

# INTEVAC INC

## FORM 10-K (Annual Report)

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SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549

Form 10-K

(Mark One)

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

For the fiscal year ended December 31, 2003

or

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

For the transition period from to

Commission file number 0-26946

INTEVAC, INC.

(Exact name of registrant as specified in its charter)

California

(State or other jurisdiction of incorporation or organization)

94-3125814

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

3560 Bassett Street

Santa Clara, California 95054

(Address of principal executive office, including Zip Code)

Registrant's telephone number, including area code:

(408) 986-9888

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

None

Title of each class

Name of each Exchange on which registered

none

none

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

Common Stock (no par value)

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

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

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

The aggregate market value of voting stock held by non-affiliates of the Registrant, as of June 28, 2003 was approximately \$15,690,000

(based on the closing price for shares of the Registrant's Common Stock as reported by the NASDAQ National Market System for the last trading day prior to that date). Shares of Common Stock held by each executive officer, director, and holder of 5% or more of the outstanding Common Stock have been excluded in that such persons may be deemed to be affiliates. This determination of affiliate status is not necessarily a conclusive determination for other purposes.

On March 3, 2004, 19,981,993 shares of the Registrant's Common Stock, no par value, were outstanding.

#### DOCUMENTS INCORPORATED BY REFERENCE

**Portions of the Registrant's Proxy Statement for the 2004 Annual Meeting of Shareholders are incorporated by reference into Part III. Such proxy statement will be filed within 120 days after the end of the fiscal year covered by this Annual Report on Form 10-K.**

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*This Annual Report on Form 10-K contains forward-looking statements, which involve risks and uncertainties. Words such as “believes,” “expects,” “plans,” “anticipates” and the like indicate forward-looking statements. These forward-looking statements include comments related to hard disk drive market dynamics, our leadership position in thin-film disk manufacturing equipment, projected customer requirements for new capacity and for technology upgrades to their installed base of thin-film disk manufacturing equipment, as well as the ability of our products to meet these requirements; the timing of delivery and/or acceptance of our products for revenue; the expected features, performance and competitive advantages of products we are developing including LIVAR®, low light level sensors and cameras and 200 Lean systems; and the cost of complying with government regulations. Our actual results may differ materially from the results discussed in the forward-looking statements for a variety of reasons, including those set forth under “Certain Factors Which May Affect Future Operating Results.”*

## PART I

### Item 1. Business

#### Overview

We are the world’s leading provider of thin-film disk sputtering equipment for the thin-film disk industry and a developer of leading technology for extreme low light imaging sensors, cameras and systems. We operate two businesses: Equipment and Imaging.

Our Equipment business designs, manufactures, markets and services complex capital equipment which deposits, or sputters, highly engineered thin-films onto disks used in hard disk drives. We believe we are the leading provider of disk sputtering systems. Our systems represent approximately half of the installed base of disk sputtering systems and produced approximately half of all thin-film disks made worldwide in 2003. Our customers include the world’s leading thin-film disk manufacturers, such as Hitachi Global Storage Technologies, or HGST, Komag, Maxtor and Seagate Technology. We believe the rapid growth of digital data, the transition from video cassette recorders to digital video recorders and the growth of new consumer applications, such as personal video recorders, video game consoles and MP3 players, along with new technology advances in the industry, will provide us with a significant growth opportunity.

Our Imaging business develops and manufactures electro-optical sensors, cameras, and systems that permit highly sensitive detection of photons in the visible and near infrared portions of the spectrum, allowing vision in extreme low light situations. We currently develop night-vision technology and equipment for military and commercial applications. To date, our revenues have been derived primarily from research and development contracts funded by the U.S. government. Applications for our imaging technology include systems for positive identification of targets at long range and sensors and cameras for use in extreme low light situations. More recently, we began developing products for use in the commercial sector, specifically the security, life science and physical science markets.

