2002, partially offset by a \$4.4 million settlement fee received by Lambda Physik relating to the cancellation of a customer contract in fiscal 2003.

Other expense, net, was \$97.4 million in fiscal 2002 compared to other income, net, of \$8.8 million in fiscal 2001. Fiscal 2002 other expense, net, includes a \$104.2 million charge due to the investment write-down. Exclusive of this investment write-down, other income, net of other expense, decreased \$2.0 million primarily due to lower interest income and lower dividends resulting from the purchase of MicroLas, partially offset by the gain on sale of real estate and rental income from the sublease of the Condensa facility to Lumenis.

#### Minority interest in subsidiaries earnings (losses)

Minority interest in subsidiaries losses was \$4.2 million during fiscal 2003 compared to minority interest in subsidiaries' earnings of \$0.4 million during fiscal 2002 due to net losses incurred by our Lambda Physik segment. We expect minority interest in subsidiaries' earnings (losses) to decrease significantly in fiscal 2004 due to our acquisition of additional shares of Lambda Physik during fiscal 2003. As of September 30, 2003, minority shareholders owned 5.74% of the shares of Lambda Physik.

Minority interest in subsidiaries earnings decreased by \$0.1 million during fiscal 2002 compared to fiscal 2001 primarily due to decreased profitability in our Lambda Physik segment.

#### **Income taxes**

The effective tax rate on loss from continuing operations (before minority interest) for fiscal 2003 was (11.6%) compared to (27.8%) for fiscal 2002. The effective tax rate decreased as a result of valuation allowances recorded on a portion of the write-down of Lumenis stock (\$6.1 million) due to capital loss limitations, valuation allowances recorded on deferred tax assets at Lambda Physik (\$7.8 million) and the nondeductibility of the current year IPR&D and goodwill impairment charges, partially offset by a benefit from the refund of prior year taxes.

The effective tax rate on income (loss) from continuing operations (before minority interest) for fiscal 2002 was (27.8%) compared to 35.1% for fiscal 2001. The effective tax rate decreased as a result of a valuation allowance recorded on a portion of the write-down of Lumenis stock due to capital loss limitations (including a \$16.6 million valuation allowance provided on the Lumenis capital loss deferred tax asset) and changes in the distribution of taxable income among jurisdictions, partially offset by the proportionately lower impact of tax credits due to the large fiscal 2003 loss from continuing operations before income taxes.

### FINANCIAL CONDITION

### Liquidity and capital resources

Our ratio of current assets to current liabilities was 3.9:1 at September 30, 2003 compared to 5.4:1 at September 30, 2002. The decrease in our ratio from September 30, 2002 to September 30, 2003 is due to decreases in cash, cash equivalents and short-term investments of \$130.0 million resulting from the purchases of Molectron, PLI and the minority interest of Lambda Physik and the reclassification of amounts to non-current restricted cash, cash equivalents and short-term investments. The decrease is partially offset by an increase in current restricted cash, cash equivalents and short-term investments of \$15.3 million.

At September 30, 2003, our primary sources of liquidity were cash, cash equivalents and short-term available-for-sale investments of \$134.9 million. Additional sources of liquidity were a multi-currency line of credit and bank credit facilities totaling \$57.5 million as of September 30, 2003, of which \$57.2 million was unused and available. During fiscal 2003, these credit facilities were used in the

United States, Japan and Europe. Our domestic lines of credit include a \$12.5 million unsecured revolving account from Union Bank of California, which expires January 31, 2005. Our Union Bank of California agreement is subject to standard covenants related to financial ratios, profitability and dividend payments and requires us to maintain \$50 million of cash and certain short-term investments (as defined in the agreement) at all times in any bank in the United States (the Minimum Balance Arrangement). We were not in compliance with certain of these covenants, including the Minimum Balance Arrangement, and the line of credit was not available to us at September 30, 2003. Additionally, no amounts were outstanding on this agreement at September 30, 2003. We are currently working with our banks to obtain a new domestic line of credit agreement on terms acceptable to us. Our foreign lines of credit are principally unsecured. We believe that cash generated from operations, together with the liquidity provided by existing cash balances and financing capacity, is sufficient to satisfy liquidity requirements for the next 12 months.

During the second quarter of fiscal 2002, we renewed the lease for our Santa Clara, California facility that expires in February 2007. The facility consists of 216,000 square feet of office, research and development and manufacturing space. Upon expiration of the lease, we have an option to purchase the facility for \$24.6 million, renew the lease for an additional five years or arrange for the sale of the facility to a third party where we would retain an obligation to the owner for the difference between the sale price, if less than \$24.6 million, and \$21.3 million, subject to certain provisions of the lease. If we do not purchase the facility or arrange for its sale as discussed above, we would be obligated for an additional lease payment of \$21.3 million. The lease requires us to maintain specified financial covenants. At September 30, 2003, we were not in compliance with the net losses limit we agreed to maintain pursuant to our agreement. The net losses limit does not permit our consolidated net income to be less than zero for any two consecutive fiscal quarters; to be less than zero for any fiscal quarter by an absolute amount that exceeds 5% of owners equity adjusted for net intangibles on the last day of the previous quarter. In October 2003, we entered into an irrevocable agreement to purchase the facility for \$24.6 million, and subsequently, received a waiver for this violation from the lessor effective as of September 30, 2003. During the first quarter of fiscal 2004, we completed the purchase of the facility for \$24.6 million.

During fiscal 2002, we amended the notes used to finance our acquisition of Star Medical (Star notes). The amendment included modifications of certain covenants associated with the notes and allowed a prepayment of a portion of the principal balance. As a result, in October 2002 we prepaid \$7.3 million of the principal balance with no prepayment penalty. The Star notes originally included financial covenants such as maintaining a minimum tangible net worth, minimum consolidated debt to capitalization ratio, fixed charge coverage ratio, as well as non-financial covenants such as providing quarterly statements to the note holders. In September 2003, we amended the agreement to relinquish all financial covenant requirements. In place of the covenants, the amendment requires that we place cash and short-term investment balances in an amount equal to 120% of the principal balance in a restricted collateral account. At September 30, 2003, \$15.2 million and \$30.4 million of current and non-current restricted cash, cash equivalents and short-term investments were related to the Star notes (see Note 6 in our Notes to Consolidated Financial Statements).

As part of our tender offer to purchase the remaining outstanding shares of our Lambda Physik subsidiary, we were required by local regulations to have funds available for the offer in an account located in Germany. As of September 30, 2003, we had \$8.3 million restricted for the purchase of the remaining outstanding shares of Lambda Physik and are included in non-current restricted cash, cash equivalents and short-term investments on our consolidated balance sheets.

# **Contractual Obligations and Off-Balance Sheet Arrangements**

Other than the operating lease for our Santa Clara, California facility discussed above, we have no off-balance sheet arrangements as defined by Regulation S-K. The following summarizes our contractual obligations at September 30, 2003, and the effect such obligations are expected to have on our liquidity and cash flow in future periods (in thousands):

		Less than 1			More than 5
<del>-</del>	Total	year	1 to 3 years	3 to 5 years	years
Long-term debt payments	\$41,294	\$13,625	\$26,811	\$ 858	\$ -
Operating lease payments (1)	50,782	6,914	10,893	25,999	6,976
Capital lease payments	791	549	242	-	-
Purchase commitments	971	971	-	-	-
Total	\$93,838	\$22,059	\$37,946	\$26,857	\$6,976

<sup>(1)</sup> Operating lease payments are exclusive of sublease income and include payments under the lease for our Santa Clara, California facility discussed above, as the purchase of the facility occurred subsequent to September 30, 2003.

#### **Changes in financial condition**

Cash, cash equivalents and short-term investments (excluding our investment in Lumenis common stock) decreased \$109.2 million, or 45%, to \$134.7 million at September 30, 2003 from \$243.9 million at September 30, 2002. Cash and cash equivalents at September 30, 2003 decreased \$54.5 million, or 42%, from September 30, 2002. Our investments in Lumenis common stock decreased \$20.8 million, or 99%, from September 30, 2002 due to the sale of most of our shares and the write-down of our investment in those shares in fiscal 2003.

Cash provided by operating activities in fiscal 2003 was \$21.2 million, which included depreciation and amortization of \$34.1 million, cash provided by operating assets and liabilities of \$22.6 million and other, net of \$5.4 million, partially offset by net purchases of short-term trading investments of \$32.0 million, minority interest in subsidiaries losses of \$4.2 million, and loss from continuing operations (net of restructuring, impairment and other charges, the write-down of our investment in Lumenis, IPR&D and the gain on sale of Lumenis shares) of \$4.7 million.

Cash used for investing activities in fiscal 2003 of \$62.4 million included \$94.9 million (net of cash acquired) to purchase PLI, Molectron and 33.88% of Lambda Physik, restricted cash, cash equivalents and short-term investments of \$53.5 million related to our Star note agreement and our tender offer to purchase the remaining shares of Lambda Physik and \$25.7 million used to acquire property and equipment primarily due to facility improvements, manufacturing equipment and investments in information technology, partially offset by net sales of short-term investments of \$86.8 million, \$12.7 million provided by proceeds from dispositions of property and equipment, \$11.0 million provided by the sale of Lumenis shares and other of \$1.1 million.

Cash used for financing activities in fiscal 2003 of \$20.1 million included net debt of repayments of \$33.1 million, resulting primarily from Lambda Physik's payment of all short-term borrowings and principal payments on the notes used to finance our acquisition of Star Medical and a decrease in cash overdraft of \$0.2 million. Financing activities generated \$13.2 million from the sale of shares under our employee stock plans, with \$9.1 million from employee stock option exercises and \$4.1 million generated from our employee stock purchase plan.

Changes in exchange rates in fiscal 2003 generated \$6.8 million, primarily due to the strengthening of the Euro in relation to the U.S. dollar.

Accounts receivable decreased \$3.4 million, or 4% from September 30, 2002 to September 30, 2003 as a result of improved collection efforts. Net inventories increased \$10.9 million, or 12%, from September 30, 2002 to September 30, 2003 primarily due to selected inventory builds to support growth, the CO<sub>2</sub> manufacturing relocation from California to Connecticut and the acquisitions of Molectron and PLI. Prepaid expenses and other assets increased \$6.4 million, or 16%, from September 30, 2002 to September 30, 2003 primarily due to increases in prepaid and refundable taxes, partially offset by payments on our notes receivable from Lumenis. Accounts payable increased \$3.9 million, or 28%, from September 30, 2002 to September 30, 2003 primarily due to increased inventory purchases. Other current liabilities increased \$14.5 million, or 27%, from September 30, 2002 to September 30, 2003 primarily due to the accrual for restructuring charges, increased customer deposits and higher warranty reserves.

#### ADOPTION OF ACCOUNTING STANDARDS

In June 2002, the Financial Accounting Standards Board (FASB) issued SFAS No. 146, "Accounting for Costs Associated with Exit or Disposal Activities" (SFAS 146) which addresses accounting for restructuring and similar costs. SFAS 146 supersedes previous accounting guidance, principally Emerging Issues Task Force (EITF) Issue No. 94-3, "Liability Recognition for Certain Employee Termination Benefits and Other Costs to Exit an Activity (including Certain Costs Incurred in a Restructuring)" (EITF 94-3). SFAS 146 requires that the liability for costs associated with an exit or disposal activity be recognized when the liability is incurred and that the liability should initially be measured and recorded at fair value. Under EITF 94-3, a liability for an exit cost was recognized at the date of our commitment to an exit plan. We adopted the provisions of SFAS 146 for restructuring activities initiated after December 28, 2002. The adoption of SFAS 146 did not have a material impact on our operating results or financial condition.

In November 2002, the EITF reached a consensus on Issue No. 00-21, "Accounting for Revenue Arrangements with Multiple Deliverables" (EITF 00-21). The EITF concluded that revenue arrangements with multiple elements should be divided into separate units of accounting if the deliverables in the arrangement have value to the customer on a standalone basis, if there is objective and reliable evidence of the fair value of the undelivered elements, and as long as there are no rights of return or additional performance guarantees by the Company. The provisions of EITF 00-21 are applicable to revenue arrangements entered into in fiscal periods beginning after June 15, 2003. We adopted the provisions of EITF 00-21 effective June 29, 2003 and the adoption did not have a material effect on our operating results or financial condition.

In November 2002, the FASB issued FASB Interpretation No. 45, "Guarantor's Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others" (FIN 45). FIN 45 requires that upon issuance of a guarantee, the guarantor must recognize a liability for the fair value of the obligation it assumes under that guarantee. We adopted the disclosure

requirements of FIN 45 in the first quarter of fiscal 2003. The recognition and measurement provisions have been applied to guarantees issued or modified after December 31, 2002. The adoption of the recognition and measurement provisions did not have a material effect on our operating results or financial condition.

In December 2002, the FASB issued SFAS No. 148, "Accounting for Stock-Based Compensation – Transition and Disclosure" (SFAS 148). The statement amends SFAS No. 123, "Accounting for Stock-Based Compensation" (SFAS 123) to provide alternative methods of transition for a voluntary change to the fair value based method of accounting for stock-based employee compensation. In addition, this statement amends the 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. We adopted the disclosure provisions of SFAS 148 in the second quarter of fiscal 2003.

In January 2003, the FASB issued FASB Interpretation No. 46, "Consolidation of Variable Interest Entities" (FIN 46) that addresses consolidation of variable interest entities. FIN 46 provides guidance for determining when a primary beneficiary should consolidate a variable interest entity, or equivalent structure, that functions to support the activities of the primary beneficiary. The provisions of FIN 46 are effective immediately for all variable interest entities created after January 31, 2003. For variable interest entities created prior to February 1, 2003, the provisions of FIN 46 are effective for the period ending after December 15, 2003. If it is reasonably possible that we will consolidate or disclose information about a variable interest entity when FIN 46 becomes effective, we are required to disclose information about those entities in all financial statements issued after January 31, 2003. We plan to adopt the provisions of FIN 46 in the first quarter of fiscal 2004 for variable interest entities created prior to February 1, 2003. We are currently evaluating the implication of FIN 46 as it relates to our loan agreement with Picometrix and the impact, if any, on our consolidated results of operations or financial condition.

During the second quarter of fiscal 2002, we renewed the lease for our Santa Clara, California facility that expires in February 2007. The facility consists of 216,000 square feet of office, research and development and manufacturing space, a portion of which we are subleasing to Lumenis. Upon expiration of the lease, we have an option to purchase the property for \$24.6 million, renew the lease for an additional five years or arrange for the sale of the property to a third party where we would retain an obligation to the owner for the difference between the sale price, if less than \$24.6 million, and \$21.3 million, subject to certain provisions of the lease. If we do not purchase the property or arrange for its sale as discussed above, we would be obligated for an additional lease payment of \$21.3 million. We have determined that the lease does not qualify as an arrangement held with a variable interest entity, and accordingly, we will not be required to consolidate the related assets and liabilities under FIN 46.

In April 2003, the FASB issued SFAS No. 149, "Amendment of Statement 133 on Derivative Instruments and Hedging Activities" (SFAS 149). The statement amends and clarifies accounting for derivative instruments, including certain derivative instruments embedded in other contracts and for hedging activities under SFAS No. 133, "Accounting for Derivative Instruments and Hedging Activities" (SFAS 133). SFAS 149 is generally effective for derivative instruments, including derivative instruments embedded in certain contracts, entered into or modified after June 30, 2003, and for hedging relationships designated after June 30, 2003. We adopted the provisions of SFAS 149 in the fourth quarter of fiscal 2003. The adoption of SFAS 149 did not have a material impact on our operating results or financial condition.

In May 2003, the FASB issued SFAS No. 150, "Accounting for Certain Financial Instruments with Characteristics of both Liabilities and Equity" (SFAS 150). The statement modifies the accounting for certain financial instruments that, under previous guidance, issuers could account for as equity and requires that those instruments be classified as liabilities in statements of financial position. The statement is effective for financial instruments entered into or modified after May 31, 2003, and otherwise is effective at the beginning of the first interim period beginning after June 15, 2003. We adopted the provisions of SFAS 150 effective June 29, 2003, and as a result, we were not required to make any reclassifications in our financial statements.

### APPLICATION OF CRITICAL ACCOUNTING POLICIES

Our discussion and analysis of 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 (GAAP). The preparation of these financial statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. We have identified the following as the items that require the most significant judgment and often involve complex estimation: revenue recognition, accounting for long-lived assets (including goodwill and intangible assets), inventory valuation, warranty reserves, accounting for notes receivable and accounting for income taxes.

#### Revenue Recognition

We recognize revenue in accordance with Staff Accounting Bulletin No. 101, "Revenue Recognition in Financial Statements," (SAB 101). Accordingly, revenue is recognized when persuasive evidence of an arrangement exists, the product has been delivered, the price is fixed or determinable and collection is probable. Delivery is generally considered to have occurred when shipped.

Should changes in conditions cause management to determine these criteria are not met for certain future transactions, revenue recognized for any reporting period could be adversely affected. Failure to obtain anticipated orders due to delays or cancellations of orders could have a material adverse effect on our revenue. In addition, pressures from customers to reduce our prices, or to modify our existing sales terms may result in material adverse effects on our revenue in future periods. Our products typically include a one-year warranty. The estimated cost of product warranty claims is accrued at the time the sale is recognized, based on historical experience.

We generally recognize product revenue at the time of delivery and, for certain products for which we perform product installation services, the cost of installation is generally accrued at the time product revenue is recognized.

Our sales to distributors, resellers and end-user customers typically do not have customer acceptance provisions and only certain of our original equipment manufacturers (OEM) customer sales have customer acceptance provisions. Customer acceptance is generally limited to performance under our published product specifications. For the few product sales that have customer acceptance provisions because of higher than published specifications, (1) the products are tested and accepted by the customer at our site or by the customer's acceptance of the results of our testing program prior to shipment to the customer, or (2) the revenue is deferred until customer acceptance occurs.

The vast majority of our sales are made to OEMs, distributors, resellers and end-users in the non-scientific market. Sales made to these customers do not require installation of the products by us and are not subject to other post-delivery obligations, except in occasional instances where, for example, we have agreed to perform installation or provide training. In those instances, we either defer revenue related to installation services until installation is completed or, if the installation services are inconsequential or perfunctory, we accrue installation costs at the time that product revenue is recognized. We defer revenue on training services until these services are provided.

Sales to end-users in the scientific market typically require installation and, thus, involve post-delivery obligations, however, our post delivery installation obligations are not essential to the functionality of our products. For a limited number of products or arrangements where management considers installation to be significant in comparison to the value of the product sold, we defer revenue related to installation services until completion of these services.

For most products, training is not provided and thus no post-delivery training obligation exists. However, when training is provided to our customers, it is typically priced separately and is recognized as revenue when the training service is provided.

# Long-Lived Assets

We evaluate long-lived assets whenever events or changes in business circumstances or our planned use of assets indicate that the carrying amount of the assets may not be fully recoverable or that the useful lives of these assets are no longer appropriate. Reviews are performed to determine whether the carrying values of assets are impaired based on comparison to either the discounted expected future cash flows (in the case of goodwill and intangible assets) or to the undiscounted expected future cash flows (for all other long-lived assets). If the comparison indicates that there is impairment, the impaired asset is written down to fair value. Significant management judgment is required in the forecast of future operating results that are used in the preparation of expected discounted and undiscounted cash flows.

In fiscal 2003, we recorded a goodwill impairment charge of \$2.4 million (\$1.8 million net of minority interest) related to Lambda Physik's lithography business as a result of significant changes in the economic outlook for this business. At September 30, 2003, we had \$91.3 million of goodwill and purchased intangible assets on our consolidated balance sheet, the value of which we believe is reasonable based on the discounted estimated future cash flows of the associated products and technologies.

During fiscal 2003 and fiscal 2002, we recorded charges of \$6.5 million and \$11.0 million, respectively, for the write-down of equipment and leasehold improvements resulting primarily from management's decision to cease most of our activities related to the telecom actives and passives components markets.

During fiscal 2003, we recorded a charge of \$3.1 million to write down the value of land, buildings and improvements and equipment at our Lincoln, California facility to net realizable value. On July 30, 2003, we completed the sale of the land, buildings and

improvements and equipment at net realizable value.

During fiscal 2003, we recorded a charge of \$6.2 million to write down the value of equipment and building improvements at our operating sites in Auburn, California, Tampere, Finland and Barendrecht, the Netherlands to net realizable value, as well as a charge of \$3.4 million to write-down long-lived assets at our facility located on Glasgow, Scotland to net realizable value.

At September 30, 2003, we had \$146.4 million of property and equipment on our consolidated balance sheet.

It is reasonably possible that the estimates of anticipated future net revenue, the remaining estimated economic life of the products and technologies, or both, could differ from those used to assess the recoverability of these assets. In that event, additional impairment charges or shortened useful lives of certain long-lived assets could be required.

#### **Inventory Valuation**

We record our inventory at the lower of cost (computed on a first-in, first-out basis) or market. We write-down our inventory to its estimated market value based on assumptions about future demand and market conditions. Inventory write-downs are generally recorded, within guidelines set by management, when the inventory for a device exceeds 12 months of demand for the device and when individual parts have been in inventory for greater than 12 months. If actual market conditions are less favorable than those projected by management, additional inventory write-downs may be required which could materially affect our future results of operations. We write-down our demo inventory by amortizing the cost of demo inventory over a two-year period from the fourth month it is placed in service. During the year ended September 30, 2003, we recorded \$2.7 million (\$1.2 million after-tax and net of minority interest) of additional inventory write-downs due to a decrease in anticipated future demand and significant changes in the economic outlook for Lambda Physik's lithography business. During the year ended September 30, 2001, we recorded a charge of \$13.9 million for excess inventory and open purchase order commitments due to decreased marketability resulting from the slowdown in the Lithography business at Lambda Physik, which was reflected in postponed delivery dates, cancelled orders and further expected order cancellations from customers. Due to rapidly changing forecasts and orders, additional write-downs for excess or obsolete inventory, while not currently expected, could be required in the future. Differences between actual results and previous estimates of excess and obsolete inventory could result in material adverse effects on our future results of operations.

#### Warranty Reserves

We provide warranties on certain of our product sales, and allowances for estimated warranty costs are recorded at the time of sale. The determination of such allowances requires us to make estimates of product return rates and expected costs to repair or replace the products under warranty. We currently establish warranty reserves based on historical warranty costs for each product line. If actual return rates and/or repair and replacement costs differ significantly from our estimates, adjustments to recognize additional cost of sales may be required in future periods.

### Notes Receivable

We evaluate notes receivable whenever events or changes in business circumstances indicate that the carrying amount of the notes may not be fully recoverable. Reviews are performed to determine whether the carrying value of notes is impaired based on the ability of the debtor to make the required payments of principal and interest on the note. If the review indicates that there is impairment, the impaired note is written down to estimated net realizable value.

In fiscal 2003 we evaluated the collectibility of our note receivable from Picometrix, including the ability of Picometrix to make the required interest and principal payments and determined that indicators of impairment existed. In the first quarter of fiscal 2003, we determined the estimated net realizable value of the note to be \$0.9 million, and accordingly recorded an impairment charge of \$3.7 million (\$2.3 million after-tax) to write-down the value of the note from its previously determined estimated net realizable value of \$4.6 million. We continue to evaluate the collectibility of the note and concluded that the net realizable value of the note at September 30, 2003 was \$0.9 million.

#### **Income Taxes**

As part of the process of preparing our consolidated financial statements, we are required to estimate our income tax provision (benefit) in each of the jurisdictions in which we operate. This process involves us estimating our current income tax provision (benefit) together with assessing temporary differences resulting from differing treatment of items for tax and accounting purposes. These differences result in deferred tax assets and liabilities, which are included within our consolidated balance sheets.

We record a valuation allowance to reduce our deferred tax assets for the amount that is not more likely than not to be realized. While we have considered future taxable income and ongoing prudent and feasible tax planning strategies in assessing the need for the

valuation allowance, in the event we were to determine that we would be able to realize our deferred tax assets in the future in excess of our net recorded amount, an adjustment to the deferred tax asset would increase income in the period such determination was made. Likewise, should we determine that we would not be able to realize all or part of our net deferred tax asset in the future, an adjustment to the deferred tax asset would be charged to income in the period such determination was made.

During fiscal 2003, our valuation allowance on deferred tax assets increased by \$14.6 million, including a \$7.8 million write down of deferred tax assets at Lambda Physik and increased allowances related to net capital loss carryforwards. In making the determination to record the valuation allowance, management considered the likelihood of future taxable income and feasible and prudent tax planning strategies to realize deferred tax assets. In the future, if we determine that we expect to realize more or less of the deferred tax assets, an adjustment to the valuation allowance will affect income in the period such determination is made.

Federal income taxes have not been provided for on a portion of the unremitted earnings of foreign subsidiaries either because such earnings are intended to be permanently reinvested or because foreign tax credits are available to offset any planned distributions of such earnings.

#### RISK FACTORS

#### Risks Related to our Business

We may experience quarterly and annual fluctuations in our net sales and operating results in the future, which may result in volatility in our stock price.

Our net sales and operating results may vary significantly from quarter to quarter and from year to year in the future. A number of factors, many of which are outside of our control, may cause these variations, including:

- general economic uncertainties;
- fluctuations in demand for, and sales of, our products or prolonged downturns in the industries that we serve;
- ability of our suppliers to produce and deliver components and parts, including sole or limited source components, in a timely manner, in the quantity and quality desired and at the prices we have budgeted;
- timing or cancellation of customer orders and shipment scheduling;
- fluctuations in our product mix;
- foreign currency fluctuations;
- introductions of new products and product enhancements by our competitors, entry of new competitors into our markets, pricing pressures and other competitive factors;
- our ability to develop, introduce, manufacture and ship new and enhanced products in a timely manner without defects;
- rate of market acceptance of our new products;
- delays or reductions in customer purchases of our products in anticipation of the introduction of new and enhanced products by us or our competitors;
- our ability to control expenses;
- level of capital spending of our customers;
- potential obsolescence of our inventory; and
- costs related to acquisitions of technology or businesses.

In addition, we often recognize a substantial portion of our sales in the last month of the quarter. Our expenses for any given quarter are typically based on expected sales and if sales are below expectations in any given quarter, the adverse impact of the shortfall on our operating results may be magnified by our inability to adjust spending quickly enough to compensate for the shortfall. We also base our manufacturing on our forecasted product mix for the quarter. If the actual product mix varies significantly from our forecast, we may not be able to fill some orders during that quarter, which would result in delays in the shipment of our products. Accordingly, variations in timing of sales, particularly for our higher priced, higher margin products, can cause significant fluctuations in quarterly operating results.

Due to these and other factors, we believe that quarter-to-quarter and year-to-year comparisons of our historical operating results may not be meaningful. You should not rely on our results for any quarter or year as an indication of our future performance. Our operating results in future quarters and years may be below public market analysts' or investors' expectations, which would likely cause the price of our common stock to fall. In addition, over the past several years, the stock market has experienced extreme price and volume fluctuations that have affected the stock prices of many technology companies. There has not always been a direct correlation between this volatility and the performance of particular companies subject to these stock price fluctuations. These factors, as well as general economic and political conditions or investors' concerns regarding the credibility of corporate financial statements and the accounting profession, may have a material adverse affect on the market price of our stock in the future.

Our business has been adversely impacted by the general worldwide economic slowdown and related uncertainties affecting markets in which we operate.

Adverse economic conditions worldwide have contributed to the current technology industry slowdown and impacted our business resulting in:

- reduced demand for some of our products;
- increased risk of excess and obsolete inventories;
- increased rate of order cancellations or delays;
- excess manufacturing capacity under current market conditions:
- continued downturn in the semiconductor industry; and
- higher overhead costs, as a percentage of revenues.

Recent political and social turmoil in many parts of the world, including the hostilities in the Middle East, terrorist and other military actions, may continue to put pressure on global economic conditions. These political, social and economic conditions are making it very difficult for us, our customers and our vendors to forecast and plan future business activities. This level of uncertainty severely challenges our ability to operate profitably or to grow our business. In particular, it is difficult to develop and implement strategy, sustainable business models and efficient operations, as well as effectively manage supply chain relationships.

If the economic or market conditions continue or further deteriorate, this may have a material adverse impact on our financial position, results of operations and cash flow.

We depend on sole source or limited source suppliers for some of the key components and materials, including exotic materials and crystals, in our products, which make us susceptible to supply shortages or price fluctuations that could adversely affect our business.

We currently purchase several key components and materials used in the manufacture of our products from sole source or limited source suppliers. Some of these suppliers are relatively small private companies that may discontinue their operations at any time. We typically purchase our components and materials through purchase orders and we have no guaranteed supply arrangement with any of these suppliers. We may fail to obtain these supplies in a timely manner in the future. We may experience difficulty identifying alternative sources of supply for certain components used in our products. We would experience further delays while identifying, evaluating and testing the products of these potential alternative suppliers. Furthermore, financial or other difficulties faced by these suppliers or significant changes in demand for these components or materials could limit their availability. Any interruption or delay in the supply of any of these components or materials, or the inability to obtain these components and materials from alternate sources at acceptable prices and within a reasonable amount of time, would impair our ability to meet scheduled product deliveries to our customers and could cause customers to cancel orders.

We rely exclusively on our own production capability to manufacture certain strategic components, optics and optical systems, crystals, semiconductor lasers, lasers and laser-based systems. Because we manufacture, package and test these components, products and systems at our own facilities, and such components, products and systems are not readily available from other sources, any interruption in manufacturing would adversely affect our business. In addition, our failure to achieve adequate manufacturing yields of these items at our manufacturing facilities may materially and adversely affect our operating results and financial condition.

Our future success depends on our ability to increase our sales volumes and decrease our costs to offset anticipated declines in the average selling prices of our products and, if we are unable to realize greater sales volumes and lower costs, our operating results may suffer.

Our future success depends on the continued growth of the markets for lasers, laser systems, precision optics and related accessories, as well as our ability to identify, in advance, emerging markets for laser-based systems. We cannot assure you that we will be able to successfully identify, on a timely basis, new high-growth markets in the future. Moreover, we cannot assure you that new markets will develop for our products or our customers' products, or that our technology or pricing will enable such markets to develop. Future demand for our products is uncertain and will depend to a great degree on the continued technological development and the introduction of new or enhanced products. If this does not continue, sales of our products may decline and our business will be harmed.

We have historically been the industry's high quality, high priced supplier of laser systems. We have, in the past, experienced decreases in the average selling prices of some of our products. We anticipate that as competing products become more widely available, the average selling price of our products may decrease. If we are unable to offset the anticipated decrease in our average selling prices by increasing our sales volumes, our net sales will decline. In addition, to maintain our gross margins, we must continue to reduce the cost of our products. Furthermore, as average selling prices of our current products decline, we must develop and introduce new products and product

enhancements with higher margins. If we cannot maintain our gross margins, our operating results could be seriously harmed, particularly if the average selling prices of our products decrease significantly.

# Our future success depends on our ability to develop and successfully introduce new and enhanced products that meet the needs of our customers.

Our current products address a broad range of commercial and scientific research applications in the photonics markets. We cannot assure you that the market for these applications will continue to generate significant or consistent demand for our products. Demand for our products could be significantly diminished by new technologies or products that replace them or render them obsolete.

Over the last three fiscal years, our research and development expenses have been in the range of 11% to 13% of net sales. Our future success depends on our ability to anticipate our customers' needs and develop products that address those needs. Introduction of new products and product enhancements will require that we effectively transfer production processes from research and development to manufacturing and coordinate our efforts with those of our suppliers to achieve volume production rapidly. If we fail to effectively transfer production processes, develop product enhancements or introduce new products in sufficient quantities to meet the needs of our customers as scheduled, our net sales may be reduced and our business may be harmed.

#### We face risks associated with our foreign sales that could harm our financial condition and results of operations.

For fiscal years 2003, 2002 and 2001, 61%, 60% and 55%, respectively, of our net sales were derived from customers outside of the Untied States. We anticipate that foreign sales will continue to account for a significant portion of our revenues in the foreseeable future. The recent global economic slowdown has already had and is likely to continue to have a negative effect on various foreign markets in which we operate. This may cause us to simplify our foreign legal entity structure and reduce our presence in certain countries, which may negatively affect the overall level of business in such countries. A portion of our foreign sales occurs through our foreign sales subsidiaries and the remainder of our foreign sales result from exports to foreign distributors, resellers and customers. Our foreign operations and sales are subject to a number of risks, including:

- longer accounts receivable collection periods;
- the impact of recessions in economies outside the United States;
- unexpected changes in regulatory requirements;
- certification requirements;
- environmental regulations;
- reduced protection for intellectual property rights in some countries;
- potentially adverse tax consequences;
- political and economic instability; and
- preference for locally produced products.

We are also subject to the risks of fluctuating foreign exchange rates, which could materially adversely affect the sales price of our products in foreign markets, as well as the costs and expenses of our foreign subsidiaries. While we use forward exchange contracts and other risk management techniques to hedge our foreign currency exposure, we remain exposed to the economic risks of foreign currency fluctuations. For additional discussion about our foreign currency risks, see "Item 7A—Quantitative and Qualitative Disclosures About Market Risk."

# The successful completion of the upgrade to our information systems is critical to our ability to effectively and efficiently operate our business in the future.

Our success in navigating the current market will depend heavily upon our ability to assemble the necessary information to make informed decisions and implement those decisions quickly and effectively. We have been working on a major upgrade to our technology infrastructure and information systems. This upgrade will result in a consolidation from multiple critical legacy systems to primarily one fully integrated enterprise system. While we are taking great care to properly plan this implementation and to test the solution fully prior to the conversion, there can be no guarantees given that the conversion will not disrupt our operations.

# We may not be able to protect our proprietary technology, which could adversely affect our competitive advantage.

We rely on a combination of patent, copyright, trademark and trade secret laws and restrictions on disclosure to protect our intellectual property rights. We cannot assure you that our patent applications will be approved, that any patents that may be issued will protect our intellectual property or that any issued patents will not be challenged by third parties. Other parties may independently develop similar or competing technology or design around any patents that may be issued to us. We cannot be certain that the steps we have taken will prevent the misappropriation of our intellectual property, particularly in foreign countries where the laws may not protect our proprietary

rights as fully as in the United States.

# We could become subject to litigation regarding intellectual property rights, which could seriously harm our business.

In recent years, there has been significant litigation in the United States involving patents and other intellectual property rights. In the future, we may be a party to litigation to protect our intellectual property or as a result of an alleged infringement of others' intellectual property. These claims and any resulting lawsuit, if successful, could subject us to significant liability for damages or invalidation of our proprietary rights. These lawsuits, regardless of their success, would likely be time-consuming and expensive to resolve and would divert management time and attention. Any potential intellectual property litigation could also force us to do one or more of the following:

- stop manufacturing, selling or using our products that use the infringed intellectual property;
- obtain from the owner of the infringed intellectual property right a license to sell or use the relevant technology, although such license may not be available on reasonable terms, or at all; or
- redesign the products that use the technology.

If we are forced to take any of these actions, our business may be seriously harmed. We do not have insurance to cover potential claims of this type.

We may, in the future, initiate claims or litigation against third parties for infringement of our proprietary rights to protect these rights or to determine the scope and validity of our proprietary rights or the proprietary rights of competitors. These claims could result in costly litigation and the diversion of our technical and management personnel.

# We depend on skilled personnel to operate our business effectively in a rapidly changing market, and if we are unable to retain existing or hire additional personnel when needed, our ability to develop and sell our products could be harmed.

Our future success depends upon the continued services of our executive officers and other key engineering, sales, marketing, manufacturing and support personnel. None of our key employees, except for employees associated with recent acquisitions in the United States, are bound by an employment agreement for any specific term and these personnel may terminate their employment at any time. In addition, we do not have "key person" life insurance policies covering any of our employees.

In addition, the significant downturn in our business environment has had a negative impact on our operations, and as a result, we have restructured our operations to reduce our workforce and implement other cost reduction activities. Although we believe these various changes and actions will improve our organizational effectiveness and competitiveness, they could lead, in the short term, to disruptions in our business, reduced employee morale and productivity, increased attrition, problems with retaining existing employees and recruiting future employees and increased financial costs.

Our ability to continue to attract and retain highly skilled personnel will be a critical factor in determining whether we will be successful in the future. Recruiting and retaining highly skilled personnel in certain functions continues to be difficult. At certain locations where we operate, the cost of living is extremely high and it may be difficult to retain key employees and management at a reasonable cost. We may not be successful in attracting, assimilating or retaining qualified personnel to fulfill our current or future needs. Our failure to attract additional employees and retain our existing employees could adversely affect our growth and our business.

### The long sales cycles for our products may cause us to incur significant expenses without offsetting revenues.

Customers often view the purchase of our products as a significant and strategic decision. As a result, customers typically expend significant effort in evaluating, testing and qualifying our products before making a decision to purchase them, resulting in a lengthy initial sales cycle. While our customers are evaluating our products and before they place an order with us, we may incur substantial sales and marketing and research and development expenses to customize our products to the customer's needs. We may also expend significant management efforts, increase manufacturing capacity and order long lead-time components or materials prior to receiving an order. Even after this evaluation process, a potential customer may not purchase our products. As a result, these long sales cycles may cause us to incur significant expenses without ever receiving revenue to offset those expenses.

# The markets in which we sell our products are intensely competitive and increased competition could cause reduced sales levels, reduced gross margins or the loss of market share.

Competition in the various photonics markets in which we provide products is very intense. We compete against a number of companies, including Thermo Electron Corporation's Spectra-Physics Lasers business unit; JDS Uniphase Corp., Cymer, Inc.; Gigaphoton, Inc.; Rofin-Sinar Technologies, Inc.; Lightwave Electronics Corp.; and Excel Technology, Inc. Some of our competitors are large companies that have significant financial, technical, marketing and other resources. These competitors may be able to devote greater resources than

we can to the development, promotion, sale and support of their products. Several of our competitors that have larger market capitalizations or more cash reserves are much better positioned than we are to acquire other companies in order to gain new technologies or products that may displace our product lines. Any of these acquisitions could give our competitors a strategic advantage. Any business combinations or mergers among our competitors, forming larger competitors with greater resources, could result in increased competition, price reductions, reduced margins or loss of market share, any of which could materially and adversely affect our business, results of operations and financial condition.

Additional competitors may enter the market and we are likely to compete with new companies in the future. We may encounter potential customers that, due to existing relationships with our competitors, are committed to the products offered by these competitors. As a result of the foregoing factors, we expect that competitive pressures may result in price reductions, reduced margins and loss of market share.

# Some of our laser systems are complex in design and may contain defects that are not detected until deployed by our customers, which could increase our costs and reduce our revenues.

Laser systems are inherently complex in design and require ongoing regular maintenance. The manufacture of our lasers, laser products and systems involves a highly complex and precise process. As a result of the technical complexity of our products, changes in our or our suppliers' manufacturing processes or the inadvertent use of defective materials by us or our suppliers could result in a material adverse effect on our ability to achieve acceptable manufacturing yields and product reliability. To the extent that we do not achieve such yields or product reliability, our business, operating results, financial condition and customer relationships would be adversely affected. We provide warranties on certain of our product sales, and allowances for estimated warranty costs are recorded during the period of sale. The determination of such allowances requires us to make estimates of product return rates and expected costs to repair or replace the products under warranty. We currently establish warranty reserves based on historical warranty costs for each product line. If actual return rates and/or repair and replacement costs differ significantly from our estimates, adjustments to recognize additional cost of sales may be required in future periods.

Our customers may discover defects in our products after the products have been fully deployed and operated under peak stress conditions. In addition, some of our products are combined with products from other vendors, which may contain defects. As a result, should problems occur, it may be difficult to identify the source of the problem. If we are unable to identify and fix defects or other problems, we could experience, among other things:

- loss of customers;
- increased costs of product returns and warranty expenses;
- 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 seriously harm our business, financial condition and results of operations.

# If we fail to accurately forecast component and material requirements for our products, we could incur additional costs and incur significant delays in shipments, which could result in loss of customers.

We use rolling forecasts based on anticipated product orders and material requirements planning systems to determine our product requirements. It is very important that we accurately predict both the demand for our products and the lead times required to obtain the necessary components and materials. We depend on our suppliers for most of our product components and materials. Lead times for components and materials that we order vary significantly and depend on factors including the specific supplier requirements, the size of the order, contract terms and current market demand for components. For substantial increases in our sales levels, some of our suppliers may need at least six months lead-time. If we overestimate our component and material requirements, we may have excess inventory, which would increase our costs. If we underestimate our component and material requirements, we may have inadequate inventory, which could interrupt and delay delivery of our products to our customers. Any of these occurrences would negatively impact our net sales, business and operating results.

# Our increased reliance on contract manufacturing and our excess manufacturing capacity may adversely impact our financial results and operations.

We have changed our manufacturing strategy to increase sourcing from contract manufacturers. In June 2003, we completed the transfer of our printed circuit board manufacturing activities in Auburn, California, to the global electronics contract manufacturer, Venture, which has factories in North America, Asia and Europe. Our ability to resume internal manufacturing operations for those

products has been eliminated. The cost, quality, performance and availability of contract manufacturing operations are and will be essential to the successful production and sale of many of our products. The inability of any contract manufacturer to meet our cost, quality, performance and availability standards could adversely impact our financial condition or results of operations. We may not be able to provide contract manufacturers with product volumes that are high enough to achieve sufficient cost savings. If shipments fall below forecasted levels, we may incur increased costs or be required to take ownership of the inventory. Also, our ability to control the quality of products produced by contract manufacturers may be limited and quality issues may not be resolved in a timely manner, which could adversely impact our financial condition or results of operations. The smooth transition from internal manufacturing to contract manufacturing by a third party is critical to our success. Failure to implement and manage a successful transition may cause severe disruptions in our supply chain that will affect the cost, quality and availability of products.

Furthermore, because we have outsourced some manufacturing operations to contract manufacturers, have experienced lower sales volumes and have exited the passive telecom business, we now have excess manufacturing capacity in certain existing facilities. During fiscal 2003, we recorded a charge of \$3.1 million to write down the value of land, buildings, improvements and equipment at our Lincoln, California facility to net realizable value. On July 30, 2003, we completed the sale of the Lincoln, California land, buildings and improvements and equipment at net realizable value. During fiscal 2003, we recorded a charge of \$6.2 million to write down the value of equipment and building improvements at our operating sites in Auburn, California, Tampere, Finland and Barendrecht, the Netherlands to net realizable value, as well as a charge of \$3.4 million to write down long-lived assets at our facility located on Glasgow, Scotland to net realizable value related to our plan to sell this facility as part of our efforts to consolidate manufacturing operations.

#### We may not achieve the expected results of our step acquisition of Lambda Physik.

In fiscal 2003, our Lambda Physik subsidiary recorded a loss of 15.7 million Euros and we decided to make a tender offer of the outstanding shares of Lambda Physik in order to provide management and technical expertise to assist Lambda Physik in achieving profitability. There can be no assurance that we will be successful in these efforts. To a large degree, Lambda Physik's future success is dependent on its ability to become a significant supplier of 193nm excimer lasers for lithography applications within the next twelve to eighteen months. Its future success is also subject to possible technological changes in OEMs we sell to in the inkjet and TFT annealing businesses. If we are unsuccessful in improving the operating results of Lambda Physik, we may experience a material adverse affect on our consolidated financial performance.

#### We may not achieve the expected benefits of integration with Lambda Physik.

We are in the process of reviewing the operational efficiency of Lambda Physik's operations and expect to achieve efficiencies by integrating some of Lambda Physik's operations into other Coherent operations. However, integrating the operations of Lambda Physik into our operations is a complex, time consuming and expensive process. The complexity of the technologies and operations being integrated and the disparate corporate cultures being combined may increase the difficulty of integration. Management's focus on the integration of operations may distract attention from our day-to-day business and may disrupt key research and development, marketing or sales efforts. In addition, it is common in the technology industry for aggressive competitors to attract customers and recruit key employees away from companies during the integration phase of an acquisition.

# If we fail to manage our restructuring of operations effectively, our business could be disrupted, which could harm our operating results.

During fiscal 2003, we restructured our operations, including the consolidation of our CO<sub>2</sub> manufacturing operations at our Bloomfield, Connecticut facility, the consolidation of our laser measurement and control business at our Portland, Oregon facility, the reorganization of our U.S. optics business and implemention of cost reduction activities to eliminate excess capacity. We are currently planning to sell our Glasgow, Scotland operations and restructure our Barendrecht, the Netherlands operations to eliminate excess capacity. Our ability to reduce our excess manufacturing capacity and to consolidate facilities may be made more difficult by further weakening of the seminconductor industry and worsening of general economic conditions in the United States and globally. If we are unable to reduce our excess manufacturing capacity and facilities, this may negatively impact our operations, cost structure and operating results.

#### Cost containment and expense reductions are critical to positive cash flow from operations and profitability.

We are continuing efforts to reduce our expense structure. We believe strict cost containment and expense reductions are essential to positive cash flow from operations in future quarters and maintaining profitability (excluding impairment charges), especially since the outlook for future quarters is subject to numerous challenges. Additional measures to contain costs and reduce expenses may be undertaken if revenues and market conditions do not improve. A number of factors could preclude us from successfully bringing costs and expenses in line with our revenues, such as our inability to accurately forecast business activities and further deterioration of our

revenues. If we are unable to continue to reduce expenses and contain our costs, this could harm our operating results.

### If we fail to manage our growth effectively, our business could be disrupted, which could harm our operating results.

Our ability to successfully offer our products and implement our business plan in evolving markets requires an effective planning and management process. We continue to expand the scope of our operations domestically and internationally. The growth in employee headcount and in sales, combined with the challenges of managing geographically-dispersed operations, has placed, and our anticipated growth in future operations will continue to place, a significant strain on our management systems and resources, particularly our information technology systems. The failure to effectively manage our growth could disrupt our business and harm our operating results.

### Any acquisitions we make could disrupt our business and harm our financial condition.

We have in the past made strategic acquisitions of other corporations, and we continue to evaluate potential strategic acquisitions of complementary companies, products and technologies. In the event of any future acquisitions, we could:

- issue stock that would dilute our current stockholders' percentage ownership;
- pay cash;
- incur debt;
- assume liabilities; or
- incur expenses related to in-process research and development, impairment of goodwill and amortization.

These purchases also involve numerous risks, including:

- problems combining the acquired operations, technologies or products;
- unanticipated costs or liabilities;
- diversion of management's attention from our core businesses;
- adverse effects on existing business relationships with suppliers and customers; and
- potential loss of key employees, particularly those of the purchased organizations.

We cannot assure you that we will be able to successfully integrate any businesses, products, technologies or personnel that we might acquire in the future, which may harm our business.

# We use standard laboratory and manufacturing materials that could be considered hazardous and we could be liable for any damage or liability resulting from accidental environmental contamination or injury.

Although most of our products do not incorporate hazardous or toxic materials and chemicals, some of the gases used in our excimer lasers and some of the liquid dyes used in some of our scientific laser products are highly toxic. In addition, our operations involve the use of standard laboratory and manufacturing materials that could be considered hazardous. Also, if a facility fire were to occur at our Tampere, Finland site and spread to a reactor used to grow semiconductor wafers, it could release highly toxic emissions. We believe that our safety procedures for handling and disposing of such materials comply with all federal, state and offshore regulations and standards; however, the risk of accidental environmental contamination or injury from such materials cannot be entirely eliminated. In the event of such an accident involving such materials, we could be liable for damages and such liability could exceed the amount of our liability insurance coverage and the resources of our business.

# If our facilities were to experience catastrophic loss, our operations would be seriously harmed.

Our facilities could be subject to a catastrophic loss from fire, flood, earthquake or terrorist activity. A substantial portion of our research and development activities, manufacturing, our corporate headquarters and other critical business operations are located near major earthquake faults in Santa Clara, California, an area with a history of seismic events. Any such loss at any of our facilities could disrupt our operations, delay production, shipments and revenue and result in large expenses to repair or replace the facility. While we have obtained insurance to cover most potential losses, after reviewing the costs and limitations associated with earthquake insurance, we have decided not to procure such insurance. We believe that this decision is consistent with decisions reached by numerous other companies located nearby. We cannot assure you that our existing insurance coverage will be adequate against all other possible losses.

Provisions of our charter documents, Delaware law, our Common Shares Rights Plan and our Change-of-Control Severance Plan may have anti-takeover effects that could prevent or delay a change in control.

Provisions of our certificate of incorporation and bylaws may discourage, delay or prevent a merger or acquisition or make removal of incumbent directors or officers more difficult. These provisions may discourage takeover attempts and bids for our common stock at a premium over the market price. These provisions include:

- the ability of our board of directors to alter our bylaws without stockholder approval;
- limiting the ability of stockholders to call special meetings;
- limiting the ability of our stockholders to act by written consent; and
- establishing advance notice requirements for nominations for election to our board of directors or for proposing matters that can be acted on by stockholders at stockholder meetings.

We are subject to Section 203 of the Delaware General Corporation Law, which prohibits a publicly held Delaware corporation from engaging in a merger, asset or stock sale or other transaction with an interested stockholder for a period of three years following the date such person became an interested stockholder, unless prior approval of our board of directors is obtained or as otherwise provided. These provisions of Delaware law also may discourage, delay or prevent someone from acquiring or merging with us without obtaining the prior approval of our board of directors, which may cause the market price of our common stock to decline. In addition, we have adopted a change of control severance plan, which provides for the payment of a cash severance benefit to each eligible employee based on the employee's position and years of service to us. If a change of control occurs, our successor or acquirer will be required to assume and agree to perform all of our obligations under the change of control severance plan.

Our common shares rights agreement permits the holders of rights to purchase shares of our common stock to exercise the stock purchase rights following an acquisition of or merger by us with another corporation or entity, following a sale of 50% or more of our consolidated assets or earning power, or the acquisition by an individual or entity of 20% or more of our common stock. Our successor or acquirer is required to assume all of our obligations and duties under the common shares rights agreement, including in certain circumstances the issuance of shares of its capital stock upon exercise of the stock purchase rights. The existence of our common shares rights agreement may have the effect of delaying, deferring or preventing a change of control and, as a consequence, may discourage potential acquirers from making tender offers for our shares.

#### Risks related to our industry

Our market is unpredictable and characterized by rapid technological changes and evolving standards, and, if we fail to address changing market conditions, our business and operating results will be harmed.

The photonics industry is characterized by extensive research and development, rapid technological change, frequent new product introductions, changes in customer requirements and evolving industry standards. Because this market is subject to rapid change, it is difficult to predict its potential size or future growth rate. Our success in generating revenues in this market will depend on, among other things:

- maintaining and enhancing our relationships with our customers;
- the education of potential end-user customers about the benefits of lasers, laser systems and precision optics; and
- our ability to accurately predict and develop our products to meet industry standards.

For our fiscal years ended September 30, 2003, 2002 and 2001, our research and development costs were \$50.8 million (12%), \$52.6 million (13%) and \$53.0 million (11%), of net sales, respectively. We cannot assure you that our expenditures for research and development will result in the introduction of new products or, if such products are introduced, that those products will achieve sufficient market acceptance. Our failure to address rapid technological changes in our markets could adversely affect our business and results of operations.

# A continued downturn in the semiconductor manufacturing industry could adversely affect our business, financial condition and results of operations.

Our net sales depend in part on the demand for our products by semiconductor equipment companies. The semiconductor industry is highly cyclical and has historically experienced periodic and significant downturns, which have often severely affected the demand for semiconductor manufacturing equipment, including laser-based tools and systems. Although such a downturn could reduce our sales, we may not be able to reduce expenses commensurately, due in part to the need for continual spending in research and development and the need to maintain extensive ongoing customer service and support capability. Accordingly, any sustained downturn in the semiconductor industry could have a material adverse effect on our financial condition and results of operations.

# ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

#### Market risk disclosures

We are exposed to market risk related to changes in interest rates, foreign currency exchange rates and equity security price risk. We do not use derivative financial instruments for speculative or trading purposes.

### Interest rate sensitivity

A portion of our investment portfolio is composed of income securities. These securities are subject to interest rate risk and will fall in value if market interest rates increase. If market interest rates were to increase immediately and uniformly by 10 percent from levels at September 30, 2003, the fair value of the portfolio, based on quoted market prices, would decline by an immaterial amount. We have the ability to generally hold our fixed income investments until maturity and therefore we would not expect our operating results or cash flows to be affected to any significant degree by the effect of a sudden change in market interest rates on our securities portfolio. If necessary, we may sell short-term investments prior to maturity to meet our liquidity needs.

At September 30, 2003, the fair value of our unrestricted available-for-sale debt securities was \$57.6 million.

At September 30, 2003, we had fixed rate long-term debt of approximately \$40.1 million, and a hypothetical 10% increase in interest rates would not have a material impact on the fair market value of this debt, based on pricing models using current interest rates. We do not hedge any interest rate exposures.