Intevac was formed in 1990 and completed a leveraged buyout of a number of divisions of Varian Associates in February 1991. The technologies acquired from Varian formed the foundation for our Equipment and Imaging businesses. We were incorporated in October 1990 in California. Our principal executive offices are located at 3560 Bassett Street, Santa Clara, California 95054, and our phone number is (408) 986-9888. Our Internet home page is located at [www.intevac.com](http://www.intevac.com); however the information in, or that can be accessed through, our home page is not part of this report. Our annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to such reports are available, free of charge, on or through our Internet home page as soon as reasonably practicable after we electronically file such material with, or furnish it to, the Securities and Exchange Commission.

“Intevac,” “Intevac® MDP 250,” “Intevac® 200 Lean,” “LIVAR,” “D-STAR,” “EBAPS” and “NightVista™,” among others, are our registered trademarks.

### Equipment Business

Our Equipment business designs, manufactures, markets and services complex capital equipment used in the sputtering, or deposition, of highly engineered thin-films of material onto thin-film disks which are used in hard disk drives. Hard disk drives are the primary storage medium for digital data and function by magnetically storing data on thin-film disks. These thin-film disks are created in a sophisticated manufacturing process involving a variation of many steps, including plating, annealing, polishing, texturing, sputtering and lubrication.

#### *Storage Market Growth Drivers*

Data storage requirements have rapidly increased from kilobytes for documents, to megabytes for audio and still images, to gigabytes for video. Hard disk drives are the primary devices used for storing and retrieving digital data. According to IDC, the total storage capacity of hard disk drives shipped grew from 5.2 billion gigabytes in 2001 to 8.8 billion gigabytes in 2002. Additionally, capacity is expected to grow at a 45.1% compounded annual growth rate from 2002 to 2007. We believe there are a number of emerging trends and applications that exploit these reduced storage costs and that require storage intensive solutions.

- New consumer electronics applications, such as digital video and audio recorders, video game platforms, emerging HDTV applications and streaming video require significant digital data storage capability.
- Personal computers have evolved from devices operating simple applications such as word processing, to powerful machines that are capable of playing, recording and creating multimedia content, such as images, audio and video. These capabilities have driven the demand for new personal computers and increasing requirements for data storage. IDC estimates personal computer growth of over 10.2% in 2004.
- Enterprise data storage requirements are increasing, as regulations and other business factors require companies to archive more information, such as documents and email. Additionally, companies are transitioning from paper-based storage to digital data-based storage and digital backup.
- Certain traditional analog storage applications are transitioning to digital hard disk-based storage. For example, the video surveillance industry, including home security, law enforcement, private security services, retail, transportation and government agencies, is transitioning from analog video tapes to digital hard disk storage.

As a result of these and other storage applications, IDC expects the total number of units of all hard disk drives to be shipped between 2002 and 2007 to grow at a compounded annual rate of approximately 10.7% from 219 million units to 365 million units.

#### *Hard Disk Drive Market Dynamics*

*Areal Density Increasing.* Areal density, the density of information stored on thin-film disks, continues to increase. Areal density is a function of how closely spaced the information bits are on the thin-film disk. Higher areal density means more information can be stored on a thin-film disk of the same size. Thin-film disk manufacturers compete by increasing the areal density of a hard disk, which enables them to provide more data storage capacity at a lower cost per gigabyte. As areal densities have increased, hard disk drive manufacturers have been able to reduce costs by reducing the number of disks per drive. In 2003, desktop personal computers included an average of 1.1 thin-film disks per drive whereas in 1998 there was an average of 2.2 thin-film disks per drive.

*Transition from Longitudinal to Perpendicular Recording.* Historically, thin-film disk manufacturers have been able to increase the areal density of a thin-film disk by improving existing longitudinal recording processes, a storage method where magnetized data bits lie flat on the thin-film disk. However, the rate of increase in areal density has slowed, as the magnetized data bits are packed closer and closer together, which increases instability. In order to increase the rate of areal density expansion, we believe the thin-film disk

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industry will transition to perpendicular recording. Perpendicular recording, as the name implies, results in the data bits lying perpendicular to the plane of the thin-film disk and also enables bits to be recorded at a higher density than longitudinal recording.