# Foreign currency exchange risk

We maintain operations in various countries outside of the United States and foreign subsidiaries that manufacture and sell our products in various global markets. As a result, our earnings and cash flows are exposed to fluctuations in foreign currency exchange rates. We attempt to limit these exposures through operational strategies and financial market instruments. We utilize hedging instruments, primarily forward contracts with maturities of twelve months or less, to manage our exposure associated with anticipated cash flows and net asset and liability positions denominated in non-functional currencies. Gains and losses on the forward contracts are mitigated by gains and losses on the underlying exposures. We do not use derivative financial instruments for trading purposes.

Looking forward, we do not anticipate any material adverse effect on our consolidated financial position, results of operations or cash flows resulting from the use of these instruments. There can be no assurance that these strategies will be effective or that transaction losses can be minimized or forecasted accurately.

Excluding Lambda Physik (discussed separately below), a hypothetical 10 percent appreciation of the forward adjusted U.S. dollar to September 30, 2003 market rates would decrease the unrealized value of our forward contracts by \$0.1 million. Conversely, a hypothetical 10 percent depreciation of the forward adjusted U.S. dollar to September 30, 2003 market rates would increase the unrealized value of our forward contracts by \$0.1 million.

The following table provides information about our foreign exchange forward contracts at September 30, 2003. The table presents the value of the contracts in U.S. dollars at the contract exchange rate as of the contract maturity date, the weighted average contractual foreign currency exchange rates and fair value. The U.S. notional fair value represents the contracted amount valued at September 30, 2003 rates.

Forward contracts to sell (buy) foreign currencies for U.S. dollars (in thousands, except contract rates):

	Average Contract Rate	U.S. Notional Contract Value	U.S. Notional Fair Value
Fair Value Hedges:			
Euro	1.1349	\$ 4,672	\$ 5,202
British Pound Sterling	1.6117	\$ 2,176	\$ 2,230
Japanese Yen	116.0679	\$(6,585)	\$(6,818)

At Lambda Physik, a hypothetical 10 percent appreciation of the Euro to September 30, 2003 market rates would decrease the unrealized value of our forward contracts by 0.7 million Euros. Conversely, a hypothetical 10 percent depreciation of the Euro to September 30, 2003 market rates would increase the unrealized value of our forward contracts by 0.8 million Euros.

The following table provides information about Lambda Physik's foreign exchange forward contracts at September 30, 2003. The table

presents the value of the contracts in Euros at the contract exchange rate as of the contract maturity date, the weighted average contractual foreign currency exchange rates and fair value. The Euro notional fair value represents the contracted amount valued at September 30, 2003 rates.

Forward contracts to sell foreign currencies for Euro (in thousands, except contract rates):

		Euro Notional Contract	
_	Average Contract Rate	Value	Euro Notional Fair Value
Fair Value Hedges:			
Japanese Yen	126.6400	1,761	1,744
U.S. Dollar	1.0967	5,593	5,351
Cash Flow Hedges:			
Japanese Yen	126.6400	213	211

### **Equity Security Price Risk**

We have investments in publicly-traded equity securities. As we account for these securities as available-for-sale, unrealized gains and losses resulting from changes in the fair value of these securities are reflected in stockholders' equity, and not reflected in earnings until the securities are sold or a decline in value is determined to be other-than-temporary. A 20% adverse change in equity prices would result in an approximate \$0.1 million decrease in the fair value of our available-for-sale equity investments as of September 30, 2003.

The market value of our equity investments is primarily comprised of our Lumenis shares, which declined to \$20.2 million as of June 29, 2002 from its initial valuation of \$124.4 million in April 2001 and its value of \$109.1 million at September 29, 2001. During the third quarter of fiscal 2002, we determined that the decline in the market value of our investment in Lumenis as of June 29, 2002 was other-than-temporary and, as a result, we recognized a pretax loss of \$104.2 million to reflect this other-than-temporary decline in market value. During the first quarter of fiscal 2003, we determined that decline from the market value of \$20.2 million at June 29, 2002 to \$9.9 million at December 28, 2002 was other-than-temporary and, as a result, we recognized a pretax loss of \$10.2 million to reflect this other-than-temporary decline in market value. During the third and fourth quarters of fiscal 2003, we sold 5,217,099 shares of Lumenis common stock for approximately \$11.0 million while recognizing a gain of \$1.5 million. The market value of our remaining investment in Lumenis (215,000 shares) was \$0.3 million with an associated cost basis of \$0.4 million as of September 30, 2003. This decline was deemed to be temporary and no impairment loss was recognized in the fourth quarter of fiscal 2003. In the first quarter of fiscal 2004, we sold our remaining shares of Lumenis common stock for approximately \$0.5 million while recognizing a gain of \$0.1 million.

#### ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

See Item 15 (a) for an index to the Consolidated Financial Statements and Supplementary Financial Information, which are attached hereto and incorporated by reference herein.

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

None.

#### ITEM 9A. CONTROLS AND PROCEDURES

# Evaluation of disclosure controls and procedures

Our management evaluated, with the participation of our Chief Executive Officer and our Chief Financial Officer, the effectiveness of our disclosure controls and procedures as of the end of the period covered by this Annual Report on Form 10-K. Based on this evaluation, our Chief Executive Officer and our Chief Financial Officer have concluded that our disclosure controls and procedures are effective to ensure that information we are required to disclose in reports that we file or submit under the Securities Exchange Act of 1934 is recorded, processed, summarized and reported within the time periods specified in SEC rules and forms.

# Changes in internal controls over financial reporting

There was no change in our internal controls over financial reporting that occurred during the fourth fiscal quarter of fiscal 2003 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

#### PART III

#### ITEM 10. DIRECTORS AND EXECUTIVE OFFICERS OF THE REGISTRANT

Information regarding our directors will either be set forth under the caption "Election of Directors—Nominees" in our proxy statement for use in connection with the Annual Meeting of Stockholders to be held on March 25, 2004 (the "2003 Proxy Statement") and is incorporated herein by reference or included in Form 10-K/A as an amendment to our Form 10-K for the fiscal year ended September 27, 2003. The 2003 Proxy Statement or Form 10-K/A will be filed with the Securities and Exchange Commission within 120 days after the end of our fiscal year.

Set forth below is the name, age, position and a brief account of the business experience of each of our executive officers:

Age	Office Held
42	President and Chief Executive Officer
51	Executive Vice President and Chief Financial Officer
56	Executive Vice President and Chief Marketing Officer
47	Executive Vice President and Chief Information Officer
58	Executive Vice President, Human Resources
58	Senior Vice President, Treasurer and Assistant Secretary
49	Senior Vice President and General Counsel
	42 51 56 47 58 58

There are no family relationships between any of the executive officers and directors.

Dr. Ambroseo has served as our President and Chief Executive Officer, as well as a member of the Board of Directors since October 2002. Dr. Ambroseo served as our Chief Operating Officer from June 2001 through September 2002. Dr. Ambroseo served as our Executive Vice President and as President and General Manager of the Coherent Photonics Group from September 2000 to June 2001. From September 1997 to September 2000, Dr. Ambroseo served as our Executive Vice President and as President and General Manager of the Coherent Laser Group. From March 1997 to September 1997, Dr. Ambroseo served as our Scientific Business Unit Manager. From August 1988, when Dr. Ambroseo joined us, until March 1997, he served as a Sales Engineer, Product Marketing Manager, National Sales Manager and Director of European Operations. Dr. Ambroseo received his PhD in Chemistry from the University of Pennsylvania.

Ms. Simonet has served as our Executive Vice President and Chief Financial Officer since April 2002. Ms. Simonet served as Vice President of Finance of our former Medical Group and Vice President of Finance, Photonics Division from December 1999 to April 2002. Prior to joining Coherent, she spent over twenty years in senior finance positions at Raychem Corporations' Division and Corporate organizations, including Vice President of Finance of the Raynet Corporation. Her last assignment was that of Chief Information Officer for Raychem. Ms. Simonet has both a Master's and Bachelor degree from the University of Leuvenn, Belgium.

Dr. Fossati-Bellani has served as our Executive Vice President and Chief Marketing Officer since November 2002. Dr. Fossati-Bellani served as our Executive Vice President and as President and General Manager of the Coherent Telecom-Actives Group from September 2000 through November 2002. From September 1997 to September 2000, Dr. Fossati-Bellani served as our Executive Vice President and as President and General Manager of the Coherent Semiconductor Group. From May 1992 to September 1997, Dr. Fossati-Bellani served as our Diode Laser Business Unit Manager. From December 1979, when he joined our Italian office, to May 1992, Dr. Fossati-Bellani served in the capacity of Scientific Sales Engineer, Product Manager, Director of Marketing, Director of Business Development, Scientific Business Unit Manager and Diode Laser Business Unit Manager for the Coherent Laser Group. Dr. Fossati-Bellani received his PhD degree in Physics from the University of Milano, Italy.

Mr. McCarthy has served as our Executive Vice President and Chief Information Officer since May 2000. From August 1999 to May 2000, he was Chief Information Officer for Unisphere Solutions, Inc., a subsidiary of Siemens AG, a large diversified industrial company. From September 1993 to July 1999, he was Vice President Information Technology for General Instrument, Inc., a company that develops and sells interactive video, voice and data products. Mr. McCarthy received a BS degree from Lafayette College and an MBA from the Wharton School of Business.

Mr. Victor has served as our Executive Vice President of Human Resources since May 2000. From August 1999 to May 2000, he was our Corporate Vice President of Human Resources. He was Vice President of Human Resources for the Coherent Medical Group from September 1997 to August 1999. Between November 1996 and September 1997, he was Vice President Human Resources for Netsource Communication, Inc., an internet advertisement and communication company. From November 1995 to November 1996, Mr. Victor served as Vice President of Human Resources for Micronics Computers, Inc., a manufacturer of computer components. Between

January 1982 and September 1995 he was a Vice President of Human Resources at Syntex, a pharmaceutical company. Mr. Victor received a BA degree from American International College and a MA degree from Springfield College.

Mr. Bucek has served as our Senior Vice President, Treasurer and Assistant Secretary since August 1985. He received his BA degree from Mankato State University and is a certified public accountant.

Mr. Miller has served as our General Counsel since October 1988 and as Senior Vice President since March 1994. Mr. Miller received a BA degree in Economics from UCLA and a JD from Stanford Law School.

#### ITEM 11. EXECUTIVE COMPENSATION

Information regarding remuneration of our directors and executive officers will either be set forth under the caption "Election of Directors—Executive Compensation" in our 2003 Proxy Statement and incorporated herein by reference or included in a Form 10-K/A as an amendment to our Form 10-K for the fiscal year ended September 27, 2003. The 2003 Proxy Statement or Form 10-K/A will be filed with the Securities and Exchange Commission within 120 days after the end of our fiscal year.

#### ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

Information regarding security ownership of certain beneficial owners and management will either be set forth under the captions "Information Concerning Solicitation and Voting—Record Date and Share Ownership" and "Election of Directors—Security Ownership of Management" in our 2003 Proxy Statement and incorporated herein by reference or included in a Form 10-K/A as an amendment to our Form 10-K for the fiscal year ended September 27, 2003. The 2003 Proxy Statement or Form 10-K/A will be filed with the Securities and Exchange Commission within 120 days after the end of our fiscal year.

### ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

Information regarding certain relationships and related transactions will either be set forth under the caption "Election of Directors—Certain Transactions" in our 2003 Proxy Statement and incorporated herein by reference or included in a Form 10-K/A as an amendment to our Form 10-K for the fiscal year ended September 27, 2003. The 2003 Proxy Statement or Form 10-K/A will be filed with the Securities and Exchange Commission within 120 days after the end of our fiscal year.

### ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The information required under this item will either be set forth in our 2003 Proxy Statement to be filed with the Securities and Exchange Commission and incorporated herein by reference or included in a Form 10-K/A as an amendment to our Form 10-K for the fiscal year ended September 27, 2003. The 2003 Proxy Statement or Form 10-K/A will be filed with the Securities and Exchange Commission within 120 days after the end of our fiscal year.

# PART IV

# ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES AND FORM 8-K REPORTS

(a)	1. Index to Consolidated Financial Statements	Page
	The following Consolidated Financial Statements of Coherent, Inc. and its subsidiaries are filed as part of this report on Form 10-K:	
	Independent Auditors' Report—Deloitte and Touche LLP	50
	Report of Independent Auditors— Ernst & Young AG Wirtschaftsprüfungsgesellschaft	51
	Consolidated Balance Sheets—September 30, 2003 and 2002	52
	Consolidated Statements of Operations—Years ended September 30, 2003, 2002 and 2001	53
	Consolidated Statements of Stockholders' Equity—Years ended September 30, 2003, 2002 and 2001	54
	Consolidated Statements of Cash Flows—Years ended September 30, 2003, 2002 and 2001	55
	Notes to Consolidated Financial Statements	57
	Quarterly Financial Information (Unaudited)	83
	2. Consolidated Financial Statement Schedules	
	Schedule II—Valuation and Qualifying Accounts	84
	Schedules not listed above have been omitted because the matter or conditions are not present or the information required to be set forth therein is included in the Consolidated Financial Statements hereto.	
Exhibit Numbers	3. Exhibits	
2.1*	Agreement and Plan of Merger. (Previously filed as Exhibit 2.1 to Form 10-K for the fiscal year ended September 29, 19	990)
3.1*	Restated and Amended Certificate of Incorporation. (Previously filed as Exhibit 3.1 to Form 10-K for the fiscal year end September 29, 1990)	led
3.2*	Certificate of Amendment of Restated and Amended Certificate of Incorporation of Coherent, Inc. (Previously filed as Exhibit 3.2 to Form 10-K for the fiscal year ended September 28, 2002)	
4.1*	Amended and Restated Common Shares Rights Agreement dated November 2, 1989 between Coherent and the Bank of Boston. (Previously filed as Exhibit 4.1 to Form 8-K filed on November 3, 1989.)	f
10.1*‡	Productivity Incentive Plan, as amended. (Previously filed as Exhibit 10.19 to Form 10-K for the fiscal year ended Octo 1988)	ber 1,
10.2*‡	Employee Stock Purchase Plan, as amended. (Previously filed as Exhibit 10.11 to Form 10-K for the fiscal year ended September 29, 2001)	
10.3*‡	Coherent Employee Retirement and Investment Plan. (Previously filed as Exhibit 10.23 to Form 8, Amendment No. 1 to Annual Report on Form 10-K for the fiscal year ended September 25, 1982)	)
10.4*‡	1995 Stock Plan and forms of agreement. (Previously filed as Exhibit 10.34 to Form 10-K for the fiscal year ended Sept 28, 1996)	ember

#### Exhibit Numbers

- 10.5\* Note Purchase Agreement by and between Coherent, Inc. and the purchasers of \$70 million series notes dated May 18, 1999. (Previously filed as Exhibit 10.36 to Form 10-K for the fiscal year ended October 2, 1999)
- 10.6\*‡ 1998 Director Option Plan. (Previously filed as Exhibit 10.37 to Form 10-K for the fiscal year ended September 30, 2000)
- 10.7\* Asset Purchase Agreement by and among ESC Medical Systems, Ltd., Energy Systems Holdings, Inc., and Coherent, Inc., dated as of February 25, 2001. (Previously filed as Exhibit 2.1 to Form 8-K filed on March 5, 2001)
- 10.8\* First amendment to Asset Purchase Agreement by and among ESC Medical Systems, Ltd., Energy Systems Holdings, Inc., and Coherent, Inc., dated as of April 30, 2001. (Previously filed as Exhibit 4 to Schedule 13 D/A filed on May 10, 2001)
- 10.9\* Registration Rights Agreement by and among ESC Medical Systems, Ltd. and Coherent, Inc., dated as of April 30, 2001. (Previously filed as Exhibit 10.3 to Form 10-Q for the quarter ended March 31, 2001)
- 10.10\*: 1990 Directors' Stock Option Plan. (Previously filed as Exhibit 10.1 to Form S-8 filed on May 1, 1996)
- 10.11\* Master Lease and Security Agreement between SMBC Leasing and Finance, Inc. and Coherent, Inc. (Previously filed as Exhibit 10.12 to Form 10-Q for the quarter ended June 29, 2002)
- 10.12\*‡ Coherent, Inc. Management Transition Agreement by and between Coherent, Inc. and Bernard J. Couillaud. (Previously filed as Exhibit 10.13 to Form 10-K for the year ended September 28, 2002)
- 10.13\*‡ Coherent, Inc. Management Transition Agreement by and between Coherent, Inc. and Robert J. Quillinan. (Previously filed as Exhibit 10.14 to Form 10-K for the year ended September 28, 2002)
- 10.14‡ 2001 Stock Plan.
  - 21.1 Subsidiaries
  - 23.1 Consent of Deloitte & Touche LLP
  - 23.2 Consent of Ernst & Young AG Wirtschaftsprüfungsgesellschaft
  - 24.1 Power of Attorney (see signature page).
  - 31.1 Certification of Chief Executive Officer pursuant to Exchange Act Rule 13a-14(a)/15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
  - 31.2 Certification of Chief Financial Officer pursuant to Exchange Act Rule 13a-14(a)/15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
  - 32.1 Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
  - 32.2 Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
- \* These exhibits were previously filed with the Commission as indicated and are incorporated herein by reference.
- ‡ Identifies management contract or compensatory plans or arrangements required to be filed as an exhibit.

### (b) Reports on Form 8-K

- 1. On October 23, 2003 the Company furnished a Current Report on Form 8-K under Item 12 (Results of Operations and Financial Condition) disclosing the issuance of a press release regarding revisions to its financial guidance for the quarter ended September 27, 2003.
- 2. On November 12, 2003, the Company furnished a Current Report on Form 8-K under Item 12 (Results of Operations and Financial Condition) disclosing the issuance of a press release announcing its financial results for the quarter and year ended September 27, 2003.

# **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 on December 18, 2003.

COHERENT, INC.

/s/ JOHN R. AMBROSEO

By: John R. Ambroseo President and Chief Executive Officer

# POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints John Ambroseo and Helene Simonet, jointly and severally, his or her attorneys-in-fact, each with the power of substitution for him or her in any and all capacities, to sign any amendments to this report, and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, hereby ratifying and confirming that each of said attorneys-in-fact, or his or her 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:

/s/JOHN R. AMBROSEO	December 18, 2003
John R. Ambroseo	Date
(Director, President & Chief Executive Officer)	
/s/HELENE SIMONET	December 18, 2003
Helene Simonet	Date
(Executive Vice President & Chief Financial Officer)	
/s/BERNARD J. COUILLAUD	December 18, 2003
Bernard J. Couillaud	Date
(Director, Chairman of the Board)	
/s/HENRY E. GAUTHIER	December 18, 2003
Henry E. Gauthier	Date
(Director, Vice Chairman of the Board)	
/s/CHARLES W. CANTONI	December 18, 2003
Charles W. Cantoni	Date
(Director)	
/s/FRANK CARRUBBA	December 18, 2003
Frank Carrubba	Date
(Director)	
/s/JERRY E. ROBERTSON	December 18, 2003
Jerry E. Robertson	Date
(Director)	
/s/JOHN H. HART	December 18, 2003
John H. Hart	Date
(Director)	
/s/ROBERT J. QUILLINAN	December 18, 2003
Robert J. Quillinan	Date
(Director)	
/s/LAWRENCE TOMLINSON	December 18, 2003
Lawrence Tomlinson	Date
(Director)	

#### INDEPENDENT AUDITORS' REPORT

To the Stockholders and Board of Directors of Coherent, Inc.:

We have audited the accompanying consolidated balance sheets of Coherent, Inc. and subsidiaries as of September 30, 2003 and 2002, and the related consolidated statements of operations, stockholders' equity, and cash flows for each of the three years in the period ended September 30, 2003. Our audits also included the consolidated financial statement schedule listed in Item 15(a)2. These financial statements and the financial statement schedule are the responsibility of Coherent's management. Our responsibility is to express an opinion on these financial statements and the financial statement schedule based on our audits. We did not audit the consolidated financial statements of Lambda Physik AG and subsidiaries (Lambda Physik) for the years ended September 30, 2003, 2002 and 2001, which statements reflect total assets constituting 22% and 19% in 2003 and 2002 and total revenues constituting 20%, 23% and 26% in 2003, 2002 and 2001, respectively, of the related consolidated totals. Those statements were audited by other auditors whose report has been furnished to us, and our opinion, insofar as it relates to the amounts included for Lambda Physik for the years ended September 30, 2003, 2002 and 2001, is based solely on the report of such other auditors.

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 financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits and the report of the other auditors provide a reasonable basis for our opinion.

In our opinion, based on our audits and the report of the other auditors, such consolidated financial statements present fairly, in all material respects, the financial position of Coherent, Inc. and subsidiaries as of September 30, 2003 and 2002, and the results of their operations and their cash flows for each of the three years in the period ended September 30, 2003 in conformity with accounting principles generally accepted in the United States of America. Also, in our opinion, based on our audits and the report of the other auditors, such 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 therein.

/s/ DELOITTE & TOUCHE LLP

San Jose, California December 17, 2003

#### REPORT OF INDEPENDENT AUDITORS

To the Stockholders and the Supervisory Board of Lambda Physik AG:

We have audited the accompanying consolidated balance sheets of Lambda Physik AG (a subsidiary of Coherent, Inc.) as of September 30, 2003 (new basis), and September 30, 2002 (old basis), and the related consolidated statements of operations, cash flows and changes in stockholders' equity for the new basis period from July 27, 2003 to September 30, 2003, and the old basis period from October 1, 2002 to July 26, 2003, and for each of the two years in the period ended September 30, 2002 (not presented separately herein). These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

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

In our opinion, the financial statements referred to above (not presented separately herein) present fairly, in all material respects, the consolidated financial position of Lambda Physik AG at September 30, 2003 (new basis), and September 30, 2002 (old basis), and the consolidated results of its operations and its cash flows for the new basis period from July 27, 2003, to September 30, 2003, the old basis period from October 1, 2002, to July 26, 2003, and each of the two years in the period ended September 30, 2002, in conformity with accounting principles generally accepted in the United States.

As described in Note 2 to the financial statements, the Company applied "push down" accounting on July 26, 2003, to reflect its parent company's basis in the Company's assets and liabilities. Period subsequent to July 26, 2003, are referred to as "new basis" while those periods prior to July 26, 2003, are referred to as "old basis" periods.

Ernst & Young AG Wirtschaftsprüfungsgesellschaft

Hentschel Boelsems

November 5, 2003 Hanover, Germany

# COHERENT, INC. AND SUBSIDIARIES CONSOLIDATED BALANCE SHEETS

(In thousands, except par value)

	September 30, 2003	September 30, 2002
ASSETS		
Current assets:		
Cash and cash equivalents (Note 11)	\$ 76,541	\$131,018
Restricted cash, cash equivalents and short-term investments	15,284	-
Short-term investments (Note 11)	58,407	133,940
Accounts receivable—net of allowances of \$4,151 in 2003 and \$4,038 in 2002	73,118	76,478
Inventories	100,147	89,218
Prepaid expenses and other assets	45,693	39,286
Deferred tax assets	29,792	55,883
Total current assets	398,982	525,823
Property and equipment, net	146,399	172,001
Restricted cash, cash equivalents and short-term investments	38,660	_
Goodwill, net	50,952	31,600
Intangible assets, net	40,327	23,555
Other assets	34,045	51,278
	\$709,365	\$804,257
LIABILITIES AND STOCKHOLDERS' EQUITY  Current liabilities: Short-term borrowings	\$ -	\$14,811
Current portion of long-term obligations.	14,140	14,887
Accounts payable	17,632	13,757
Income taxes payable	1,361	1,274
Other current liabilities	67,980	53,478
Total current liabilities	101,113	98,207
Long-term obligations	27,911	43,345
Other long-term liabilities	29,008	55,860
Minority interest in subsidiaries	7,475	49,602
Commitments and contingencies (Note 11)		
Stockholders' equity:		
Common stock, par value \$.01: Authorized—500,000 shares		
Outstanding—29,939 shares in 2003 and 29,042 shares in 2002	298	289
Additional paid-in capital	299,378	284.182
Notes receivable from stock sales	(793)	(2,045)
Accumulated other comprehensive income	18,409	2,360
Retained earnings	226,566	272,457
Total stockholders' equity	543,858	557,243
	\$709,365	\$804,257
<del>-</del>	4.0.,00	\$55., <b>2</b> 57

See accompanying Notes to Consolidated Financial Statements.

# COHERENT, INC. AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF OPERATIONS

(In thousands, except per share data)

	Years Ended September 30,		
	2003	2002	2001
Net sales	\$ 406,235	\$397,324	\$477,945
Cost of sales	257,467	236,318	278,172
Gross profit		161,006	199,773
Operating expenses:			,
Research and development.	50,751	52,613	52,961
In-process research and development	6,338	-	2,471
Selling, general and administrative	103,929	94,114	104,746
Restructuring, impairment and other charges	35,163	11,015	-
Intangibles amortization		3,427	5,262
Total operating expenses	201,328	161,169	165,440
Income (loss) from operations	(52,560)	(163)	34,333
Other income (expense):	(02,000)	(105)	2 .,222
Interest and dividend income	5,371	10,058	13,291
Interest expense.	(3,878)	(5,315)	(5,089)
Foreign exchange loss	(1,815)	(942)	(1,374)
Write-down of Lumenis investment	(10,212)	(104,237)	(1,5 / 1)
Other—net	5,680	3,017	2,021
Total other income (expense), net	(4,854)	(97,419)	8,849
Income (loss) from continuing operations before income taxes and minority interest	(57,414)	(97,582)	43,182
Provision (benefit) for income taxes	(6,640)	(27,172)	15,156
Income (loss) from continuing operations before minority interest	(50,774)	(70,410)	28,026
Minority interest in subsidiaries' (earnings) losses	4,241	(427)	(541)
Income (loss) from continuing operations.	(46,533)	(70,837)	27,485
Discontinued operations, net of income taxes (Note 3):	(40,555)	(70,037)	27,103
Gain on disposal of Medical segment	642	1,869	74,690
Income (loss) from discontinued Medical segment.		-	(1,479)
Income (loss) before accounting changes	(45,891)	(68,968)	100,696
Cumulative effect of accounting change (net of income tax of \$36)		(00,700)	54
Net income (loss)	\$(45,891)	\$(68,968)	\$100,750
Tet income (1088)	φ(+3,071)	\$(00,500)	\$100,730
Net income (loss) per basic share:			
Income (loss) from continuing operations	<b>\$(1.58)</b>	\$(2.46)	\$0.99
Income from discontinued operations, net of income taxes		0.06	2.65
Net income (loss)	\$(1.56)	\$(2.40)	\$3.64
Net income (loss) per diluted share:			
Income (loss) from continuing operations	<b>\$(1.58)</b>	\$(2.46)	\$0.95
Income from discontinued operations, net of income taxes	0.02	0.06	2.55
Net income (loss)	\$(1.56)	\$(2.40)	\$3.50
Shares used in computation:			
Basic	29,448	28,786	27,709
Diluted	29,448	28,786	28,817

See accompanying Notes to Consolidated Financial Statements.

# COHERENT, INC. AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY

# Years ended September 30, 2003, 2002 and 2001 (In thousands)

	Common Stock <u>Shares</u>	Common Stock Par <u>Value</u>	Add. Paid-in <u>Capital</u>	Notes Rec. From Stock <u>Sales</u>	Retained <u>Earnings</u>	Accum. Other Comp. Income (Loss)	<u>Total</u>
Balances, October 1, 2000	27,102	\$270	\$227,973	\$(1,392)	\$240,675	\$(5,757)	\$461,769
Components of comprehensive income:							
Net income					100,750		100,750
Translation adjustment, net of tax						2,484	2,484
Unrealized loss on available for sale securities, net of tax						(10,199)	(10,199)
SFAS No. 133 transition adjustment, net of tax						(275)	(275)
Net gain on derivative instruments, net of tax						322	322
Total comprehensive income							93,082
Stock-based compensation charge (see Note 3)			12,860				12,860
Sales of shares under Employee Stock Option Plan		10	16,287	(308)			15,989
Productivity Incentive Plan distributions			861				861
Sales of shares under Employee Stock Purchase Plan		3	5,511				5,514
Tax benefit of Employee Stock Option Plan			7,381	020			7,381
Collection of notes receivable				839		(12.125)	839
Balances, September 30, 2001	28,426	283	270,873	(861)	341,425	(13,425)	598,295
Components of comprehensive loss:					((0,0(0)		((0,0(0)
Net loss					(68,968)	5 252	(68,968)
Translation adjustment, net of tax						5,352 10,718	5,352 10,718
Unrealized gain on available for sale securities, net of tax						(285)	,
Net loss on derivative instruments, net of tax						(283)	(285)
Total comprehensive loss  Issuance of common stock for repayment of acquisition							(53,183)
obligation	. 59	1	1,251				1,252
Sales of shares under Employee Stock Option Plan		3	5,170	(1,250)			3,923
Productivity Incentive Plan distributions		3	98	(1,230)			3,923 98
Sales of shares under Employee Stock Purchase Plan		2	5,643				5,645
Tax benefit of Employee Stock Option Plan		2	1,147				1,147
Collection of notes receivable			1,14/	66			66
Balances, September 30, 2002		289	284,182	(2,045)	272,457	2,360	557,243
Components of comprehensive loss:	27,042	207	204,102	(2,043)	212,431	2,300	331,243
Net loss					(45,891)		(45,891)
Translation adjustment, net of tax					(13,071)	16,719	16,719
Unrealized loss on available for sale securities, net of tax						(780)	(780)
Net gain on derivative instruments, net of tax						110	110
Total comprehensive loss						110	(29,842)
Issuance of stock options in exchange for services			43				43
Sales of shares under Employee Stock Option Plan		6	9,042				9,048
Productivity Incentive Plan distributions		· ·	123				123
Sales of shares under Employee Stock Purchase Plan		3	4,110				4,113
Tax benefit of Employee Stock Option Plan			1,878				1,878
Collection of notes receivable			-,	1,252			1,252
Balances, September 30, 2003	29,939	\$298	\$299,378	\$ (793)	\$226,566	\$18,409	\$543,858

See accompanying Notes to Consolidated Financial Statements.

# COHERENT, INC. AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF CASH FLOWS (In thousands)

Cash flows from continuing operating activities:   Income (loss) from continuing operations after accounting changes   \$(46,538)   \$(70,837)   \$27,539   \$(70,837)   \$(70,83		Year		
Income (loss) from continuing operations after accounting changes   Adjustments to reconcile income (loss) from continuing operations after accounting changes to net cash provided by (used in) continuing operating activities:    Purchased in-process research and development   6,338   - 2,471     Other non-cash expense   43   - 1,327     Purchases of short-term trading investments   (210,242)   (155,556)   (354,138)     Proceeds from sales of short-term trading investments   (178,241   192,030   304,464     Write-down of Lumenis investment   (1,481)   - 1   - 1     Gain on sale of Lumenis investment   (1,481)   - 1   - 1     Cumulative effect of accounting changes   26,800   11,015   - 1     Cumulative effect of accounting changes   29,002   24,078   20,335     Intangibles amortization   5,147   3,427   5,262     Issuance of common stock under Productivity Incentive Plan   123   98   861     Deferred income taxes   3,511   (30,287)   (11,915)     Minority interest in subsidiaries' earnings   (4,241)   427   541     Dividends paid to minority stockholders   (265)   (186)   - 1     Equity in (income) loss of joint ventures   1,927   1,284   (314)     Changes in assets and liabilities   (4,241)   (4,241)   (4,241)     Inventories   4,866   24,529   (18,961)     Prepaid expenses and other assets   87   1,365   (2,608)     Accounts receivable   1,112   (8,330)   (7,024)     Income taxes payable   1,224   (2,971)   (1,4637)     Other current liabilities   (25,678)   (39,930)   (94,523)     Proceeds from dispositions of property and equipment   12,732   5,002   7,756     Purchases of property and equipment   (25,678)   (39,930)   (94,523)     Proceeds from dispositions of property and equipment   12,732   5,002   7,756     Purchases of property and equipment   (25,678)   (39,930)   (94,523)     Proceeds from sales of Madical segment, net   (25,678)   (39,930)   (30,930)   (30,930)     Increase in restricted cash, cash equivalents and short-term investments   (35,506)   (30,00)   (30,00)   (30,00)   (30,00)   (30,00)		2003	2002	2001
Adjustments to reconcile income (loss) from continuing operations after accounting changes to net eash provided by (used in) continuing operating activities:  Purchased in-process research and development				
accounting changes to net cash provided by (used in) continuing operating activities:  Purchased in-process research and development.  Other non-cash expense.  43 - 2,471 Other non-cash expense.  43 - 1,327 Purchases of short-term trading investments.  Proceeds from sales of short-term trading investments.  Proceeds from sales of short-term trading investments.  10,212 104,237 - Gain on sale of Lumenis investment.  (14,81) - 1,0212 104,237 - Gain on sale of Lumenis investment.  (14,81) - 1,0212 104,237 - Gain on sale of Lumenis investment.  Non-cash restructuring, impariment and other charges.  Cumulative effect of accounting changes.  Cumulative effect of accounting changes.  Cumulative effect of accounting changes.  Depreciation and amortization.  5,147 3,427 5,262 Issuance of common stock under Productivity Incentive Plan.  123 98 861 Deferred income taxes.  3,511 (30,287) (11,915) Minority interest in subsidiaries' carnings.  (4,241) 427 541 Dividends paid to minority stockholders.  Equity in (income) loss of joint ventures.  Accounts receivable.  Accounts receivable.  Accounts receivable.  Accounts receivable.  Accounts receivable.  Accounts receivable.  Accounts payable.  Accounts paya		\$(46,533)	\$(70,837)	\$27,539
Operating activities:   Purchased in-process research and development.   6,338   - 1,327     Other non-cash expense   43   - 1,327     Purchases of short-term trading investments   (210,242)   (155,556)   (354,138)     Proceeds from sales of short-term trading investments   178,241   192,030   304,644     Write-down of Lumenis investment   10,212   104,237   - 1     Gain on sale of Lumenis investment   (1,481)   -     -       Non-cash restructuring, impairment and other charges   26,800   11,015   -       Cumulative effect of accounting changes   -     -     (54)     Depreciation and amortization   29,002   24,078   20,335     Intangibles amortization   5,147   3,427   5,262     Issuance of common stock under Productivity Incentive Plan   123   98   861     Deferred income taxes   3,511   (30,287)   (11,915)     Minority interest in subsidiaries' earnings   (4,241)   427   541     Dividends paid to minority stockholders   (265)   (186)   -     Equity in (income) loss of joint ventures   1,927   1,284   (314)     Changes in assets and liabilities:   (265)   (186)   -     Accounts receivable   11,835   15,334   (14,471)     Inventories   4,866   24,529   (18,961)     Prepaid expenses and other assets   11,112   (8,330)   (7,024)     Income taxes payable   1,112   (8,330)   (7,024)     Income taxes payable   1,112   (8,330)   (7,024)     Income taxes payable   1,112   (8,330)   (7,024)     Other current liabilities   (25,678)   (39,930)   (94,523)     Proceeds from investing activities   (25,678)   (39,930)   (94,523)     Proceeds from sales and maturities of available-for-sale securities   275,835   -   (42,895)     Proceeds from sales and maturities of available-for-sale securities   275,835   -   (42,895)     Proceeds from sales and maturities of available-for-sale securities   275,835   -   (42,895)     Proceeds from sales and maturities of available-for-sale securities   (53,806)   -     (40,897)     Issuance of note receivable from Picometrix   -   (60,000)   -   (60,000)   -   (7,566)   (7,566)   (7,566)				
Purchased in-process research and development.         6,338         -         2,471           Other non-cash expensee.         43         1,327           Purchases of short-term trading investments         (210,242)         (155,556)         (354,318)           Proceeds from sales of short-term trading investments         178,241         192,030         304,464           Write-down of Lumenis investment         10,212         104,237         -           Gain on sale of Lumenis investment         (1,481)         -         -           Non-cash restructuring, impairment and other charges         26,800         11,015         -           Cumulative effect of accounting changes         -         -         (54)           Depreciation and amortization         29,002         24,078         20,335           Intangibles amortization         5,147         3,427         5,262           Issuance of common stock under Productivity Incentive Plan         123         98         861           Deferred income taxes         3,511         (30,287)         (11,915)           Minority interest in subsidiaries' earnings         (4,241)         427         541           Dividends paid to minority stockholders         (265)         (186)         -           Equity in (income) loss of joint ven				
Other non-cash expense.         43         -         1,327           Purchases of short-term trading investments         (210,242)         (155,55)         (354,138)           Proceeds from sales of short-term trading investments         178,241         192,030         304,464           Write-down of Lumenis investment.         (10,212         104,237         -           Gain on sale of Lumenis investment.         (1,481)         -         -           Non-cash restructuring, impairment and other charges         26,800         11,015         -           Cumulative effect of accounting changes         -         -         (54)           Depreciation and amortization         29,002         24,078         20,335           Intagibles amortization         5,147         3,427         5,262           Issuance of common stock under Productivity Incentive Plan         123         98         861           Deferred income taxes         3,511         (30,287)         (11,915)           Minority interest in subsidiaries' earnings         (4,241)         427         541           Dividends paid to minority stockholders         (265)         (186)	1 0			
Purchases of short-term trading investments         (210,242)         (155,556)         (354,138)           Proceeds from sales of short-term trading investments         178,241         192,030         304,664           Write-down of Lumenis investment         10,212         104,237         -           Gain on sale of Lumenis investment         (1,481)         -         -           Non-cash restructuring, impairment and other charges         26,800         11,015         -           Cumulative effect of accounting changes         -         -         (54)           Depreciation and amortization         29,002         24,078         20,335           Intangibles amortization         5,147         3,427         5,262           Issuance of common stock under Productivity Incentive Plan         123         98         861           Deferred income taxes         3,511         (30,287)         (11,915)           Minority interest in subsidiaries' earnings         (4,241)         427         541           Dividends paid to minority stockholders         (265)         (186)         -           Equity in (income) loss of joint ventures         19,27         1,284         (314)           Changes in assets and liabilities:         11,835         15,334         (14,471)	Purchased in-process research and development	6,338	-	2,471
Proceeds from sales of short-term trading investments         178,241         192,030         304,464           Write-down of Lumenis investment         10,212         104,237         -           Gain on sale of Lumenis investment         (1,481)         -         -           Non-cash restructuring, impairment and other charges         26,800         11,015         -           Cumulative effect of accounting changes         -         -         (54)           Depreciation and amortization         29,002         24,078         20,335           Intangibles amortization         5,147         3,427         5,262           Issuance of common stock under Productivity Incentive Plan         123         98         861           Deferred income taxes         3,3511         (30,287)         (11,915)           Minority interest in subsidiaries' earnings         (4,241)         427         541           Dividends paid to minority stockholders         (265)         (186)         -           Equity in (income) loss of joint ventures         1,227         1,284         (314)           Changes in assets and liabilities         3         11,355         15,334         (14,471)           Inventories         4,866         24,529         (18,961)           Prepaid expenses		43	-	1,327
Write-down of Lumenis investment         10,212         104,237           Gain on sale of Lumenis investment         (1,481)         -           Non-cash restructuring, impairment and other charges         26,800         11,015           Cumulative effect of accounting changes         -         -         -           Depreciation and amortization         29,002         24,078         20,335           Intangibles amortization         51,47         3,427         5,262           Issuance of common stock under Productivity Incentive Plan         123         98         861           Deferred income taxes         3,511         (30,287)         (11,915)           Minority interest in subsidiaries' earnings         (4,241)         427         541           Dividends paid to minority stockholders         (265)         (186)         -           Equity in (income) loss of joint ventures         1,927         1,284         (314)           Changes in assets and liabilities:         1,227         1,284         (314)           Accounts receivable         11,835         15,334         (14,471)           Inventories         4,866         24,529         (18,961)           Prepaid expenses and other assets         87         1,365         (2,608) <t< td=""><td>Purchases of short-term trading investments</td><td>(210,242)</td><td>(155,556)</td><td>(354,138)</td></t<>	Purchases of short-term trading investments	(210,242)	(155,556)	(354,138)
Gain on sale of Lumenis investment         (1,481)         -           Non-cash restructuring, impairment and other charges         26,800         11,015         -           Cumulative effect of accounting changes         -         -         (54)           Depreciation and amortization         29,002         24,078         20,335           Intangibles amortization         5,147         3,427         5,262           Issuance of common stock under Productivity Incentive Plan         123         98         861           Deferred income taxes         3,511         (30,287)         (11,915)           Minority interest in subsidiaries' earnings         (4,241)         427         541           Dividends paid to minority stockholders         (265)         (186)         -           Equity in (income) loss of joint ventures         1,927         1,284         (314)           Changes in assets and liabilities:         3,511         (30,287)         (14,471)           Accounts receivable         11,835         15,334         (14,471)           Inventories         4,866         24,529         (18,961)           Prepaid expenses and other assets         87         1,365         (2,608)           Accounts payable         1,112         (8,330)         (7,024	Proceeds from sales of short-term trading investments	178,241	192,030	304,464
Non-cash restructuring, impairment and other charges         26,800         11,015           Cumulative effect of accounting changes         -         -         -         (54)           Depreciation and amortization         29,002         24,078         20,335           Intangibles amortization         5,147         3,427         5,262           Issuance of common stock under Productivity Incentive Plan         123         98         861           Deferred income taxes         3,511         (30,287)         (11,915)           Minority interest in subsidiaries' carnings         (4,241)         427         541           Dividends paid to minority stockholders         (265)         (186)         -           Equity in (income) loss of joint ventures         1,927         1,284         (314)           Changes in assets and liabilities:         3         1,122         (2,618)           Accounts receivable         11,835         15,334         (14,471)           Inventories         4,866         24,529         (18,961)           Prepaid expenses and other assets         87         1,365         (2,608)           Accounts payable         1,112         (8,330)         (7,024)           Income taxes payable         2,124         (2,971) <td< td=""><td>Write-down of Lumenis investment</td><td>10,212</td><td>104,237</td><td>=</td></td<>	Write-down of Lumenis investment	10,212	104,237	=
Cumulative effect of accounting changes         -         (54)           Depreciation and amortization.         29,002         24,078         20,335           Intangibles amortization.         5,147         3,427         5,262           Issuance of common stock under Productivity Incentive Plan         123         98         861           Deferred income taxes         3,511         (30,287)         (11,915)           Minority interest in subsidiaries' carnings         (4,241)         427         541           Dividends paid to minority stockholders         (265)         (186)         -           Equity in (income) loss of joint ventures         1,927         1,284         (314)           Changes in assets and liabilities:         1,927         1,284         (314)           Changes in assets and liabilities:         3,581         15,334         (14,471)           Inventories         4,866         24,529         (18,961)           Prepaid expenses and other assets.         87         1,365         (2,608)           Accounts payable.         1,124         (8,330)         (7,024)           Income taxes payable assets payable.         1,224         (2,971)         (14,637)           Otter current liabilities.         3,508         (7,882)         6	Gain on sale of Lumenis investment	(1,481)	-	-
Depreciation and amortization   29,002   24,078   20,335     Intangibles amortization   5,147   3,427   5,262     Issuance of common stock under Productivity Incentive Plan   123   98   861     Deferred income taxes   3,511   (30,287)   (11,915)     Minority interest in subsidiaries' earnings   (4,241)   427   541     Dividends paid to minority stockholders   (265)   (186)       Equity in (income) loss of joint ventures   1,927   1,284   (314)     Changes in assets and liabilities:	Non-cash restructuring, impairment and other charges	26,800	11,015	-
Intangibles amortization	Cumulative effect of accounting changes	-	-	(54)
Issuance of common stock under Productivity Incentive Plan         123         98         861           Deferred income taxes         3,511         (30,287)         (11,915)           Minority interest in subsidiaries' earnings         (4,241)         427         541           Dividends paid to minority stockholders         (265)         (186)         -           Equity in (income) loss of joint ventures         1,927         1,284         (314)           Changes in assets and liabilities:         3,511         15,334         (14,471)           Inventories         4,866         24,529         (18,961)           Prepaid expenses and other assets.         87         1,365         (2,608)           Accounts payable.         1,112         (8,330)         (7,024)           Income taxes payable.         1,122         (8,30)         (7,024)           Income taxes payable used in) continuing operating activities.         3,508         (7,882)         6,590           Net cash provided by (used in) continuing operating activities.         21,214         101,775         (54,732)           Purchases of property and equipment.         (25,678)         (39,930)         (94,523)           Proceeds from dispositions of property and equipment.         12,732         5,002         7,756	Depreciation and amortization	29,002	24,078	20,335
Deferred income taxes         3,511         (30,287)         (11,915)           Minority interest in subsidiaries' earnings         (4,241)         427         541           Dividends paid to minority stockholders         (265)         (186)         -           Equity in (income) loss of joint ventures         1,927         1,284         (314)           Changes in assets and liabilities:         T         1,285         15,334         (14,471)           Inventories         4,866         24,529         (18,961)           Prepaid expenses and other assets         87         1,365         (2,608)           Accounts payable         1,112         (8,330)         (7,024)           Income taxes payable         1,112         (8,330)         (7,024)           Income taxes payable         1,224         (2,971)         (14,637)           Other current liabilities         3,508         (7,882)         6,590           Net cash provided by (used in) continuing operating activities         21,214         101,775         (54,732)           Cash flows from investing activities:         2         3,508         (39,930)         (94,523)           Proceeds from dispositions of property and equipment         (25,678)         (39,930)         (94,523)           Proc	Intangibles amortization	5,147	3,427	5,262
Minority interest in subsidiaries' earnings         (4,241)         427         541           Dividends paid to minority stockholders         (265)         (186)         -           Equity in (income) loss of joint ventures         1,927         1,284         (314)           Changes in assets and liabilities:         3,927         1,284         (14,471)           Inventories receivable         11,835         15,334         (14,471)           Inventories         4,866         24,529         (18,961)           Prepaid expenses and other assets         87         1,365         (2,608)           Accounts payable         1,112         (8,330)         (7,024)           Income taxes payable         1,124         (2,971)         (14,637)           Other current liabilities         3,508         (7,882)         6,590           Net cash provided by (used in) continuing operating activities         21,214         101,775         (54,732)           Cash flows from investing activities:         Purchases of property and equipment         (25,678)         (39,930)         (94,523)           Proceeds from dispositions of property and equipment         12,732         5,002         7,756           Purchases of available-for-sale securities         11,278         5,002         7,756 <td>Issuance of common stock under Productivity Incentive Plan</td> <td>123</td> <td>98</td> <td>861</td>	Issuance of common stock under Productivity Incentive Plan	123	98	861
Minority interest in subsidiaries' earnings         (4,241)         427         541           Dividends paid to minority stockholders         (265)         (186)         -           Equity in (income) loss of joint ventures         1,927         1,284         (314)           Changes in assets and liabilities:         3,927         1,284         (14,471)           Inventories receivable         11,835         15,334         (14,471)           Inventories         4,866         24,529         (18,961)           Prepaid expenses and other assets         87         1,365         (2,608)           Accounts payable         1,112         (8,330)         (7,024)           Income taxes payable         1,124         (2,971)         (14,637)           Other current liabilities         3,508         (7,882)         6,590           Net cash provided by (used in) continuing operating activities         21,214         101,775         (54,732)           Cash flows from investing activities:         Purchases of property and equipment         (25,678)         (39,930)         (94,523)           Proceeds from dispositions of property and equipment         12,732         5,002         7,756           Purchases of available-for-sale securities         11,278         5,002         7,756 <td>Deferred income taxes</td> <td>3,511</td> <td>(30,287)</td> <td>(11,915)</td>	Deferred income taxes	3,511	(30,287)	(11,915)
Dividends paid to minority stockholders         (265)         (186)         -           Equity in (income) loss of joint ventures         1,927         1,284         (314)           Changes in assets and liabilities:         3         11,835         15,334         (14,471)           Inventories         4,866         24,529         (18,961)           Prepaid expenses and other assets         87         1,365         (2,608)           Accounts payable         1,112         (8,330)         (7,024)           Income taxes payable         1,224         (2,971)         (14,637)           Other current liabilities         3,508         (7,882)         6,590           Net cash provided by (used in) continuing operating activities         21,214         101,775         (54,732)           Cash flows from investing activities:         2         2         1,752         5,002         7,756           Purchases of property and equipment         12,732         5,002         7,756           Purchases of available-for-sale securities         (178,071)         -         (42,895)           Proceeds from sales and maturities of available-for-sale securities         275,835         -         42,376           Proceeds from sale of Medical segment, net         -         -         - <td></td> <td>(4,241)</td> <td>427</td> <td>541</td>		(4,241)	427	541
Equity in (income) loss of joint ventures         1,927         1,284         (314)           Changes in assets and liabilities:         3         11,835         15,334         (14,471)           Accounts receivable         11,835         15,334         (14,471)           Inventories         4,866         24,529         (18,961)           Prepaid expenses and other assets.         87         1,365         (2,608)           Accounts payable.         1,112         (8,330)         (7,024)           Income taxes payable.         1,224         (2,971)         (14,637)           Other current liabilities.         3,508         (7,882)         6,590           Net cash provided by (used in) continuing operating activities         21,214         101,775         (54,732)           Cash flows from investing activities:         2         21,214         101,775         (54,732)           Cash flows from dispositions of property and equipment.         12,732         5,002         7,756           Purchases of property and equipment.         12,732         5,002         7,756           Purchases of available-for-sale securities         (178,071)         -         (42,895)           Proceeds from sales and maturities of available-for-sale securities         275,835         -         42	·	(265)	(186)	-
Changes in assets and liabilities:           Accounts receivable         11,835         15,334         (14,471)           Inventories         4,866         24,529         (18,961)           Prepaid expenses and other assets         87         1,365         (2,608)           Accounts payable         1,112         (8,330)         (7,024)           Income taxes payable         1,224         (2,971)         (14,637)           Other current liabilities         3,508         (7,882)         6,590           Net cash provided by (used in) continuing operating activities         21,214         101,775         (54,732)           Cash flows from investing activities:         21,214         101,775         (54,732)           Purchases of property and equipment         (25,678)         (39,930)         (94,523)           Proceeds from dispositions of property and equipment         12,732         5,002         7,756           Purchases of available-for-sale securities         (178,071)         -         (42,895)           Proceeds from sales and maturities of available-for-sale securities         275,835         -         42,376           Proceeds from sale of Medical segment, net         -         -         -         89,716           Issuance of note receivable from Picometrix <td></td> <td>1,927</td> <td>1,284</td> <td>(314)</td>		1,927	1,284	(314)
Inventories		•	ŕ	, ,
Inventories	Accounts receivable	11,835	15,334	(14,471)
Prepaid expenses and other assets         87         1,365         (2,608)           Accounts payable         1,112         (8,330)         (7,024)           Income taxes payable         1,224         (2,971)         (14,637)           Other current liabilities         3,508         (7,882)         6,590           Net cash provided by (used in) continuing operating activities         21,214         101,775         (54,732)           Cash flows from investing activities:         Variable of the cash provided by (used in) continuing operating activities         21,214         101,775         (54,732)           Cash flows from investing activities:         Variable of the cash used in investing activities         21,214         101,775         (54,732)           Cash flows from investing activities:         Variable of the cash used in investing activities         21,214         101,775         (54,732)           Cash flows from investing activities:         Variable of the cash used in investing activities         (25,678)         (39,930)         (94,523)           Proceeds from dispositions of property and equipment         12,732         5,002         7,756           Purchases of available-for-sale securities         (178,071)         -         (42,895)           Proceeds from sales and maturities of available-for-sale securities         275,835         -	Inventories			
Accounts payable		87	1,365	(2,608)
Other current liabilities         3,508         (7,882)         6,590           Net cash provided by (used in) continuing operating activities         21,214         101,775         (54,732)           Cash flows from investing activities:         Purchases of property and equipment         (25,678)         (39,930)         (94,523)           Proceeds from dispositions of property and equipment         12,732         5,002         7,756           Purchases of available-for-sale securities         (178,071)         -         (42,895)           Proceeds from sales and maturities of available-for-sale securities         275,835         -         42,376           Proceeds from sale of Medical segment, net         -         -         89,716           Issuance of note receivable from Picometrix         -         (6,000)         -           Acquisition of businesses and minority interest, net of cash acquired         (94,880)         -         (52,803)           Increase in restricted cash, cash equivalents and short-term investments         (53,506)         -         -         -           Other-net         1,128         (1,002)         63           Net cash used in investing activities         (60,310)         (41,930)         (50,310)	• •	1,112	(8,330)	
Other current liabilities         3,508         (7,882)         6,590           Net cash provided by (used in) continuing operating activities         21,214         101,775         (54,732)           Cash flows from investing activities:         Purchases of property and equipment         (25,678)         (39,930)         (94,523)           Proceeds from dispositions of property and equipment         12,732         5,002         7,756           Purchases of available-for-sale securities         (178,071)         -         (42,895)           Proceeds from sales and maturities of available-for-sale securities         275,835         -         42,376           Proceeds from sale of Medical segment, net         -         -         89,716           Issuance of note receivable from Picometrix         -         (6,000)         -           Acquisition of businesses and minority interest, net of cash acquired         (94,880)         -         (52,803)           Increase in restricted cash, cash equivalents and short-term investments         (53,506)         -         -         -           Other-net         1,128         (1,002)         63           Net cash used in investing activities         (60,310)         (41,930)         (50,310)	Income taxes payable	1,224	(2,971)	(14,637)
Net cash provided by (used in) continuing operating activities21,214101,775(54,732)Cash flows from investing activities:25,678)(39,930)(94,523)Purchases of property and equipment12,7325,0027,756Purchases of available-for-sale securities(178,071)-(42,895)Proceeds from sales and maturities of available-for-sale securities275,835-42,376Proceeds from sale of Medical segment, net89,716Issuance of note receivable from Picometrix-(6,000)-Acquisition of businesses and minority interest, net of cash acquired(94,880)-(52,803)Increase in restricted cash, cash equivalents and short-term investments(53,506)Other-net1,128(1,002)63Net cash used in investing activities(62,440)(41,930)(50,310)	1 7	,		` ' '
Cash flows from investing activities:  Purchases of property and equipment (25,678) (39,930) (94,523)  Proceeds from dispositions of property and equipment (178,071) (42,895)  Purchases of available-for-sale securities (178,071) - (42,895)  Proceeds from sales and maturities of available-for-sale securities (178,071) - (42,895)  Proceeds from sale of Medical segment, net 89,716  Issuance of note receivable from Picometrix - (6,000) - Acquisition of businesses and minority interest, net of cash acquired (94,880) - (52,803)  Increase in restricted cash, cash equivalents and short-term investments (53,506) (50,000)  Other-net 1,128 (1,002) 63  Net cash used in investing activities (50,310)				
Purchases of property and equipment (25,678) (39,930) (94,523)  Proceeds from dispositions of property and equipment 12,732 5,002 7,756  Purchases of available-for-sale securities (178,071) - (42,895)  Proceeds from sales and maturities of available-for-sale securities 275,835 - 42,376  Proceeds from sale of Medical segment, net 89,716  Issuance of note receivable from Picometrix - (6,000) - Acquisition of businesses and minority interest, net of cash acquired (94,880) - (52,803)  Increase in restricted cash, cash equivalents and short-term investments (53,506)	<u> </u>			
Proceeds from dispositions of property and equipment	Cash flows from investing activities:			
Proceeds from dispositions of property and equipment	Purchases of property and equipment	(25,678)	(39,930)	(94,523)
Purchases of available-for-sale securities		12,732	5,002	
Proceeds from sales and maturities of available-for-sale securities 275,835 - 42,376  Proceeds from sale of Medical segment, net - 89,716  Issuance of note receivable from Picometrix - (6,000) -  Acquisition of businesses and minority interest, net of cash acquired (94,880) - (52,803)  Increase in restricted cash, cash equivalents and short-term investments (53,506)  Other-net 1,128 (1,002) 63  Net cash used in investing activities (62,440) (41,930) (50,310)		,	, =	,
Proceeds from sale of Medical segment, net		, , ,	=	` ' '
Issuance of note receivable from Picometrix	Proceeds from sale of Medical segment, net	· -	-	89,716
Acquisition of businesses and minority interest, net of cash acquired       (94,880)       - (52,803)         Increase in restricted cash, cash equivalents and short-term investments       (53,506)          Other-net       1,128       (1,002)       63         Net cash used in investing activities       (62,440)       (41,930)       (50,310)		-	(6,000)	, -
Increase in restricted cash, cash equivalents and short-term investments       (53,506)       -       -         Other-net       1,128       (1,002)       63         Net cash used in investing activities       (62,440)       (41,930)       (50,310)		(94,880)	-	(52,803)
Other-net         1,128         (1,002)         63           Net cash used in investing activities         (62,440)         (41,930)         (50,310)		` / /	-	-
Net cash used in investing activities         (62,440)         (41,930)         (50,310)			(1,002)	63
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# COHERENT, INC. AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF CASH FLOWS (CONTINUED) (In thousands)

	Years Ended September 30,		
_	2003	2002	2001
Cash flows from financing activities:			
Long-term debt borrowings	\$ 363	\$ 1,361	\$ 663
Long-term debt repayments	(17,990)	(11,022)	(1,622)
Short-term borrowings	711	7,048	31,519
Short-term repayments	(16,822)	(14,708)	(22,124)
Cash overdrafts decrease	(232)	(408)	(3,698)
Repayments of capital lease obligations	(557)	(491)	(453)
Issuance of common stock under employee stock option and purchase plans	13,161	9,568	21,503
Collection of notes receivable from stock sales	1,252	66	839
Net cash provided by (used in) financing activities	(20,114)	(8,586)	26,627
Net cash provided by (used in) discontinued operations	-	-	(1,278)
Effect of exchange rate changes on cash and cash equivalents	6,863	2,350	581
Net increase (decrease) in cash and cash equivalents	(54,477)	53,609	(79,112)
Cash and cash equivalents, beginning of year		77,409	156,521
Cash and cash equivalents, end of year		\$131,018	\$77,409
Supplemental disclosure of cash flow information:  Cash paid during the year for:			
Interest	\$4,280	\$5,455	\$ 5,864
Income taxes	\$1,194	\$3,056	\$ 44,542
Noncash investing and financing activities:			
Equipment acquired under capital leases	\$ -	\$ -	\$ 663
Tax benefit from stock option exercises	\$1,878	\$1,147	\$ 7,381
Issuance of notes related to sale of common stock	\$ -	\$1,250	\$ 308
Repayment of acquisition obligation through issuance of common stock	\$ -	\$1,252	\$ -
Activity resulting from sale of Medical segment:			
Shares of Lumenis common stock received	\$ -	\$ -	\$124,390
Note receivable from Lumenis	\$ -	\$ -	\$ 11,160
Stock-based compensation charge	\$ -	\$ -	\$ 12,576
Deferred income tax expense	\$ -	\$ -	\$ 24,445
		(concluded)	

See accompanying Notes to Consolidated Financial Statements

# COHERENT, INC. AND SUBSIDIARIES NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

#### 1. DESCRIPTION OF BUSINESS

Founded in 1966, we provide photonics-based solutions for commercial and scientific research applications. We design and manufacture a diversified selection of photonics products and solutions, primarily lasers, laser-based systems and accessories. Headquartered in Santa Clara, California, we have worldwide operations including research and development, manufacturing, sales, service and support capabilities.

#### 2. SIGNIFICANT ACCOUNTING POLICIES

#### **Fiscal Year**

Our fiscal year ends on the Saturday closest to September 30. Fiscal years 2003, 2002 and 2001 ended on September 27, September 28 and September 29, respectively. For convenience, the accompanying consolidated financial statements have been shown as ending on September 30 for all fiscal years. All fiscal years presented included 52 weeks, whereas fiscal 2004 will include 53 weeks. The fiscal year of our majority-owned subsidiary Lambda Physik AG (Lambda Physik) ends on September 30. Accordingly, Lambda Physik's financial statements as of that date and for the years then ended have been used for our consolidated financial statements. Management believes that the impact of the use of different year-ends is immaterial to our consolidated financial statements taken as a whole.

#### **Use of Estimates**

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

#### **Basis of Presentation**

The consolidated financial statements include the accounts of Coherent, Inc. and its majority-owned subsidiaries (collectively, the Company, we, our, or Coherent). All significant intercompany balances and transactions have been eliminated. Investments in business entities in which we do not have control but have the ability to exercise significant influence over operating and financial policies (generally 20-50% ownership) are accounted for by the equity method.

Certain prior year amounts in the consolidated financial statements and the notes thereto have been reclassified to conform to the fiscal 2003 presentation. Such reclassifications had no impact on net income (loss) or stockholders' equity for any year presented.

# **Discontinued Operations**

On April 30, 2001, we completed the sale of our Medical segment to Lumenis, Ltd. (formerly ESC Medical Systems, Ltd.). The disposal of the Medical segment represents the disposal of a business segment under Accounting Principles Board Opinion No. 30, "Reporting the Results of Operations—Reporting the Effects of Disposal of a Segment of a Business, and Extraordinary, Unusual and Infrequently Occurring Events and Transactions" (APB 30). Accordingly, results of the operations of our Medical segment have been classified as discontinued (see Note 3).

#### **Fair Value of Financial Instruments**

The carrying amounts of certain of our financial instruments including cash and cash equivalents, accounts and notes receivable, short-term borrowings, accounts payable and accrued liabilities approximate fair value due to their short maturities. Short-term investments are comprised of available-for-sale securities, which are carried at fair value. The recorded carrying amount of our long-term obligations approximates fair value except for the notes used to finance our acquisition of Star Medical (Star notes), which had a carrying value of \$38.0 million and a fair value of \$41.3 million. We determined the estimated fair value of our long-term debt by calculating the future value of payments based on current market interest rates available to us. Foreign exchange contracts are stated at fair value based on prevailing financial market information.

# **Cash Equivalents**

All highly liquid investments with maturities of three months or less at the time of purchase are classified as cash equivalents.

#### Concentration of Credit Risk

Financial instruments that may potentially subject us to concentrations of credit risk consist principally of cash equivalents, short-term investments, accounts receivable and notes receivable. At September 30, 2003, the majority of our short-term investments are in federal agency obligations, corporate obligations, repurchase agreements, bank certificates of deposit and money market funds. Cash equivalents and short-term investments are maintained with several financial institutions and may exceed the amount of insurance provided on such balances. The majority of our accounts receivable are derived from sales to customers for commercial and scientific research applications. We perform ongoing credit evaluations of our customers' financial condition and limit the amount of credit extended when deemed necessary but generally require no collateral. We maintain reserves for potential credit losses. Our products are broadly distributed, and no one customer accounted for more than 10% of total net sales during fiscal 2003, fiscal 2002 or fiscal 2001. We continuously evaluate the collectibility of our notes receivable.

#### **Inventories**

Inventories are stated at the lower of cost (first-in, first-out) or market. Inventories are as follows (in thousands):

<u> </u>	September 30,		
_	2003	2002	
Purchased parts and assemblies	\$ 27,817	\$31,516	
Work-in-process	44,721	32,845	
Finished goods	27,609	24,857	
Inventories	\$100,147	\$89,218	

#### **Property and Equipment**

Property and equipment are stated at cost and are generally depreciated or amortized using the straight-line method. Cost, accumulated depreciation and amortization and estimated useful lives are as follows (in thousands):

	September 30,		
	2003	2002	Useful Life
Land	\$ 6,079	\$ 10,184	
Buildings and improvements	79,448	101,256	5-40 years
Equipment, furniture and fixtures	176,821	157,912	3-10 years
Leasehold improvements	18,070	8,153	Lesser of useful life or terms of lease
	280,418	277,505	
Accumulated depreciation and amortization	(134,019)	(105,504)	
Property and equipment, net	\$146,399	\$172,001	

# **Long-lived Assets**

We evaluate the carrying value of long-lived assets in accordance with the provisions of Statement of Financial Accounting Standards (SFAS) No. 144, "Accounting for the Impairment of Disposal of Long-Lived Assets" whenever events or changes in business circumstances or our planned use of assets indicate that the carrying amount of the assets may not be fully recoverable or that the useful lives of these assets are no longer appropriate. Reviews are preformed to determine whether the carrying values of assets are impaired based on comparison to the undiscounted expected future net cash flows. If the comparison indicates that there is impairment, the impaired asset is written down to fair value. If long-lived assets are classified as available for sale, the impairment to be recognized is equal to the amount by which the carrying amount exceeds the fair value less costs to sell. Significant management judgment is required in the forecast of future operating results that is used in the preparation of expected undiscounted cash flows. See Note 4 for a discussion of impairment charges recorded during fiscal 2003 and 2002.

#### Goodwill

With our adoption of SFAS No. 142, "Goodwill and Other Intangible Assets" (SFAS 142) beginning in fiscal 2002, goodwill is tested for impairment at least annually, and between annual tests in certain circumstances, and written down when impaired, rather than being amortized as previous accounting standards required (see Note 7). Prior to fiscal 2002, goodwill was amortized using the straight-line method over its estimated period of benefit. Under SFAS 142, material amounts of goodwill attributable to each of our reporting units are tested for impairment by comparing the fair value of each reporting unit with its carrying value. Fair value is determined using a discounted cash flow methodology. Absent any impairment indicators, we perform our annual impairment tests during the fourth

quarter of each fiscal year in conjunction with our annual budgeting process.

#### **Intangible Assets**

Intangible assets, including acquired existing technology, customer base, trade name, non-compete agreements, patents, licenses, drawings and order backlog are amortized on a straight-line basis over estimated useful lives of six months to fifteen years.

#### **Revenue Recognition**

Effective October 1, 2000, we adopted Staff Accounting Bulletin No. 101, "Revenue Recognition in Financial Statements" (SAB 101). SAB 101 summarizes certain of the Securities and Exchange Commission's (SEC's) views in applying GAAP to revenue recognition in financial statements. Our previous policy was to recognize product installation revenue upon shipment and to accrue product installation costs at the time revenue was recognized. The cumulative effect of the change, totaling \$0.1 million (net of income taxes of \$58,000), is shown as a one-time charge to income in the consolidated statements of operations for fiscal 2001.

In accordance with SAB 101, revenue is recognized when persuasive evidence of an arrangement exists, the product has been delivered, the price is fixed or determinable and collection is probable. Delivery is generally considered to have occurred upon shipment. Our products typically include a one-year warranty and the estimated cost of product warranty claims is accrued at the time the sale is recognized, based on historical experience.

We generally recognize product revenue at the time of delivery and, for certain products for which we perform product installation services, the cost of installation is generally accrued at the time product revenue is recognized.

Our sales to distributors, resellers and end-user customers typically do not have customer acceptance provisions and only certain of our original equipment manufacturers (OEMs) customer sales have customer acceptance provisions. Customer acceptance is generally limited to performance under our published product specifications. For the few product sales that have customer acceptance provisions because of higher than published specifications, (1) the products are tested and accepted by the customer at our site or by the customer's acceptance of the results of our testing program prior to shipment to the customer, or (2) the revenue is deferred until customer acceptance occurs.

The vast majority of our sales are made to OEMs, distributors, resellers and end-users in the non-scientific market. Sales made to these customers do not require installation of the products by us and are not subject to other post-delivery obligations, except in occasional instances where, for example, we have agreed to perform installation or provide training. In those instances, we either defer revenue related to installation services until installation is completed or, if the installation services are inconsequential or perfunctory, we accrue installation costs at the time that product revenue is recognized. We defer revenue on training services until these services are provided.

Sales to end-users in the scientific market typically require installation and, thus, involve post-delivery obligations, however our post-delivery installation obligations are not essential to the functionality of our products. For a limited number of products or arrangements where management considers installation to be significant in comparison to the value of the product sold, we defer revenue related to installation services until completion of these services.

For most products, training is not provided and thus no post-delivery training obligation exists. However, when training is provided to our customers, it is typically priced separately and is recognized as revenue after these services have been provided.

# **Foreign Currency Translation**

The functional currencies of our foreign subsidiaries are their respective local currencies. Accordingly, gains and losses from the translation of the financial statements of the foreign subsidiaries are reported as a separate component of accumulated other comprehensive income (OCI). Foreign currency transaction gains and losses are included in earnings.

#### **Derivatives**

SFAS No. 133, "Accounting for Derivative Instruments and Hedging Activities" (SFAS 133) as amended, requires that all derivatives, whether designated in hedging relationships or not, be recorded on the balance sheet at fair value. If the derivative is designated as a fair value hedge, the changes in the fair value of the derivative and of the hedged item attributable to the hedged risk are recognized in earnings. If the derivative is designated as a cash flow hedge, the effective portions of the changes in the fair value of the derivative are recorded in OCI and are recognized in the income statement when the hedged item affects earnings. Ineffective portions of changes in the fair value of cash flow hedges are recognized in other income (expense).

We adopted SFAS 133 on October 1, 2000. The transition adjustment to implement SFAS 133, which is presented as a cumulative effect of change in accounting principle, increased earnings by \$0.2 million (net of income taxes of \$0.1 million) and decreased OCI by \$0.3 million (net of income taxes of \$0.2 million) in fiscal 2001. The net derivative losses included in OCI as of October 1, 2000 were comprised of hedges on backlog which were reclassified into earnings during the twelve months ended September 30, 2001 and a hedge related to a building purchase option which we exercised in December 2000 and will be amortized into earnings through December 2020.

Our objective of holding derivatives is to minimize the risks of foreign currency fluctuation by using the most effective methods to eliminate or reduce the impact of these exposures. Principal currencies hedged include the Euro, Yen and British Pound. Forwards used to hedge a portion of forecasted foreign revenue for up to 15 months in the future are designated as cash flow hedging instruments.

For foreign currency forward contracts under SFAS 133, hedge effectiveness is measured by comparing the cumulative change in the hedged contract with the cumulative change in the hedged item, both of which are based on forward rates. For foreign currency option contracts under SFAS 133, hedge effectiveness is asserted when the critical elements representing the total changes in the option's cash flows continue to match the related elements of the hedged forecasted transaction. Should discrepancies arise, effectiveness is measured by comparing the change in option value and the change in value of a hypothetical derivative mirroring the critical elements of the forecasted transaction.

The \$0.1 million net derivative loss included in OCI as of September 30, 2003 will be amortized into earnings through December 2020 for a hedge related to a building purchase option that was exercised in December 2000.

Forwards not designated as hedging instruments under SFAS 133 are also used to hedge the impact of the variability in exchange rates on accounts receivable and collections denominated in certain foreign currencies. Changes in fair value of these derivatives are recognized in other income (expense).

#### **Comprehensive Income (Loss)**

Comprehensive income (loss) is defined as the change in equity of a business enterprise during a period from transactions and other events and circumstances from non-owner sources and is presented in our Statements of Stockholders' Equity.

#### Earnings (Loss) Per Share

Basic earnings (loss) per share are computed based on the weighted average number of shares outstanding during the period. Diluted earnings (loss) per share is computed based on the weighted average number of shares outstanding during the period increased by the effect of dilutive stock options and stock purchase contracts, using the treasury stock method, and shares issuable under the Productivity Incentive Plan. Potentially dilutive shares are excluded from the diluted earnings (loss) per share computation in loss periods.

#### **Stock-Based Compensation**

As permitted under SFAS No. 123, "Accounting for Stock-Based Compensation" (SFAS 123), we have elected to follow the recognition and measurement principles of APB Opinion No. 25, "Accounting for Stock Issued to Employees" (APB 25) to account for employee stock options. Under APB 25, no compensation expense is recognized when the exercise price of employee stock options equals the market price of the underlying stock on the date of grant.

SFAS No. 148, "Accounting for Stock-Based Compensation-Transition and Disclosure, an Amendment of FASB Statement No. 123" (SFAS 148) amends the disclosure requirements of SFAS 123 to require more prominent disclosures in both annual and interim financial statements regarding the method of accounting for stock-based employee compensation and the effect of the method used on reported results. SFAS 123 requires the disclosure of pro forma net income (loss) and earnings (loss) per share had we adopted the fair value method. Under SFAS 123, the fair value of stock-based awards to employees is calculated through the use of option pricing models, even though such models were developed to estimate the fair value of freely tradable, fully transferable options without vesting restrictions, which significantly differ from our stock option awards. These models also require subjective assumptions, including future stock price volatility and expected time to exercise, which greatly affect the calculated values.

For purposes of estimating the effect of SFAS 123 on our net income (loss), the fair value of our options was estimated at the grant date using the Black-Scholes option pricing model with the following weighted average assumptions:

	Employee Stock Option Plans		Employee Stock Purchase Plans Years Ended September 30,			
	Years Ended September 30,					
	2003	2002	2001	2003	2002	2001
Expected life in years	4.5	4.4	4.6	0.5	0.5	0.5-1.0
Expected volatility	73.9%	79.0	80.0%	45.8-55.2	45.8-109.2	56.6-109.6
Risk-free interest rate	2.7%	4.4%	4.9%	1.1%-2.2%	2.2%-4.2%	4.2%-6.6%
Expected dividends	none	none	none	none	none	none

No options were granted under the Lambda Physik Plan in fiscal 2003. Our calculations for options granted in fiscal 2002 and 2001 under the Lambda Physik plan were made using the Black-Scholes option-pricing model with the following weighted average assumptions:

	Years Ended September 30,		
	2002	2001	
Expected life in years	3.5	2.0	
Expected volatility	75.0%	90.0%	
Risk-free interest rate	4.7%	4.3%	
Expected dividends	none	none	

The resulting expense from options under the Lambda Physik plan is included in the pro forma net income (loss) amounts noted below.

Our calculations are based on a single option valuation approach and forfeitures are recognized as they occur. The following table illustrates the effect on our net income (loss) and net income (loss) per share if we had applied the fair value recognition provisions of SFAS 123 to stock-based employee compensation (in thousands, except per share data):

_	Yea	Years Ended September 30,		
_	2003	2002	2001	
Net income (loss), as reported	\$(45,891)	\$(68,968)	\$100,750	
Deduct: total stock-based employee compensation expense				
determined under fair value based method for all awards, net of				
income taxes	17,637	19,034	17,457	
Pro forma net income (loss)	\$(63,528)	\$(88,002)	\$ 83,293	
Earnings (loss) per share				
Basic-as reported	<b>\$</b> (1.56)	\$ (2.40)	\$ 3.64	
Basic-pro forma	\$ (2.16)	\$ (3.06)	\$ 3.01	
Diluted-as reported	\$ (1.56)	\$ (2.40)	\$ 3.50	
Diluted-pro forma	\$ (2.16)	\$ (3.06)	\$ 2.89	

During the preparation of our fiscal 2003 consolidated financial statements, we determined that the pro forma net income (loss) and pro forma net income (loss) per share for fiscal 2002 and 2001 had been improperly calculated. Accordingly, such pro forma amounts presented above have been revised. These changes did not impact our consolidated balance sheets, consolidated statement of operations, net loss or net loss per share for any of the periods presented.

# **Advertising Costs**

Advertising costs are expensed as incurred.

#### **Income Taxes**

As part of the process of preparing our consolidated financial statements, we are required to estimate our income tax provision (benefit) in each of the jurisdictions in which we operate. This process involves estimating our current income tax provision (benefit) together with assessing temporary differences resulting from differing treatment of items for tax and accounting purposes. These differences result in deferred tax assets and liabilities, which are included within our consolidated balance sheets.

We record a valuation allowance to reduce our deferred tax assets to the amount that is more likely than not to be realized. While we have considered future taxable income and ongoing prudent and feasible tax planning strategies in assessing the need for the valuation

allowance, in the event we were to determine that we would be able to realize our deferred tax assets in the future in excess of our net recorded amount, an adjustment to the deferred tax asset would increase income in the period such determination was made. Likewise, should we determine that we would not be able to realize all or part of our net deferred tax asset in the future, an adjustment to the deferred tax asset would be charged to income in the period such determination was made.

Federal income taxes have not been provided for on a portion of the unremitted earnings of foreign subsidiaries either because such earnings are intended to be permanently reinvested or because foreign tax credits are available to offset any planned distributions of such earnings. The total amount of unremitted earnings of foreign subsidiaries for which we have not yet recorded federal income taxes was approximately \$70.3 million at September 30, 2003. In addition to federal income taxes (which are not practicably determinable), withholding taxes of approximately \$3.8 million would be payable upon repatriation of such earnings which would result in additional foreign tax credits.

#### **Recently Issued Accounting Standards**

In June 2002, the Financial Accounting Standards Board (FASB) issued SFAS No. 146, "Accounting for Costs Associated with Exit or Disposal Activities" (SFAS 146), which addresses accounting for restructuring and similar costs. SFAS 146 supersedes previous accounting guidance, principally Emerging Issues Task Force (EITF) Issue No. 94-3, "Liability Recognition for Certain Employee Termination Benefits and Other Costs to Exit an Activity (Including Certain Costs Incurred in a Restructuring)" (EITF 94-3). SFAS 146 requires that the liability for costs associated with an exit or disposal activity be recognized when the liability is incurred and that the liability should initially be measured and recorded at fair value. Under EITF 94-3, a liability for an exit cost was recognized at the date of our commitment to an exit plan. We adopted the provisions of SFAS 146 for restructuring activities initiated after December 28, 2002. The adoption of SFAS 146 did not have a material impact on our operating results or financial condition.

In November 2002, the EITF reached a consensus on Issue No. 00-21, "Accounting for Revenue Arrangements With Multiple Deliverables" (EITF 00-21). The EITF concluded that revenue arrangements with multiple elements should be divided into separate units of accounting if the deliverables in the arrangement have value to the customer on a standalone basis, if there is objective and reliable evidence of the fair value of the undelivered elements, and as long as there are no rights of return or additional performance guarantees by the Company. The provisions of EITF 00-21 are applicable to revenue arrangements entered into in fiscal periods beginning after June 15, 2003. We adopted the provisions of EITF 00-21 effective June 29, 2003. The adoption did not have a material effect on our operating results or financial condition.

In November 2002, the FASB issued FASB Interpretation No. 45, "Guarantor's Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others" (FIN 45). FIN 45 requires that upon issuance of a guarantee, the guarantor must recognize a liability for the fair value of the obligation it assumes under that guarantee. We adopted the disclosure requirements of FIN 45 in the first quarter of fiscal 2003 (see Note 8 concerning the reserve for warranty costs). The recognition and measurement provisions have been applied to guarantees issued or modified after December 31, 2002. The adoption of the recognition and measurement provisions did not have a material effect on our operating results or financial condition.

In January 2003, the FASB issued FIN 46, "Consolidation of Variable Interest Entities" which addresses consolidation of variable interest entities. FIN 46 provides guidance for determining when a primary beneficiary should consolidate a variable interest entity, or equivalent structure, that functions to support the activities of the primary beneficiary. The provisions of FIN 46 are effective immediately for all variable interest entities created after January 31, 2003. For variable interest entities created prior to February 1, 2003, the provisions of FIN 46 are effective for our first quarter of fiscal 2004. We are currently evaluating the implication of FIN 46 as it relates to our loan agreement with Picometrix, Inc. (see Note 8) and the impact, if any, on our consolidated results of operations or financial condition.

During the second quarter of fiscal 2002, we renewed the lease for our Santa Clara, California facility that expires in February 2007. The facility consists of 216,000 square feet of office, research and development and manufacturing space, a portion of which we are subleasing to Lumenis. Upon expiration of the lease, we have an option to purchase the facility for \$24.6 million, renew the lease for an additional five years or arrange for the sale of the facility to a third party where we would retain an obligation to the owner for the difference between the sale price, if less than \$24.6 million, and \$21.3 million, subject to certain provisions of the lease. If we do not purchase the facility or arrange for its sale as discussed above, we would be obligated for an additional lease payment of \$21.3 million. We have determined that the lease does not qualify as an arrangement held with a variable interest entity, and accordingly, we will not be required to consolidate the related assets and liabilities under FIN 46.

In April 2003, the FASB issued SFAS No. 149, "Amendment of Statement 133 on Derivative Instruments and Hedging Activities" (SFAS 149). The statement amends and clarifies accounting for derivative instruments, including certain derivative instruments embedded in other contracts and for hedging activities under SFAS 133. SFAS 149 is generally effective for derivative instruments, including derivative instruments embedded in certain contracts, entered into or modified after June 30, 2003, and for hedging relationships designated after

June 30, 2003. We adopted the provisions of SFAS 149 beginning in the fourth quarter of fiscal 2003. The adoption did not have any impact on our consolidated operating results or financial condition.

In May 2003, the FASB issued SFAS No. 150, "Accounting for Certain Financial Instruments with Characteristics of both Liabilities and Equity" (SFAS 150). The statement modifies the accounting for certain financial instruments that, under previous guidance, issuers could account for as equity and requires that those instruments be classified as liabilities in statements of financial position. The statement is effective for financial instruments entered into or modified after May 31, 2003, and otherwise is effective at the beginning of the first interim period beginning after June 15, 2003. SFAS 150 was effective June 29, 2003, and had no impact on our consolidated financial statements.

## 3. DISCONTINUED OPERATIONS

On February 25, 2001, we entered into a definitive agreement to sell our Medical segment to Lumenis, Ltd. (formerly ESC Medical Systems Ltd.). On April 30, 2001, we completed the sale of the Medical segment assets for cash of \$100.0 million, notes receivable of \$12.9 million and 5,432,099 shares of Lumenis common stock. We estimated the total value of this consideration to be \$236.0 million as of the closing of the sale. The agreement provided additional cash consideration up to \$6.0 million if the actual net tangible assets sold were more than a predetermined amount and a note receivable reduction if the actual net tangible assets sold were less than a predetermined amount. In fiscal 2001, we recognized a gain of \$71.8 million (net of taxes of \$44.7 million), inclusive of \$12.6 million in stock compensation charges due to the acceleration of stock option vesting, on our sale of the Medical segment. In fiscal 2002, we reached a purchase price settlement with Lumenis, resulting in a gain of \$1.9 million (net of income taxes of \$1.2 million), which was included in our results of discontinued operations in fiscal 2002. In addition, the agreement provides a future earnout payment of up to \$25.0 million based on the future sales of certain Medical laser and light-based products through December 31, 2004. In fiscal 2003, we recorded a net benefit of \$0.6 million relating to the anticipated refund of prior year taxes.

The face value of the note received was \$12.9 million, bearing interest at 5% payable semi-annually over its 18-month term and was due on October 30, 2002. At April 30, 2001, we recorded the note at its fair value of \$11.6 million and amortized the discount to interest income over the term of the note. In October 2002, we renegotiated the terms of our note receivable from Lumenis (see Note 8). The Lumenis common stock received is unregistered and its trading is subject to restrictions under Rule 144 of the Securities Act of 1933 and other contractual restrictions as defined in the definitive agreement. At April 30, 2001, we estimated the value of the Lumenis stock at \$124.4 million (see Note 6 concerning the subsequent write-down of this investment).

The results of the operations of the Medical segment have been classified as discontinued in the accompanying consolidated financial statements. Income from discontinued operations consisted of the following (in thousands):

	Years Ended September 30,			
	2003	2002	2001	
Net sales	<u> </u>	\$ -	\$109,219	
Loss from operations prior to phase-out period	\$ -	-	\$ (1,672)	
Benefit for income taxes	<u>-</u>	<u>-</u>	(193)	
Loss from operations, net	<u> </u>	<u> </u>	(1,479)	
Gain on disposal	47	3,099	116,576	
Provision (benefit) for income taxes on gain	(595)	1,230	44,729	
Operating income during phase-out period	-	-	3,888	
Provision for income taxes on operating income in phase-out period	<u>-</u>	<u>-</u>	1,045	
Gain on disposal, net	642	1,869	74,690	
Income from discontinued operations, net	\$642	\$1,869	\$ 73,211	

# 4. RESTRUCTURING, IMPAIRMENT AND OTHER CHARGES

During fiscal 2003 and 2002 we recorded restructuring, impairment and other charges of \$35.2 million (\$24.8 million after-tax) and \$11.0 million (\$6.7 million after-tax), respectively. No such charges were recorded during fiscal 2001. The fiscal 2003 and 2002 charges were as follows (in thousands):

	rears Ended September 50,	
_	2003	2002
Termination of activities of the Coherent Telecom-Actives Group	\$14,818	\$ -
Impairment of long-lived assets	12,672	11,015
Goodwill impairment (Note 7)	2,358	-
Impairment of Picometrix note (Note 8)	3,723	-
Lease termination costs	1,693	-
Other	(101)	
Total	\$35,163	\$11,015

# **Coherent Telecom-Actives Group**

Based on market information and insights and the status of our development projects of our Coherent Telecom-Actives Group (CTAG) obtained subsequent to September 30, 2002, we determined that our return on investment for at least the next several years would have been unsatisfactory and, therefore, additional investments were no longer justified. As a result, in the first quarter of fiscal 2003, we decided to terminate the activities of CTAG, an operating segment that had been aggregated with our Photonics Group in our Electro-Optics reportable segment. The charge related to the termination of these activities includes a \$6.5 million write-down of equipment and leasehold improvements to net realizable value; a \$6.8 million accrual for the estimated contractual obligation for lease and other facility costs of the building, net of estimated sublease income, in San Jose, California, formerly occupied by CTAG; the \$1.4 million write-off of our option to purchase Picometrix, Inc. (Picometrix); and \$0.1 million of other restructuring costs.

# **Impairment of Long Lived Assets**

In the fourth quarter of fiscal 2002, management decided that, given our exit from the passive telecom market and the outsourcing of the production of printed circuit boards, our manufacturing facility located in Lincoln, California was not needed to support our operations. Accordingly, we committed to sell certain land, buildings, improvements and equipment with a total carrying value of \$12.4 million. As of September 30, 2002, the proposed sale of the building did not meet the necessary criteria to be classified as held for sale under SFAS No. 121, "Accounting for the Impairment of Long-Lived Assets and for Long-Lived Assets to be Disposed Of" and, as a result, was classified as held for use in the consolidated balance sheet at September 30, 2002. In fiscal 2003, the proposed sale of the facility met the necessary criteria to be classified as assets held for sale under SFAS 144. Accordingly, the carrying values of the land, buildings and improvements and equipment were adjusted to their respective fair values less costs to sell of \$9.0 million and \$0.3 million, respectively, and as a result, we recorded an impairment charge of \$3.1 million (\$2.7 million after-tax) during fiscal 2003. The determinations of fair values were based on quoted market prices and comparable sales of similar assets. In July 2003, we completed the sale of the land, buildings, improvements and equipment and received net proceeds of \$9.2 million.

In the fourth quarter of fiscal 2003, management reassessed the planned utilization of certain long-lived assets of our operating sites in Auburn, California and Tampere, Finland, and determined that we had excess manufacturing capacity. As a result, management committed to a plan to sell certain equipment with a carrying value of \$5.7 million and to dispose of certain building improvements with a carrying value of \$1.0 million. The proposed sale of the equipment met the necessary criteria to be classified as assets held for sale under SFAS 144. Accordingly, the carrying value of the equipment was adjusted to its current fair value less costs to sell of \$0.8 million. The fair value of the equipment was determined based on comparable sales of similar assets. The building improvements were determined to have no future benefit and were abandoned in the fourth quarter of fiscal 2003. As a result, we recorded an impairment charge of \$5.9 million (\$3.5 million after-tax) million in fiscal 2003.

In the fourth quarter of fiscal 2003, management initiated plans to consolidate the activities of our foreign subsidiary located in Glasgow, Scotland in an attempt to increase operating efficiency. Management determined that the carrying value of long-lived assets, consisting primarily of production equipment and buildings located at this subsidiary exceeded their estimated future undiscounted cash flows. Accordingly, long-lived assets with a carrying value of \$6.3 million were written down to their estimated fair of \$2.9 million, resulting in an impairment charge of \$3.4 million in fiscal 2003. Additionally, certain long-lived assets that were classified as held for use at our Barendrecht, the Netherlands subsidiary were impaired, resulting in a charge of \$0.3 million. The determinations of the fair values assigned to the long-lived assets were based on comparable sales of similar assets and an expected cash flow approach. We are currently negotiating the sale of our Glasgow, Scotland subsidiary, and as a result, it is reasonably possible that a change in our estimated impairment charge will occur in the near term.

In fiscal 2002, we evaluated the carrying value of certain long-lived assets of our Electro-Optics segment, consisting primarily of production equipment, buildings and improvements recorded. As a result, we recognized an impairment loss of \$11.0 million related

to the write-off of equipment due to management's decision to cease most of our activities related to the telecom passives component market. A significant portion of the assets impaired was acquired in connection with planned capacity expansions in anticipation of future demand and had not yet been placed in service.

### Lease Termination Cost

In the fourth quarter of fiscal 2003, we were not in compliance with certain financial covenants associated with the operating lease arrangement for our Santa Clara, California facility (see Note 11). In October 2003, we entered into an irrevocable agreement to purchase the facility for \$24.6 million, and subsequently, received a waiver for this violation from the lessor effective as of September 30, 2003. In September 2003, based on a third-party appraisal, we estimated the fair value of the facility to be \$24.0 million, including leasehold improvements. We accrued the \$1.7 million excess of our purchase price of \$24.6 million plus the carrying value of leasehold improvements of \$1.1 million over the fair value of the facility of \$24.0 million as an early lease termination cost in the fourth quarter of fiscal 2003. During the first quarter of 2004, we purchased the facility for \$24.6 million.

# **Accrued Restructuring Charges**

At September 30, 2003, we had \$5.5 million accrued as a current liability on our consolidated balance sheet for restructuring charges. The following table sets forth an analysis of the components of the fiscal 2003 restructuring charges, payments made against the accrual, and other provisions (reversals) through September 30, 2003 (in thousands):

	Severance Related	Facilities Related Charges	Other Restructuring Costs	Total
Balance, September 30, 2002	\$ -	\$ -	\$ -	\$ -
Provision	139	6,825	844	7,808
Reversals	-	-	(756)	(756)
Deductions	(139)	(1,297)	(88)	(1,524)
Balance, September 30, 2003	\$ -	\$5,528	\$ -	\$ 5,528

The remaining restructuring accrual balance is expected to result in cash expenditures through fiscal 2007 for facilities related charges, net of estimated sublease income.

The severance related costs are comprised of severance pay, outplacement services, and medical and other related benefits for six employees terminated due to the termination of activities in CTAG. Long-term asset write-downs include items identified as no longer needed to support our ongoing operations. The facilities-related charges include the estimated \$6.8 million contractual obligations for the lease and other facility costs of the building in San Jose, California, net of estimated sublease income. Other restructuring costs primarily include expenses associated with terminating other contractual arrangements.

# 5. ACQUISITIONS

During the three years ended September 30, 2003, we completed the acquisitions described in the following paragraphs, each of which has been accounted for as a purchase. The consolidated financial statements include the operating results of each business from the date of acquisition. Pro forma results of operations have not been presented for the acquisitions of Positive Light, Inc (PLI), Molectron Detector, Inc. (Molectron), DeMaria Electro-Optics Systems, Inc. (DEOS) and Crystal Associates, Inc. (Crystal) because the effects of these acquisitions were not material on either an individual or on an aggregate basis. The amounts assigned to purchased inprocess research and development (IPR&D) were determined by identifying research projects in areas for which technological feasibility has not been established. The values were determined by estimating the costs to develop the acquired in-process technologies into commercially viable products, estimating the resulting net cash flows from such projects, and discounting the net cash flows back to their present value. Amounts allocated to intangibles, other than goodwill, arising from such acquisitions are amortized on a straight-line basis over periods ranging from six months to fifteen years (see Note 7).

# Lambda Physik

On June 3, 2003, we initiated a tender offer to purchase the 5,250,000 (39.62%) outstanding shares of our Lambda Physik subsidiary owned by other shareholders (the minority interest) for approximately \$10.50 per share. The offer period was originally set to expire on July 15, 2003, however, as a result of our decision to waive our requirement of owning a minimum of 95% of the total shares of Lambda Physik subsequent to the tender offer, the offer period was extended to July 30, 2003. As of the closing date of the offer period, we purchased 4,448,569 outstanding shares of Lambda Physik for approximately \$47.4 million, resulting in a total ownership percentage of 93.95% (inclusive of shares previously owned). We purchased an additional 32,472 of outstanding shares of Lambda

Physik for approximately \$0.3 million subsequent to the offering period, resulting in a total ownership percentage of 94.26% (inclusive of shares previously owned) as of September 30, 2003. We have accounted for this transaction as a step acquisition using the purchase method.

The difference between the purchase price of the minority interest of \$49.7 million (including acquisition costs of \$2.0 million) and the carrying value of the minority interest of \$49.0 million was recorded as an adjustment of the carrying value of the assets of Lambda Physik (the step acquisition adjustment). The step acquisition adjustment was recorded based on the proportion of the minority interest acquired. We immediately charged \$1.9 million to expense for amounts representing purchased IPR&D related to projects that had not yet reached technological feasibility and had no alternative future use and recorded \$4.2 million of identifiable intangible assets. The step acquisition was accounted for as follows (in thousands):

Reduction in carrying value of minority interest acquired	\$48,975
Tangible assets	1,869
In-process research and development (IPR&D)	1,908
Adjustment to existing goodwill of Lambda Physik	(7,337)
Intangible assets:	
Existing technology	2,275
Trade name	1,107
Backlog	585
Customer base	187
Patents	95
Total	\$49,664

Pro forma results of operations, had the minority acquisition taken place at the beginning of fiscal 2003, would have resulted in a net loss of \$51.0 million and a net loss per basic and diluted share of \$1.73 for fiscal 2003. If the acquisition took place at the beginning of fiscal 2002, pro forma results of operations would have resulted in a net loss of \$70.4 million and a net loss per basic and diluted share of \$2.45 for fiscal 2002.

At September 30, 2003, we had \$8.3 million held in an escrow account that is restricted for the sole purpose of acquiring the remaining outstanding shares of Lambda Physik and are included in non-current restricted cash, cash equivalents and short-term investments on our consolidated balance sheet.

# PLI

On April 1, 2003, we acquired PLI of Los Gatos, California for approximately \$35.0 million in cash (net of cash acquired of \$3.9 million). PLI designs and manufactures advanced solid-state lasers for the scientific and industrial markets. The acquisition was accounted for as a purchase and accordingly, the acquired assets and liabilities were recorded at their fair market values at the date of acquisition. We immediately charged \$4.4 million to expense, representing purchased IPR&D. At the time of acquisition, the inprocess technologies were expected to be commercially viable by September 2003 and expenditures to complete were expected to be \$0.2 million. At September 30, 2003, one project was complete and the other is expected to be completed in the first quarter of fiscal 2004 with estimated expenditures to complete of less than \$50,000.

### Molectron

On December 6, 2002, we acquired Molectron of Portland, Oregon for approximately \$11.5 million in cash. Molectron designs and manufactures laser test and measurement equipment used across all photonics-based applications and markets. The acquisition was accounted for as a purchase and accordingly, the acquired assets and liabilities were recorded at their fair market values at the date of acquisition.

# **Tutcore OY Ltd.**

In April 2002, we issued 59,246 shares of our common stock valued at \$1.3 million as payment for the remaining obligation related to the 1996 acquisition of Tutcore OY Ltd., located in Tampere, Finland.

## **DEOS**

In April 2001, we acquired DEOS of Bloomfield, Connecticut, for \$22.5 million in cash. DEOS designs and manufactures carbon dioxide lasers used in electronics packaging, materials processing and research applications. The acquisition was accounted for as a purchase and accordingly, the acquired assets and liabilities were recorded at their fair market values at the date of acquisition. We immediately charged \$2.4 million to expense, representing purchased IPR&D. At the time of acquisition, the in-process technologies were

expected to be commercially viable by January 2002 and expenditures to complete were expected to be \$0.3 million. The products began shipping in May 2002.

# Crystal

In November 2000, we acquired Crystal of East Hanover, New Jersey for \$7.1 million in cash. Crystal manufactures exotic crystals, which are utilized in a wide variety of photonics applications. The acquisition was accounted for as a purchase, and, accordingly, the \$5.9 million excess of the purchase price over the fair value of net assets acquired was recorded as goodwill and intangible assets.

The aggregate purchase price of these acquisitions has been allocated to the net assets acquired and in-process research and development purchased as follows (in thousands):

	PLI	Molectron	DEOS	Crystal Associates
Tangible assets	\$ 14,329	\$ 4,358	\$ 5,069	\$3,441
In-process research and development (IPR&D)	4,430	-	2,400	=
Goodwill	18,907	5,511	3,640	352
Intangible assets:				
Existing technology	9,200	5,680	12,300	5,099
Customer base	920	350	580	-
Trade name	180	80	-	-
Non-compete agreement	500	-	-	-
Backlog	110	-	-	-
Workforce-in-place	-	-	-	406
Deferred tax liabilities	(3,225)	(2,288)	-	-
Liabilities assumed	(6,455)	(2,155)	(1,489)	(2,148)
Total	\$ 38,896	\$ 11,536	\$ 22,500	\$7,150

The intangibles assets including existing technology, customer base, trade name, non-compete agreement and backlog are amortized over their respective estimated useful lives of 1 to 15 years. Effective October 1, 2001, the unamortized portion of workforce-in-place was reclassified as goodwill as required, upon our adoption of SFAS 142.

In June 2002, our Lambda Physik subsidiary acquired a 98% interest in Optomech GmbH for \$33,000 in cash (including direct acquisition costs). Optomech manufactures technical mechanical components under clean room conditions and is one of Lambda's key suppliers for excimer laser components such as laser tubes. As a result of the purchase accounting, \$0.3 million of negative goodwill was allocated pro rata to all assets acquired and liabilities assumed, excluding financial assets, assets to be disposed of by sale, deferred tax assets and other current assets.

In April 2001, our Lambda Physik subsidiary acquired an additional 44% interest in the joint venture MicroLas Laser System GmbH (MicroLas) for \$24.4 million in cash. Lambda Physik previously held 46% of MicroLas, which was accounted for under the equity method and is now included in the consolidated financial statements of the Company as the majority owner with 90% ownership. In October 2003, Lambda Physik acquired the remaining outstanding shares of MicroLas to bring its ownership to 100%. MicroLas manufactures optical components such as lenses and beam guidance systems that are used in connection with Lambda Physik lasers in production of the TFT flat-panel displays and inkjet printers. The acquisition was accounted for as a purchase, and, accordingly, Lambda Physik recorded the acquired assets and liabilities at their fair market values at the date of acquisition.

The aggregate purchase price of \$24.4 million has been allocated to the assets and in-process research and development acquired. The total price was allocated among the assets acquired (including acquired in-process research and development) as follows (in thousands):

Tangible assets	\$ 2,465 71
Goodwill	18 639
Intangible assets:	10,037
	862
Backlog	5.573
Patents	3,373 874
Drawings and existing processes	0,.
Liabilities assumed	(1,033)
Deferred tax liabilities	(3,015)
Total	\$ 24,436

The patents and drawings and existing processes are being amortized over their estimated useful lives of 10 and 5 years, respectively. The

acquired order backlog was amortized as orders were recognized as revenue.

## 6. SHORT-TERM INVESTMENTS

Effective March 30, 2003, we transferred all securities formerly classified as trading securities to available-for-sale due to a change in our investment strategies. As required by SFAS No. 115, "Accounting for Certain Investments in Debt and Equity Securities" (SFAS 115) the transfer of these securities between categories of investments was accounted for at fair value and the unrealized gains and losses previously recognized in earnings through the date of transfer from the trading category have not been reversed. All unrealized gains and losses subsequent to the date of transfer are included as a separate component of comprehensive income (loss).

All highly liquid investments with maturities of three months or less at the time of purchase are considered to be cash equivalents and are classified as available-for-sale securities. Marketable short-term investments in debt and equity securities are also classified and accounted for as available-for-sale securities and are valued based on quoted market prices. Investments classified as available-for-sale are reported at fair value with unrealized gains and losses, net of related tax, recorded as a separate component of OCI in stockholders' equity until realized. Interest and amortization of premiums and discounts for debt securities are included in interest income. Gains and losses on securities sold are determined based on the specific identification method and are included in other income (expense).

Cash, cash equivalents and short-term investments consist of the following (in thousands):

	,	Septembe	er 30, 2003	
		Unrealized	Unrealized	
	Cost Basis	Gains	Losses	Fair Value
Cash and cash equivalents	\$ 84,943	<u> </u>	<u>     \$    -    </u>	\$ 84,943
Less: restricted cash and cash equivalents				(8,402)
				76,541
Short-term investments:				
Available-for-sale securities:				
Corporate equity securities	393	-	(116)	277
Commercial paper	549	=	-	549
U.S. government and agency obligations	57,278	171	(29)	57,420
State and municipal obligations	11,677	135	(1)	11,811
Corporate notes and obligations	33,755	213	(76)	33,892
Total short-term investments	\$103,652	\$519	\$(222)	103,949
Less: restricted short term-investments				(45,542)
				\$58,407
		Septembe	er 30, 2002	
	Cost Basis	Unrealized Gains	Unrealized Losses	Fair Value
Cash and cash equivalents	\$131,018	<u> </u>	\$ -	\$131,018
Short-term investments:				
Trading securities:				
Commercial paper	10,940	3	_	10,943
Certificates of deposit		46	_	3,046
U.S. government and agency obligations		526	(15)	38,618
Corporate notes and obligations		665	(65)	60,256
Total trading securities		1,240	(80)	112,863
Available-for-sale securities:				
Corporate equity securities	20,153	924	-	21,077
1 1 7		924	-	21,077
Total available-for-sale securities	20,133			

At September 30, 2003, \$8.4 million of cash and cash equivalents were primarily restricted for the purchase of the remaining

outstanding shares of Lambda Physik (see Note 5) and disability insurance. In addition, \$45.6 million of short-term investments were restricted pursuant to our Star notes agreement (see Note 10). There were no restricted cash, cash equivalents or short-term investments at September 30, 2002.

The amortized cost and estimated fair value of available-for-sale investments in debt securities at September 30, 2003, classified as short-term investments, including restricted amounts, on our consolidated balance sheet were as follows (in thousands):

	Amortized Cost	Estimated Fair Value
Due in less than 1 year	\$53,633	\$53,873
Due in 1 to 5 years	47,989	48,149
Due in 5 to 10 years	1,583	1,594
Due beyond 10 years	54	56
Total investments in available-for-sale debt securities	\$103,259	\$103,672

There were no investments in available-for-sale debt securities at September 30, 2002.

For fiscal 2003, we received \$126.8 million for the sale of available-for-sale securities and realized gross gains of \$1.6 million and gross losses of \$0.1 million. There were no sales of available-for-sale securities in fiscal 2002.

Realized gains from the sale of trading securities were \$0.2 million and \$0.1 million for fiscal years ended September 30, 2003 and 2002, respectively. Realized losses from the sale of trading securities were \$0 and \$0.1 million for fiscal years ended September 30, 2003 and 2002, respectively.

Our investments in corporate equity securities at September 30, 2003 and September 30, 2002, primarily represent the fair value of our investment in Lumenis common stock (215,000 shares and 5,432,099 shares, respectively) and are classified as available-for-sale. The Lumenis common stock is unregistered and its trading is subject to restrictions under SEC Rule 144 and other restrictions as defined in the definitive agreement. Unrealized gain (loss) on the investment is included in other comprehensive income (loss).

In determining if and when a decline in the value of our Lumenis stock is other-than-temporary, as required by SFAS 115, management evaluates the length of time that the market value has been below cost, the severity of the decline relative to cost, current and expected future market conditions, the financial condition of Lumenis and other relevant criteria. When such a decline in value is deemed to be other-than-temporary, we recognize an impairment loss in the current period operating results to the extent of the decline. In the third quarter of fiscal 2002, the market value of our investment in Lumenis had declined from our initial valuation of \$124.4 million to \$20.2 million. This decline was deemed to be other-than-temporary and an impairment loss of \$104.2 million (\$79.2 million after income tax benefit of \$25.0 million) was recognized in the third quarter of fiscal 2002. The \$25.0 million in tax benefit related to the impairment loss recognized in the third quarter of fiscal 2002 is net of a \$16.6 million valuation allowance recorded against this capital loss deferred tax asset. In the first quarter of fiscal 2003, the market value of our investment in Lumenis had declined to \$9.9 million. This decline was also deemed to be other-than-temporary and an additional impairment loss of \$10.2 million was recognized. We recorded no net tax benefit related to the \$10.2 million impairment loss as we recorded a \$4.1 million valuation allowance against this capital loss deferred tax asset. Unrealized gains and losses subsequent to the first quarter of fiscal 2003 from the new cost basis are recorded in OCI. During the third and fourth quarters of fiscal 2003, we sold 5,217,099 shares of Lumenis common stock for approximately \$11.0 million while recognizing a gain of \$1.5 million. The market value of our remaining investment in Lumenis (215,000 shares) was \$0.3 million with an associated cost basis of \$0.4 million as of September 30, 2003. In the first quarter of fiscal 2004, we sold our remaining shares of Lumenis common stock for approximately \$0.5 million while recognizing a gain of \$0.1 million.

## 7. GOODWILL AND INTANGIBLE ASSETS

Effective October 1, 2001, we adopted the provisions of SFAS No. 142, "Goodwill and Other Intangible Assets" (SFAS 142). Upon adoption, we suspended the amortization of goodwill with a net carrying value of \$32.1 million at September 30, 2001 and annual amortization of \$4.1 million, including amortization resulting from the acquisitions of Crystal in November 2000, DEOS and MicroLas in April 2001, and other business combinations initiated prior to the adoption of SFAS 141.

As part of our adoption of SFAS 142, we completed the initial impairment tests during the second quarter of fiscal 2002 and the annual impairment tests during the fourth quarter of fiscal 2002 and these tests resulted in no impairment. In the second quarter of fiscal 2003, our Lambda Physik reporting segment lowered its forecasted outlook in the lithography business and we determined the significant changes in the economic outlook for this business were an indicator that an impairment test was required under SFAS 142. During the quarter ended March 29, 2003, we performed an impairment test on the goodwill associated with the lithography business. As a result of our analysis, we determined that the goodwill associated with this business was impaired and we recorded a charge of

\$2.4 million in the second quarter of fiscal 2003. We completed the annual impairment test for fiscal 2003 in the fourth quarter of fiscal 2003 and these tests resulted in no impairment.

The carrying amount of goodwill attributable to each reportable segment is as follows (in thousands):

_	2003	2002
Electro-Optics	\$34,991	\$10,982
Lambda Physik	15,961	20,618
Total	\$50,952	\$31,600

Actual results of operations for fiscal 2001 adjusted to apply the non-amortization provisions of SFAS 142 are as follows (in thousands, except per share data):

Reported net income	\$100,750 1,766 \$102,516
Basic earnings per share:	
Reported net income	\$3.64
Goodwill amortization, net of tax	0.06
Adjusted net income	
Diluted earnings per share:	
Reported net income	\$3.50
Goodwill amortization, net of tax	0.06
Adjusted net income	\$3.56

In connection with adopting SFAS 142, we also reassessed the useful lives and the classification of our identifiable intangible assets and determined that they continued to be appropriate, except for workforce-in-place with a net carrying value of \$0.8 million, which was reclassified into goodwill. The components of our amortizable intangible assets are as follows (in thousands):

	<b>September 30, 2003</b>				September 30, 2002	
	Gross		_	Gross		_
	Carrying	Accumulated		Carrying	Accumulated	
	Amount	Amortization	Net	Amount	Amortization	Net
Existing technology	\$36,093	\$ 6,083	\$30,010	\$19,404	\$3,198	\$16,206
Patents	8,258	2,682	5,576	6,961	1,668	5,293
Licenses	4,261	3,621	640	4,261	3,195	1,066
Drawings	1,122	544	578	956	272	684
Order backlog	1,803	1,457	346	945	945	-
Customer lists	2,086	640	1,446	630	324	306
Trade name	1,360	176	1,184	-	-	-
Non-compete agreement	646	99	547	-	-	-
Total	\$55,629	\$15,302	\$40,327	\$33,157	\$9,602	\$23,555

Amortization expense for intangible assets during fiscal years 2003, 2002 and 2001 were \$5.1 million, \$3.4 million and \$2.4 million, respectively. Estimated amortization expense for the next five fiscal years and all years thereafter are as follows (in thousands):

	<b>Estimated Amortization</b>
	Expense
2004	\$ 6,178
2005	5,367
2006	4,891
2007	4,514
2008	4,352
Thereafter	15,025
Total	\$40,327

# 8. BALANCE SHEET DETAILS

Prepaid expenses and other assets consist of the following (in thousands):

	September 30,	
	2003	2002
Prepaid and refundable income taxes	\$23,101	\$ 9,235
Prepaid expenses and other	21,776	16,757
Note receivable from Lumenis	-	12,828
Assets held for sale	816	466
Total prepaid expenses and other assets	\$45,693	\$39,286

In August 2002, we entered into a loan agreement with Picometrix of Ann Arbor, Michigan. Picometrix develops and manufactures ultra high-speed photoreceivers and instrumentation for the telecommunication, data communication and test and measurement markets, focusing on epitaxial growth, photodetector design and microfabrication, high-speed microwave packaging, hybrid circuit assembly and high-speed testing. Under the loan agreement, we provided Picometrix with \$6.0 million of debt financing in exchange for (1) a nine-month option to purchase 100% of the equity of Picometrix for \$6.0 million plus a two-year earn-out of up to \$25.0 million and (2) the repayment of the \$6.0 million of loan principal at maturity and interest at the greater of prime (4.25% at September 30, 2002) minus 0.5% or 3.0% payable monthly over its term. We originally recorded the purchase option at its fair value of \$1.4 million and the note at its fair value of \$4.6 million and were amortizing the discount to interest income over the estimated 18-month term of the note. The maturity date of the note varied depending on whether we exercised the option to acquire Picometrix. On November 22, 2002, we terminated our option to purchase Picometrix and recorded a \$1.4 million charge to write-off the value assigned to the purchase option. The termination of our purchase option also resulted in the note becoming due in full on May 26, 2003. In the first quarter of fiscal 2003, we evaluated the collectibility of our note receivable from Picometrix, including the ability of Picometrix to make the required interest and principal payments. We determined that the estimated net realizable value of the note at December 28, 2002 was \$0.9 million, and accordingly recorded an impairment charge of \$3.7 million (\$2.3 million after-tax) during the first quarter of fiscal 2003 (see Note 4). We continue to evaluate the collectibility of the note and concluded that the net realizable value of the note at September 30, 2003 was \$0.9 million. As of September 30, 2003, the note is considered due on demand.

In October 2002, we renegotiated the terms of our note receivable from Lumenis that we received as part of the consideration for the sale of our Medical segment to Lumenis. The face value of the note was \$12.9 million, bearing interest at 5% per annum and was originally due on October 30, 2002. Under the renegotiated terms, the due date of the note was extended to July 31, 2003 and interest on unpaid principal accrued at 9% per annum and was payable monthly. In fiscal 2003, Lumenis made payments of \$12.9 million, settling the note in full.

Assets held for sale at September 30, 2003 include \$0.8 of impaired equipment for our Auburn, California and Tampere, Finland facilities, all of which are recorded at net realizable value (see Note 4). Assets held for sale at September 28, 2002 include \$0.5 million of impaired telecommunications equipment for our Lincoln, California facility and was recorded at net realizable value.

Other assets consist of the following (in thousands):

	September 30,	
	2003	2002
Asset related to deferred compensation arrangements	\$17,466	\$15,516
Deferred tax assets	11,433	23,665
Other assets	4,183	11,065
Assets held for investment	963	1,032
Total other assets	\$34,045	\$51,278

Assets held for investment at September 30, 2003 and 2002 include our former manufacturing facility in Sturbridge, Massachusetts that we leased to Convergent Prima, Inc. through March 31, 2003.

Other current liabilities consist of the following (in thousands):

	September 30,	
	2003	2002
Accrued payroll and benefits	\$22,006	\$19,217
Accrued expenses and other	18,729	18,368
Accrued restructuring charges (Note 4)	5,528	-
Reserve for warranty	10,242	8,495
Deferred income	3,756	4,324
Lease termination cost (Note 4)	1,693	-
Customer deposits	6,026	3,074
Total other current liabilities	\$67,980	\$53,478

We provide warranties on certain of our product sales (generally one year) and allowances for estimated warranty costs are recorded at the time of sale. The determination of such allowances requires us to make estimates of product return rates and expected costs to repair or replace the products under warranty. We currently establish warranty reserves based on historical warranty costs for each product line. If actual return rates and/or repair and replacement costs differ significantly from our estimates, adjustments to recognize additional cost of sales may be required in future periods.

Components of the reserve for warranty costs during fiscal 2003 and 2002 were as follows (in thousands):

	September 30,	
_	2003	2002
Beginning balance	\$ 8,495	\$11,519
Additions related to current period sales	12,537	6,433
Warranty costs incurred in the current period	(11,090)	(9,685)
Accruals resulting from acquisitions	253	228
Adjustments to accruals related to prior period sales	47	<u>-</u>
Ending balance.	\$10,242	\$ 8,495

Other long-term liabilities consist of the following (in thousands):

	September 30,	
	2003	2002
Deferred compensation	\$17,466	\$15,516
Deferred tax liabilities	5,968	36,433
Deferred income	1,477	1,365
Environmental remediation costs	547	640
Other long-term liabilities	3,550	1,906
Total other long-term liabilities	\$29,008	\$55,860

# 9. SHORT-TERM BORROWINGS

Short-term borrowings consist of the following (in thousands):

_	September 30,		
	2003		2002
Short-term note payable to bank	\$	-	\$10,500
Borrowings under bank lines		-	4,159
Notes payable to minority stockholder in subsidiary		-	152
Short-term borrowings	\$	-	\$14,811

The short-term note payable to bank expired December 31, 2002 and the note payable to minority stockholder interest in subsidiary was repaid in December 2002.

We maintain lines of credit worldwide with several banks. Our domestic lines of credit consist of a \$1.0 million account with Umpqua Bank that expired November 3, 2003, a \$7.0 million account with Dresdner Bank that has no expiration date and a \$12.5 million unsecured revolving account from Union Bank of California, which expires January 31, 2005. Our Union Bank of California agreement is subject to

standard covenants related to financial ratios, profitability and dividend payments and requires us to maintain \$50 million of cash and certain short-term investments (as defined in the agreement) at all times in any bank in the United States (the Minimum Balance Arrangement). We were not in compliance with certain of these covenants, including the Minimum Balance Arrangement, and the line of credit was not available to us at September 30, 2003. No amounts were outstanding on our Union Bank of California revolving account at September 30, 2003. We are currently working with our banks to obtain a new domestic line of credit agreement on terms acceptable to us. In addition, we have several foreign lines of credit that allow us to borrow in the applicable local currency. At September 30, 2003, these lines of credit totaled \$49.5 million and there were no borrowings against these lines. Our foreign lines of credit are concentrated in Europe and Japan and are principally unsecured. All of our lines of credit generally provide borrowings at the bank reference rate or better, which varies depending on the country where the funds are borrowed.

# 10. LONG-TERM OBLIGATIONS

The components of long-term obligations are as follows (in thousands):

	September 30,	
	2003	2002
Notes payable	\$41,122	\$55,555
Bonds payable	-	1,200
Capital leases	757	1,280
Other	172	197
	42,051	58,232
Current portion	(14,140)	(14,887)
Long-term obligations	\$27,911	\$43,345

# Notes payable

At September 30, 2003, notes payable consists of \$38.0 million (\$17.8 million at 6.7% and \$20.2 million at 6.9%) to finance our acquisition of Star Medical (Star notes) and other unsecured notes payable totaling \$3.1 million at interest rates ranging from 1.5% to 4.6%.

In September 2002, we amended our Star notes agreement. The amendment included modifications of certain covenants associated with the notes and allowed a prepayment of a portion of the principal balance. As a result, in October 2002 we prepaid \$7.3 million of the principal balance with no prepayment penalty. The Star notes originally included financial covenants such as maintaining a minimum tangible net worth, minimum consolidated debt to capitalization ratio, fixed charge coverage ratio, as well as non-financial covenants such as providing quarterly statements to the note holders. In September 2003, we amended the agreement to relinquish all financial covenant requirements. In place of the covenants, the amendment requires that we place cash and short-term investment balances in an amount equal to 120% of the principal balance in a restricted collateral account. At September 30, 2003, \$15.2 million and \$30.4 million of current and non-current restricted cash, cash equivalents and short-term investments were related to the Star notes (see Note 6).

# **Bonds** payable

Bonds payable were issued to finance the construction of certain facilities and acquisition of equipment, which secure repayment of the bonds. These bonds were paid in full during fiscal 2003.

Annual maturities of long-term debt (excluding capital leases) are \$13.6 million, \$13.5 million, \$13.4 million, \$0.6 million, and \$0.2 million in fiscal years 2004 through 2008, respectively.

# 11. COMMITMENTS AND CONTINGENCIES

## **Commitments**

We lease several of our facilities under operating leases. In addition, we lease the land for our Auburn manufacturing facilities under long-term fixed leases.

In fiscal 2002, we renewed the lease for our Santa Clara, California facility that expires in February 2007. Upon expiration of the lease, we have an option to purchase the facility for \$24.6 million, renew the lease for an additional five years or arrange for the sale of the facility to a third party where we would retain an obligation to the owner for the difference between the sale price, if less than \$24.6 million, and \$21.3 million, subject to certain provisions of the lease. If we do not purchase the facility or arrange for its sale as

discussed above, we would be obligated for an additional lease payment of \$21.3 million. The lease also requires that we maintain specified financial covenants. At September 30, 2003, we were not in compliance with the net losses limit we agreed to maintain pursuant to our agreement. In October 2003, we entered into an irrevocable agreement to purchase the facility for \$24.6 million, and subsequently received a waiver for this violation from the lessor effective as of September 30, 2003. As of September 30, 2003, the estimated fair value of the facility was \$1.7 million less than the purchase price of \$24.6 million and we have recorded such amount in other current liabilities (see Note 4). As the purchase of the facility occurred subsequent to September 30, 2003, the future minimum lease payments are included in the table below.

Future minimum payments under our non-cancelable leases at September 30, 2003 are as follows (in thousands):

Year Ending September 30,	Capital Leases	Operating Leases
2004	\$549	\$ 6,914
2005	242	5,837
2006	-	5,056
2007	-	24,361
2008	-	1,638
Thereafter	-	6,976
Total	791	\$50,782
Less amount representing interest	34	
Present value of minimum lease payments	\$757	

Rent expense, exclusive of sublease income, was \$8.6 million, \$8.0 million and \$6.6 million in fiscal 2003, 2002 and 2001, respectively.

Future minimum lease receivables under subleases at September 30, 2003 are as follows (in thousands):

1 ear Ending September 30,	
2004	\$1,267
2005	1,267
2006	1,267
2007	422
Thereafter	-
Total	\$4,223

Sublease income was \$2.3 million, \$4.5 million and \$1.7 million for fiscal years 2003, 2002 and 2001, respectively.

In September 1988, we entered into several patent license agreements with Patlex Corporation (Patlex) relating to laser-related patents owned by Dr. Gordon Gould that had been assigned to Patlex. Under the terms of the agreements, we pay royalties to Patlex ranging from 3.5% to 5.0% for specified categories of domestic sales and 2.0% of specified categories for foreign sales, subject to certain exceptions and limitations. Royalty expense under these agreements was \$0.7 million, \$0.7 million and \$0.8 million in the years ended September 30, 2003, 2002 and 2001, respectively. The patents expire on various dates through May 2005.

Under the terms of a contract manufacturing agreement, we have approximately \$1.0 million of non-cancelable purchase commitments as of September 30, 2003.

## **Contingencies**

Voor Ending Contembor 20

Certain claims and lawsuits have been filed or are pending against us. In the opinion of management, all such matters have been adequately provided for, are without merit, or are of such kind that if disposed of unfavorably, would not have a material adverse effect on our consolidated financial position or results of operations.

We, along with several other companies, have been named as a party to a remedial action order issued by the California Department of Toxic Substance Control relating to soil and groundwater contamination at and in the vicinity of the Stanford Industrial Park in Palo Alto, California, where our former headquarters facility is located. The responding parties to the Regional Order (including Coherent) have completed Remedial Investigation and Feasibility Reports, which were approved by the State of California. The responding parties have installed four remedial systems and have reached agreement with responding parties on final cost sharing.

We were was also named, along with other parties, to a remedial action order for the Porter Drive facility site itself in Stanford Industrial Park. The State of California has approved the Remedial Investigation Report, Feasibility Study Report, Remedial Action Plan Report and Final Remedial Action Report, prepared by us for this site. We have been operating remedial systems at the site to remove subsurface chemicals since April 1992. During fiscal 1997, we settled with the prior tenant and neighboring companies, on allocation of the cost of investigating and remediating the site at 3210 Porter Drive, Palo Alto and the bordering site at 3300 Hillview Avenue, Palo Alto.

Management believes that our probable, nondiscounted net liability at September 30, 2003 for remaining costs associated with the above environmental matters is \$0.5 million, which has been previously accrued. This amount consists of total estimated probable costs of \$0.6 million (\$0.1 million included in other current liabilities and \$0.5 million included in other long-term liabilities) reduced by minimum probable recoveries of \$0.1 million included in other assets from other parties named to the order.

# 12. STOCKHOLDERS' EQUITY

On March 23, 2001 our shareholders approved an increase in our authorized common stock to 500,000,000 shares with a \$0.01 par value.

Each outstanding share of our common stock carries a stock purchase right (right) issued pursuant to a dividend distribution declared by our Board of Directors and distributed to stockholders of record on November 17, 1989. When exercisable, each right entitles the stockholder to buy one share of our common stock at an exercise price of \$80. The rights will become exercisable following the tenth day after a person or group announces acquisition of 20% or more of our common stock or announces commencement of a tender offer, the consummation of which would result in ownership by the person or group of 30% or more of the common stock. We will be entitled to redeem the rights at \$.01 per right at any time on or before the 10th day following the acquisition by a person or group of 20% or more of our common stock.

If, prior to redemption of the rights, we are acquired in a merger or other business combination in which we are the surviving corporation, or a person or group acquires 20% or more of our common stock, each right owned by a holder of less than 20% of the common stock will entitle its owner to purchase, at the right's then current exercise price, a number of shares of common stock of Coherent having a fair market value equal to twice the right's exercise price. If we sell more than 50% of our assets or earning power or are acquired in a merger or other business combination in which we are not the surviving corporation, the acquiring person must assume the obligations under the rights and the rights will become exercisable to acquire common stock of the acquiring person at the discounted price.

# 13. EMPLOYEE STOCK OPTION AND BENEFIT PLANS

# **Productivity Incentive Plan**

The Productivity Incentive Plan (Plan) provides for quarterly distributions of common stock and cash to each eligible employee. The amounts of the distributions are based on consolidated sales, pre-tax profit, the market price of our common stock and the employee's salary. The fair market value of common stock and cash that are earned under the Plan are charged to expense. During fiscal 2003, 4,122 shares (fair market value of \$0.1 million) and \$1.1 million were accrued for the benefit of employees. During fiscal 2002, 5,272 shares (fair market value of \$0.1 million) and \$1.7 million were accrued for the benefit of employees. During fiscal 2001, 18,691 shares (fair market value of \$0.6 million) and \$4.9 million were accrued for the benefit of employees. At September 30, 2003, we had 76,829 shares of our common stock reserved for future issuance under the Plan.

# **Coherent Employee Retirement and Investment Plan**

Under the Coherent Employee Retirement and Investment Plan, we match employee contributions to the Plan up to a maximum of 6% of the employee's individual earnings. Employees become eligible for participation on their first day of employment and for Company matching contributions after completing one year of service. Our contributions (net of forfeitures) during fiscal 2003, 2002, and 2001 were \$3.7 million, \$3.6 million and \$2.5 million, respectively.

# **Supplemental Retirement Plan**

We have a Supplemental Retirement Plan for senior management personnel which permits the participants to contribute up to 24% of their before tax earnings to a trust. We will match these contributions up to an amount equal to 6% of such participants' earnings less any amounts contributed by us to such participant under the Coherent Employee Retirement and Investment Plan. Our contributions (net of forfeitures) during fiscal 2003, 2002 and 2001, were \$52,000, \$55,000 and \$43,000, respectively.

## **Employee Stock Purchase Plan**

We have an Employee Stock Purchase Plan whereby eligible employees may authorize payroll deductions of up to 10% of their regular base salary to purchase shares at the lower of 85% of the fair market value of the common stock on the date of commencement of the

offering or on the last day of the six-month offering period. During fiscal 2003, 2002 and 2001, a total of 272,868, 235,843 and 259,487 shares, respectively, were purchased by and distributed to employees at an average price of \$15.07, \$23.94 and \$21.23 per share, respectively.

At September 30, 2003, \$1.6 million had been contributed by employees that will be used to purchase a maximum of 105,025 shares in the year ended September 30, 2004 at a price determined under the terms of the Plan. At September 30, 2003, we had 914,556 shares of our common stock reserved for future issuance under the plan.

# **Stock Option Plans**

We have three Stock Option Plans and two non-employee Directors' Stock Option Plans. Under these plans, Coherent may grant options to purchase up to an aggregate of 11,800,000 and 595,000 shares of common stock, respectively. Employee options are generally exercisable three years from the grant date, at the fair market value of the common stock on the date of the grant; however, initial grants to employees issued through May 31, 2003 vest 25% annually and initial grants issued subsequent to May 31, 2003 vest 50% annually. Director options are automatically granted to our non-employee directors. Such directors initially receive a stock option for 30,000 shares exercisable over a three-year period. Additionally, the non-employee directors receive an annual grant of 12,000 shares exercisable three years from the date of grant. Grants under employee plans expire between four to six years from the original grant date and grants under director plans expire ten years from the original grant date.

Option activity for all plans is summarized as follows:

_	Outstanding Options		
	Number of Shares	Weighted Average Exercise Price Per Share	
Outstanding, October 1, 2000	3,914,500	\$27.88	
Options granted	1,554,100	34.55	
Options exercised	(1,050,500)	15.82	
Options canceled	(575,200)	38.45	
Outstanding, September 30, 2001	3,842,900	31.49	
Options granted	1,267,100	30.71	
Options exercised	(330,600)	16.93	
Options canceled	(143,500)	36.17	
Outstanding, September 30, 2002	4,635,900	32.09	
Options granted	1,212,900	19.95	
Options exercised	(617,200)	14.66	
Options canceled	(274,300)	33.36	
Outstanding, September 30, 2003	4,957,300	\$31.22	

At September 30, 2003, 1,577,796 options were available for future grant under all plans. At September 30, 2003, all outstanding stock options have been issued under plans approved by our shareholders. The following table summarizes information about stock options outstanding at September 30, 2003:

	Options Outstanding		Options E	xercisable	
Range of Exercise Prices	Number of Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life (Years)	Number of Shares	Weighted Average Exercise Price
\$8.94 - \$19.06	571,600	\$ 15.26	3.70	343,100	\$ 12.84
19.09 - 19.77	859,275	19.75	5.48	800	19.09
19.85 - 29.04	339,900	24.82	4.25	138,550	25,37
29.85 - 30.92	1,038,025	30.84	4.56	110,150	30.73
31.00 - 32.50	939,050	32.44	2.93	361,400	32.43
32.89 - 49.88	1,049,400	45.06	2.80	774,425	46.99
50.00 - 87.13	157,050	67.45	2.72	91,800	65.97
\$89.75	3,000	89.75	2.44	2,250	89.75
Total	4,957,300	\$31.22	3.86	1,822,475	\$ 36.04

There were 1,637,770 and 1,003,650 options exercisable as of September 30, 2002 and 2001 with weighted average exercise prices of \$24.03 and \$18.44, respectively. The weighted average estimated fair value of stock options granted in fiscal 2003, 2002 and 2001

was \$12.08, \$19.31 and \$22.11, respectively.

Our subsidiary, Lambda Physik AG, implemented a stock-based incentive award plan for its employees during the year ended September 30, 2000. In fiscal 2003, Lambda Physik AG issued no options to purchase shares of Lambda Physik AG common stock, no options were exercised and 49,600 options were canceled. At September 30, 2003, 150,900 options were outstanding at a weighted average exercise price of \$45.92 per share and 103,758 options were exercisable. In fiscal 2002, Lambda Physik AG issued options to purchase 72,300 shares of Lambda Physik AG common stock at a weighted average price of \$14.30 per share to employees under the plan. During the year ended September 30, 2002, no options were exercised and 35,050 options were canceled. At September 30, 2002, 200,500 options were outstanding at a weighted average exercise price of \$39.53 per share and 70,366 options were exercisable. In fiscal 2001, Lambda Physik AG issued options to purchase 72,900 shares of Lambda Physik AG common stock at a weighted average price of \$68.52 per share to employees. During the year ended September 30, 2001, no options were exercised and 29,450 options were canceled. At September 30, 2001, 163,250 options were outstanding at a weighted average exercise price of \$50.22 per share and no options were exercisable.

## **Notes Receivable from Stock Sales**

Notes receivable from stock sales result from the exercise of stock options for notes. The notes are full recourse promissory notes bearing interest at 4.8% to 6.7% per annum and are collateralized by the stock issued upon exercise of the stock options. Interest is payable annually and principal is due through 2007.

# 14. COMPREHENSIVE INCOME (LOSS)

The following summarizes activity in accumulated comprehensive income (loss) related to derivatives, net of tax, held by us (in thousands):

Balance, September 30, 2001	\$ 47
Changes in fair value of derivatives	(370)
Net losses reclassified from OCI	85
Balance, September 30, 2002	(238)
Changes in fair value of derivatives	53
Net losses reclassified from OCI	57
Balance, September 30, 2003	\$(128)

Accumulated other comprehensive income (net of tax) at September 30, 2003 is comprised of accumulated translation adjustments of \$18.7 million, net loss on derivative instruments of \$0.1 million and unrealized loss on available-for-sale securities of \$0.2 million, respectively. Accumulated other comprehensive income (net of tax) at September 30, 2002 is comprised of accumulated translation adjustments of \$2.0 million, net loss on derivative instruments of \$0.2 million and unrealized gain on available-for-sale securities of \$0.6 million, respectively.

# 15. OTHER INCOME (EXPENSE)

Other income (expense) is as follows (in thousands):

	Years Ended September 30,		
	2003	2002	2001
Royalty income	\$100	\$ 100	\$ 166
Sublease income, net of expenses	980	2,646	661
Net gain (loss) on sale of assets	(3)	1,665	=
Equity in income (loss) of joint ventures	(1,927)	(1,284)	314
Gain (loss) on investments, net.	1,428	(874)	608
Customer contract settlement fee	4,400	=	=
Other—net	702	764	272
Other income (expense) net	\$5,680	\$3,017	\$2,021

# 16. INCOME TAXES

The provision (benefit) for income taxes on income (loss) from continuing operations before minority interest consists of the following (in thousands):

	Years Ended September 30,			
	2003	2002	2001	
Currently payable:				
Federal	<b>\$(19,646)</b>	\$(1,335)	\$5,774	
State	1,024	-	404	
Foreign	7,544	2,821	7,879	
	(11,078)	1,486	14,057	
Deferred:				
Federal	7,133	(28,085)	2,897	
State	(5,279)	(2,253)	200	
Foreign	2,584	1,680	(1,998)	
	4,438	(28,658)	1,099	
Provision (benefit) for income taxes	\$(6,640)	\$(27,172)	\$15,156	

The components of income (loss) from continuing operations before income taxes and minority interest consist of (in thousands):

_	Years Ended September 30,			
	2003	2003 2002		
United States	\$(50,944)	\$(106,394)	\$30,623	
Foreign	(6,470)	8,812	12,559	
Income (loss) from continuing operations before income taxes and	<u> </u>		_	
minority interest	\$(57,414)	\$ (97,582)	\$43,182	

The reconciliation of the statutory federal income tax rate related to pretax income (loss) from continuing operations to the effective rate is as follows:

_	Years Ended September 30,			
_	2003	2002	2001	
Federal statutory tax rate	(35.0)%	(35.0)%	35.0%	
Valuation allowance	25.3	16.9	-	
Foreign tax rates in excess of U.S. rates, net	0.3	(2.7)	1.0	
State income taxes, net of federal income tax benefit	(2.7)	(4.1)	4.0	
Research and development credit	<b>(7.8)</b>	(2.3)	(5.3)	
In-process research and development	4.0	-	-	
Impairment with no tax benefit	3.7	-	-	
Income tax refunds from prior years	-	(3.0)	-	
Other	0.6	2.4	0.4	
Provision for income taxes.	(11.6)%	(27.8)%	35.1%	

The significant components of deferred tax assets and liabilities were (in thousands):

	September 30,	
	2003	2002
Deferred tax assets:		
Reserves and accruals not currently deductible	\$19,893	\$22,068
Operating loss carryforwards and tax credits	47,950	20,667
Capital loss carryforwards	15,525	=
Asset impairment	2,936	41,377
Intercompany profit	2,921	3,236
Deferred service revenue	1,181	1,316
Amortization	4,731	6,758
Inventory capitalization	2,384	1,391
Other	1,328	1,414
	98,849	98,227
Valuation allowance	(31,143)	(16,562)
	67,706	81,665
Deferred tax liabilities:		
Gain on issuance of stock by subsidiary	22,059	22,059
Depreciation and amortization	5,653	11,997
Accumulated translation adjustment	4,998	1,452
Other	2,951	6,568
	35,661	42,076
Total deferred tax assets and liabilities	\$32,045	\$39,589

As of September 30, 2003, realization of a portion of our federal and state net capital loss carryforwards, generated due to our sale of Lumenis common stock at a loss, was not considered more likely than not by management; accordingly, we established a valuation allowance of \$15.9 million and \$5.4 million for the federal and state portions, respectively, considered not realizable. In addition, during the fourth quarter of fiscal 2003, we recorded a valuation allowance of \$7.8 million against deferred tax assets of Lambda Physik because we did not believe we would earn sufficient future taxable income to utilize these deferred tax assets, resulting in a \$7.8 million charge to income tax expense. At September 30, 2003, a valuation allowance of \$1.8 million remained related to the portion of the tax benefit associated with capital losses recognized with the fiscal 2002 write-down of our investment in Lumenis common stock but not yet realized for tax purposes and \$0.2 million on other deferred tax assets for which realization was not considered more likely than not by management.

The total net deferred tax asset is classified on the consolidated balance sheets as follows (in thousands):

	September 30,	
	2003 2002	
Current deferred income tax assets	\$29,792	\$55,883
Current deferred income tax liabilities	(3,212)	(3,526)
Non-current deferred income tax assets	11,433	23,665
Non-current deferred income tax liabilities	(5,968)	(36,433)
Net deferred tax assets	\$32,045	\$39,589

Net operating loss carryforwards of \$55.7 million in the U.S. will expire if unused by fiscal 2023. Foreign net operating loss carryforwards of \$23.5 million have no expiration date. Federal and state capital loss carryforwards of \$45.3 million and \$108.5 million, respectively, will expire if not used by fiscal 2008.

Federal R&D credit carryforwards of \$2.6 million will expire in fiscal years 2016 and 2017. California manufacturer's investment credits of \$1.3 million will expire in fiscal years 2008 to 2010. California R&D credit carryforwards of \$2.9 million have no expiration date.

# 17. EARNINGS (LOSS) PER SHARE

Basic earnings per share is computed based on the weighted average number of shares outstanding during the period. Diluted earnings per share is computed based on the weighted average number of shares outstanding during the period increased by the effect of dilutive stock options and stock purchase contracts, using the treasury stock method, and shares issuable under the Productivity Incentive Plan.

The following table presents information necessary to calculate basic and diluted earnings per common and common equivalent share (in thousands, except per share data):

	Years Ended September 30,		
	2003	2002	2001
Weighted average shares outstanding—Basic	29,448	28,786	27,709
Common stock equivalents	-	-	1,091
Employee stock purchase plan equivalents	-	-	17
Weighted average shares and equivalents—Diluted	29,448	28,786	28,817
Income (loss) from continuing operations for basic and diluted			
earnings per share computation	\$(46,533)	\$(70,837)	\$27,485
Income (loss) from continuing operations per share—basic	<b>\$</b> (1.58)	\$(2.46)	\$0.99
Income (loss) from continuing operations per share—diluted	\$(1.58)	\$(2.46)	\$0.95

A total of 3,580,000, 2,830,000, and 1,284,000 anti-dilutive weighted shares have been excluded from the dilutive share equivalents calculation at September 30, 2003, 2002 and 2001, respectively.

# 18. SEGMENT INFORMATION

We are organized around two separately managed business units: the Photonics Group and Lambda Physik, which we have identified as operating segments. The Photonics Group is included in our Electro-Optics reportable segment while the Lambda Physik business unit is included in our Lambda Physik reportable segment. Our Electro-Optics reportable segment focuses on markets such as semiconductor and related manufacturing, materials processing, OEM laser components and instrumentation, scientific research and government programs, and graphic arts and display. Our Lambda Physik reportable segment focuses on markets including lasers for the production of thin film transistors (TFT) used in flat panel displays, microlithography applications in the semiconductor industry, ink jet printers, automotive, environmental research, scientific research, medical OEMs, materials processing and micro-machining applications.

Our Chief Executive Officer and Chief Financial Officer have been identified as the chief operating decision makers (CODMs) for SFAS No. 131 "Disclosures about Segments of an Enterprise and Related Information" (SFAS 131) purposes as they assess the performance of the business units and decide how to allocate resources to the business units. Pretax income from continuing operations is the measure of profit and loss that our CODMs use to assess performance and make decisions. Pretax income from continuing operations represents the sales less the cost of sales and direct operating expenses incurred within the operating segments. In addition, our corporate expenses, except for administrative costs previously allocated to our discontinued Medical segment, depreciation of corporate assets and general legal expenses, are allocated to the operating segments and are included in the results below. Corporate expenses not allocated to the groups (administrative costs previously allocated to our discontinued Medical segment, impairment of corporate assets, depreciation of corporate assets and general legal expenses) are included in Corporate and Other in the reconciliation of operating results. Furthermore, the write-downs of our Lumenis investment, interest expense, interest income and the gain on the sale of real estate are included in Corporate and Other in the reconciliation of operating results.

Intersegment sales are accounted for primarily at domestic selling prices. As the CODMs monitor headcount, depreciation and amortization expense and capital expenditures by operating segment, these amounts are presented below. The CODMs do not review total assets by segment, but they do review net trade receivables, net inventories and net property and equipment by operating segment. The accounting policies for reported segments are the same as for Coherent as a whole (see Note 2).

# **Reportable Segments**

Information on reportable segments as of, and for the years ended September 30, 2003, 2002 and 2001, are as follows (in thousands, except headcount):

2003	Electro- Optics	Lambda Physik	Corporate and Other	Total
Net sales	\$324,308	\$81,927	\$-	\$406,235
Intersegment net sales	226	1,658	_	1,884
Gross profit	127,299	21,469	_	148,768
Research & development	36,762	13,989	-	50,751
In-process research and development	4,430	1,908	-	6,338
Selling, general & administrative	80,652	19,946	3,331	103,929
Restructuring, impairment and other charges	31,112	2,358	1,693	35,163
Intangibles amortization	3,837	1,310	-	5,147
Total operating expenses	156,793	39,511	5,024	201,328
Income (loss) from continuing operations before income taxes, including	100,750	25,011	c, = .	201,520
tax-effected minority interest	(29,350)	(11,450)	(12,373)	(53,173)
Depreciation & amortization	18,752	6,416	3,834	29,002
Capital expenditures	15,582	4,306	5,790	25,678
Accounts receivable	57,035	16,083	5,750	73,118
Inventories	59,777	40,370	_	100,147
Property & equipment, net	\$101,344	\$29,656	\$15,399	\$146,399
Headcount	1,700	347	89	2,136
Treadcount	ŕ			2,130
2002	Electro- Optics	Lambda Physik	Corporate and Other	Total
Net sales	\$307,622	\$89,702	-	\$397,324
Intersegment net sales	193	1,184	-	1,377
Gross profit	128,393	32,877	\$(264)	161,006
Research & development	39,800	12,813	-	52,613
Selling, general & administrative	73,692	18,165	2,257	94,114
Restructuring, impairment and other charges	11,015	-	-	11,015
Intangibles amortization	2,251	1,176	-	3,427
Total operating expenses	126,758	32,154	2,257	161,169
Income (loss) from continuing operations before income taxes, including				
tax-effected minority interest	1,585	(900)	(98,694)	(98,009)
Depreciation & amortization	18,117	7,003	2,385	27,505
Capital expenditures	30,120	4,008	5,802	39,930
Accounts receivable	57,033	19,445	-	76,478
Inventories	52,796	36,422	_	89,218
Property & equipment, net	\$130,841	\$27,782	\$13,378	\$172,001
Headcount	1,720	384	86	2,190
	Electro-	Lambda	Corporate	,
2001	Optics	Physik	and Other	Total
Net sales	\$356,830	\$121,115		\$477,945
Intersegment net sales	910	1,217	_	2,127
Gross profit	162,707	36,452	\$614	199,773
Research & development	38,445	14,516	-	52,961
In-process research and development	2,400	71	_	2,471
Selling, general & administrative	74,435	20,807	9,504	104,746
Intangibles amortization	3,613	1,649	-	5,262
Total operating expenses	118,893	37,043	9,504	165,440
Income (loss) from continuing operations before income taxes, including	110,075	57,073	7,504	105,770
tax-effected minority interest	43,305	(492)	(172)	42,641
Depreciation & amortization	16,063	7,730	1,804	25,597
Capital expenditures	70,153	18,948	5,422	94,523
Accounts receivable	62,377	28,311	3,422	94,523
Inventories	68,471	39,534	(25)	107,980
	\$129,511		\$9,915	\$168,536
Property & equipment, net		\$29,110	· · · · · · · · · · · · · · · · · · ·	
Headcount	1,831	448	93	2,372

# **Geographic Information**

Our foreign operations consist primarily of sales offices and manufacturing facilities in Europe and Asia-Pacific. Sales, marketing and customer service activities are conducted through sales subsidiaries throughout the world. Geographic sales information for the last three years ending September 30, 2003 is based on the location of the end customer. Geographic long-lived asset information presented below is based on the physical location of the assets at the end of each year.

Sales to unaffiliated customers are as follows (in thousands):

	Years Ended September 30,			
SALES	2003	2002	2001	
United States	\$157,171	\$159,247	\$213,365	
Japan	84,903	93,697	101,797	
Europe, other	67,249	66,024	74,973	
Germany	48,058	44,401	50,873	
Asia-Pacific, other	31,154	16,493	16,260	
Rest of World	17,700	17,462	20,677	
Total Sales	\$406,235	\$397,324	\$477,945	

For the years ended September 30, 2003, 2002 and 2001, no one customer accounted for 10% or more of total net sales.

Long-lived assets, which include all non-current assets other than goodwill, intangibles and deferred taxes, by geographic region are as follows (in thousands):

	September 30,			
LONG-LIVED ASSETS	2003	2002	2001	
United States	\$138,109	\$137,913	\$145,728	
Germany	44,231	31,462	30,916	
Europe, other	23,601	28,802	21,059	
Asia-Pacific	1,730	1,866	2,089	
Total Long-lived Assets	\$207,671	\$200,043	\$199,792	

# QUARTERLY FINANCIAL INFORMATION (UNAUDITED)

Summarized quarterly financial data for the years ended September 30, 2003, 2002 and 2001 has been restated to account for the discontinued Medical segment and is as follows (in thousands, except per share amounts):

	First Ouarter	Second Ouarter	Third Ouarter	Fourth Ouarter
YEAR ENDED SEPTEMBER 30, 2003:				
Net sales	\$102,030	\$103,512	\$99,174	\$101,519
Gross profit	40,443	40,991	36,949	30,385
Net income (loss)	(20,483)	1,927	(2,286)	(25,049)
Net income (loss) per basic share	\$(0.70)	\$0.07	\$(0.08)	\$(0.84)
Net income (loss) per diluted share	\$(0.70)	\$0.07	\$(0.08)	\$(0.84)
YEAR ENDED SEPTEMBER 30, 2002:				
Net sales	\$96,619	\$98,649	\$95,932	\$106,124
Gross profit	42,020	39,992	38,509	40,485
Net income (loss)	2,730	3,007	(81,130)	6,425
Net income (loss) per basic share	\$0.10	\$0.10	\$(2.81)	\$0.22
Net income (loss) per diluted share	\$0.09	\$0.10	\$(2.81)	\$0.22
YEAR ENDED SEPTEMBER 30, 2001:				
Net sales	\$111,929	\$129,603	\$120,913	\$115,500
Gross profit	51,464	57,862	55,324	35,123
Net income (loss)	12,153	14,653	74,019	(75)
Net income (loss) per basic share	\$0.45	\$0.53	\$2.66	\$0.00
Net income (loss) per diluted share	\$0.43	\$0.51	\$2.56	\$0.00

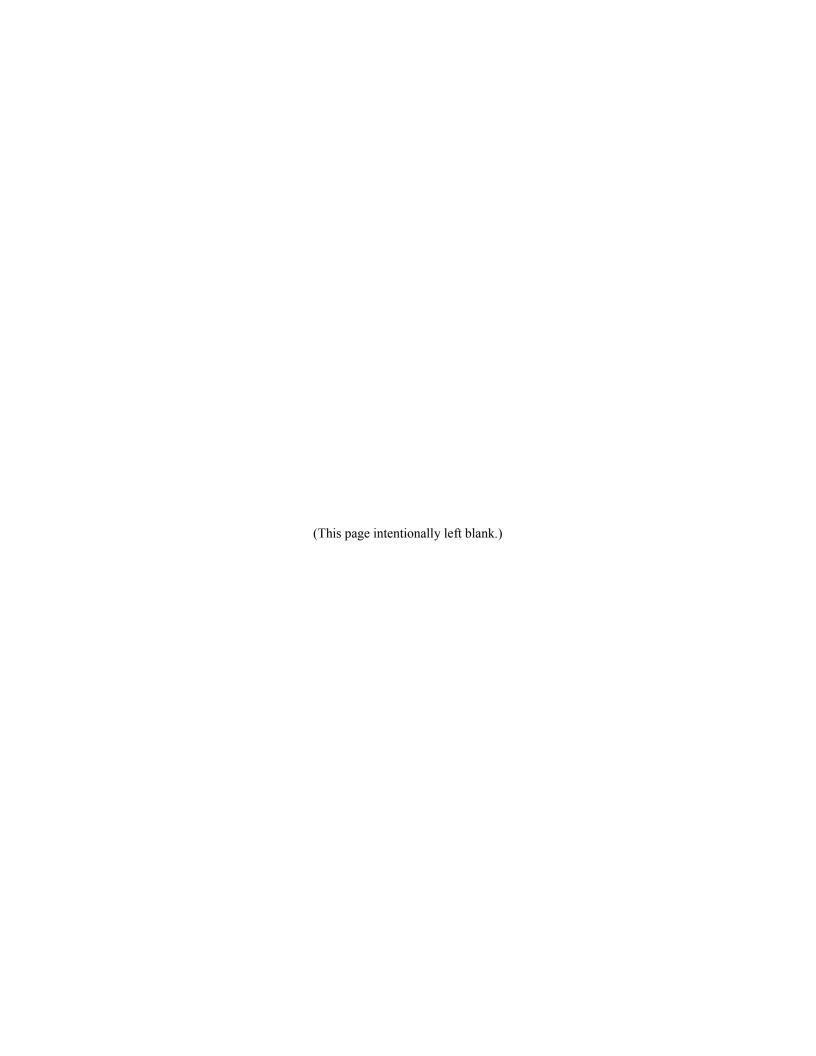
# VALUATION AND QUALIFYING ACCOUNTS

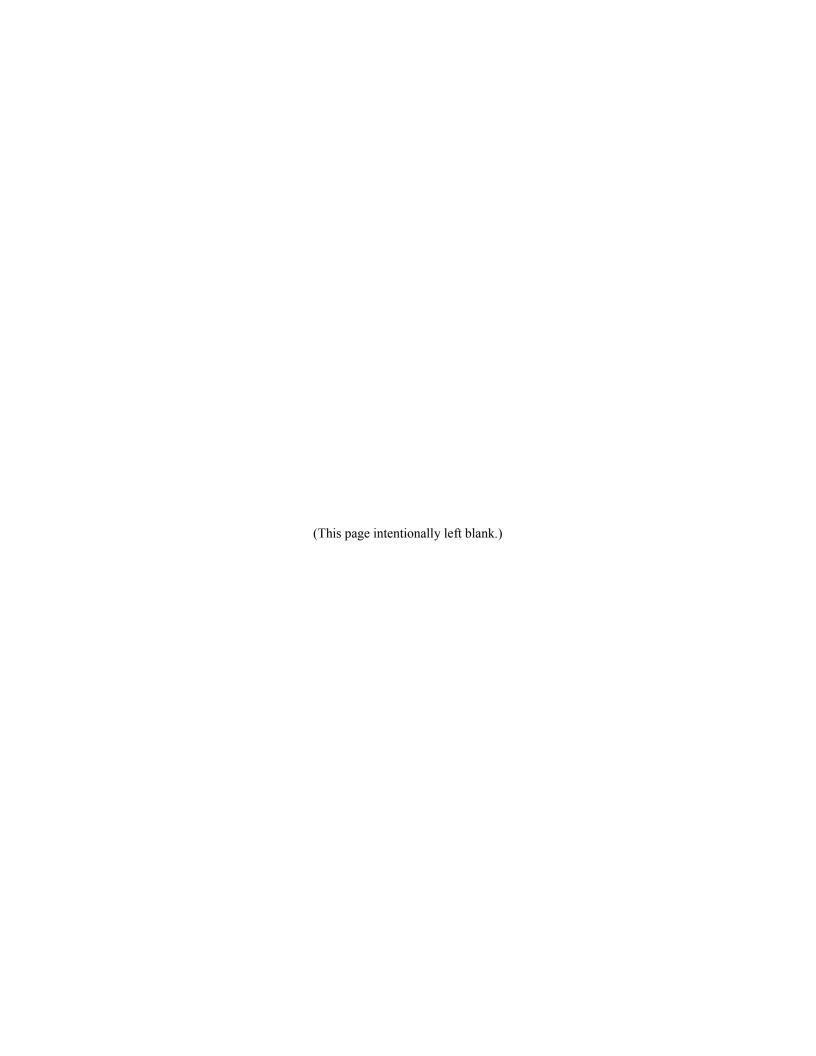
# For Years Ended September 30, 2003, 2002 and 2001

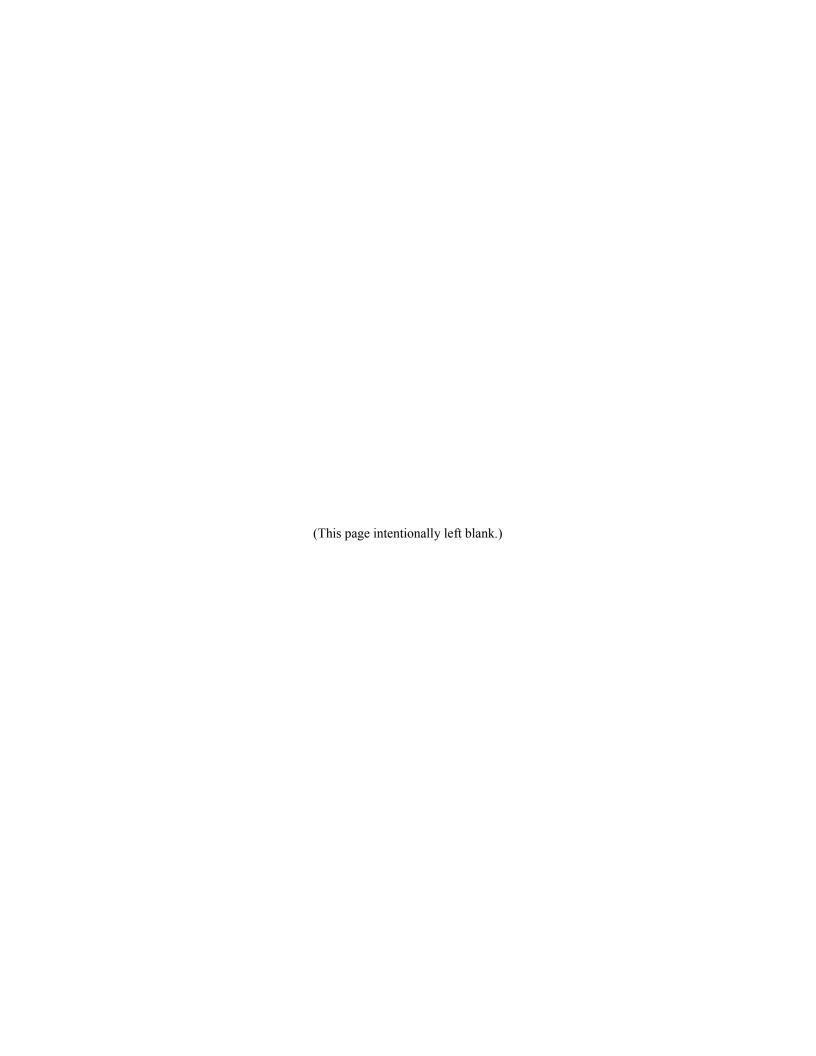
(In thousands)

	Balance at Beginning of Period	Addition Charged to Costs and Expenses	Deductions from Reserves(1)	Balance at End of Period
YEAR ENDED SEPTEMBER 30, 2003:				
Accounts receivable allowances	\$ 4,038	\$ 3,679	\$ (3,566)	\$ 4,151
Warranty	8,495	12,837	(11,090)	10,242
YEAR ENDED SEPTEMBER 30, 2002:				
Accounts receivable allowances	\$ 4,794	\$ 1,811	\$ (2,567)	\$ 4,038
Warranty	11,519	6,661	(9,685)	8,495
YEAR ENDED SEPTEMBER 30, 2001:				
Accounts receivable allowances	\$ 3,553	\$ 2,894	\$ (1,653)	\$ 4,794
Warranty	9,590	14,861	(12,932)	11,519

<sup>(1)</sup> Reductions from the reserves are for the purpose for which the reserves were created.







## **Corporate Information**

## Board of Directors

Bernard J. Couillaud, Ph.D.

Chairman (retired) Coherent, Inc.

Henry E. Gauthier Vice Chairman (retired) Coherent, Inc.

John R. Ambroseo, Ph.D.

President and Chief Executive Officer

Coherent, Inc.

Robert J. Quillinan

Executive Vice President and Mergers and Acquisitions (retired)

Coherent, Inc.

Charles W. Cantoni

President and Chief Executive Officer

Alara, Inc.

Frank Carrubba, Ph.D. Chief Technical Officer (retired) Philips Electronics N.V.

Jerry E. Robertson, Ph.D. Executive Vice President (retired) 3M Life Sciences Sector

John Hart 3 Com Fellow

3 Com CTO and Senior Vice

President (retired)

Lawrence Tomlinson Senior Vice President and Treasurer (retired) Hewlett-Packard

# Corporate Officers

John R. Ambroseo, Ph.D.

President and Chief Executive Officer

Coherent, Inc.

Helene Simonet

Executive Vice President and Chief Financial Officer

Coherent, Inc.

Dennis C. Bucek

Sr. Vice President, Treasurer, and

Assistant Secretary Coherent, Inc.

Kevin McCarthy

Executive Vice President and Chief Information Officer

Coherent, Inc.

Ron Victor

Executive Vice President, Human Resources Coherent, Inc.

Vittorio Fossati-Bellani, Ph.D. Executive Vice President and Chief Marketing Officer Coherent, Inc.

Scott H. Miller

Sr. Vice President and General Counsel & Assistant Secretary

Coherent, Inc.

Lawrence W. Sonsini Secretary Member, Wilson, Sonsini, Goodrich & Rosati, P.C.

Independent Auditors
Deloitte & Touche, LLP

San Jose, CA

General Legal Counsel (Outside) and Financial

Information

Wilson, Sonsini, Goodrich & Rosati, P.C.

Palo Alto, CA

### SEC Form 10-K

Form 10-K was filed with the Securities and Exchange Commission on December 18, 2003 for the 2003 fiscal year. Copies will be made available without charge upon request.

Coherent, Inc.

Investor Relations P.O. Box 54980

Santa Clara, CA 95056-0980 Telephone: (408) 764-4110 Fax: (408)970-9998 http://www.Coherent.com

Please send change of address and other correspondence to

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c/o EquiServe
P.O. Box 4301 0
Providence, RI 02940-3011
(781) 575-3120
http://www.EquiServe.com

**Financial Information** 

Coherent invites security analysts and representatives of

portfolio management firms to contact: Peter Schuman, Director, Investor Relations

Telephone: (408) 764-4174

Annual Meeting

Annual meeting of shareholders will held on March 25, 2004,

5:30 p.m. at

5100 Patrick Henry Drive Santa Clara, California

Coherent, Inc. is an equal opportunity employer, M/F/H/V.

The statements in this annual report that relate to future plans, events or performance, including statements such as we anticipate that volume orders will commence in fiscal 2004; most of our customers in China however, ended the fiscal year with inventory positions, which we predict they will burn through by the middle of fiscal 2004; these moves have contributed, and will continue to contribute, to the enhancement of our operating performance; expect the entire process to be concluded during fiscal 2004; and the restructuring of our manufacturing operations should lead to higher efficiency and better agility, which will translate into improved performance. Factors that could cause actual results to differ materially include risks and uncertainties, including risks associated to currency adjustments, contract cancellations, manufacturing risks, competitive factors, and uncertainties pertaining to customer orders, demand for products and services, any effects from future outbreaks of severe acute respiratory syndrome or SARS, and development of markets for the Company's products and services and other risks identified in the Company's SEC filings. Actual results, events and performance may differ materially. Readers are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date hereof. The Company undertakes no obligation to update these forwardlooking statements as a result of events or circumstances after the date hereof or to reflect the occurrence of unanticipated events. Readers are encouraged to refer to the risk disclosures described in the Company's reports on Forms 10-K, 10-Q and 8K, as applicable.

Chameleon, Sapphire, Innova, and Compass are registered trademarks of Coherent, Inc.

Fortune 500 is a registered trademark of Time, Inc.

MC-177-04-20K0204

# Coherent, Inc. Global Presence

#### Coherent, Inc.

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### **Coherent Positive Light**

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