*New Equipment Required for Perpendicular Recording.* The equipment that thin-film disk manufacturers purchased in the mid to late 1990s could generally accommodate up to 12 process steps, which has been sufficient to enable improvements in areal density using longitudinal recording. However, producing thin-film disks capable of perpendicular recording may require up to 18 to 24 process steps. As a result, in order to transition to perpendicular recording, thin-film disk manufacturers will most likely need to replace or retool their existing thin-film disk manufacturing equipment.

*Consolidation of Equipment Suppliers.* The supplier base of disk sputtering equipment has consolidated. Beginning in 1995, many thin-film disk manufacturers undertook aggressive expansion plans. The reduction in thin-film disks per drive combined with these capacity expansions resulted in substantial excess disk production capacity in the late 1990s through 2002. As a result, even as total storage capacity of all hard disk drives shipped increased dramatically from 1997 to 2002, thin-film disk manufacturers did not make significant investments in new disk sputtering equipment. In fact, of the four leading providers of disk sputtering equipment, only two have announced new equipment platforms capable of perpendicular recording.

*Industry Consolidation.* Two types of companies purchase disk sputtering equipment. Vertically integrated companies manufacture both thin-film disks and the drives that use the disks. Thin-film disk manufacturing companies manufacture only thin-film disks and sell them to hard disk drive manufacturers. These companies were also adversely affected by the overcapacity of 1997 through 2002, and as a result, the industry underwent significant consolidation. For instance, in 2001 Maxtor acquired Quantum's hard disk drive operations, and IBM sold its hard disk drive business to Hitachi in 2002. In 2001, Fujitsu ceased manufacturing hard disk drives for the personal storage market. This consolidation has reduced the number of thin-film hard disk manufacturers able to respond to any increasing demand for digital data storage.

*Return to Industry Growth.* According to IDC, hard disk drive demand will reach 365 million units by 2007. In 2003, hard disk drive manufacturers were expected to produce approximately 232 million units, according to IDC. Recently, HGST, Maxtor and Seagate, have announced significant thin-film disk manufacturing capacity expansions.

To meet increasing demands, thin-film disk manufacturers are beginning to invest in new disk sputtering equipment that can accommodate the additional process steps required for perpendicular recording. To evaluate the performance of competing disk sputtering equipment, thin-film disk manufacturers consider the following criteria:

- *Cost of Ownership.* The factors that affect the cost of ownership of disk sputtering equipment include purchase price, yield, throughput, factory floor footprint, uptime and material utilization efficiency. A lower cost of ownership for disk sputtering equipment is a key factor in lowering the manufacturer's product cost.
- *Extendibility and Flexibility.* We believe thin-film disk manufacturers need disk sputtering equipment that can address the needs of their evolving technology roadmaps. This equipment must be capable of incorporating new process steps and technical capabilities, including the processes needed for producing thin-film disks capable of perpendicular recording. Additionally, these manufacturers are improving longitudinal processes and further developing the processes necessary for perpendicular recording, and as a result, they demand a modular, flexible system that supports process reconfigurations and expansions with a minimum of effort.
- *Compatibility with Existing Equipment.* We believe thin-film disk manufacturers prefer to standardize their processes around one or two disk sputtering equipment suppliers. Once a thin-film disk manufacturer has selected a particular supplier's equipment, that manufacturer generally relies upon that supplier's equipment for much of its production capacity and frequently will continue to purchase any additional equipment from the same supplier. There are significant economies of scale related to the use of a single platform in product design, product qualification, manufacturing and support.



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- *Long-term Commitment of Supplier.* We believe thin-film disk manufacturers need disk sputtering equipment providers that are committed to meeting current and future technology requirements and to supporting this equipment throughout its useful life. As a result, thin-film disk manufacturers increasingly demand a supplier with the stability and capability to be a long-term technology partner.

### *Our Competitive Strengths*

We are the leading provider of sputtering equipment to thin-film disk manufacturers. We believe that our industry leadership is the result of the following key competitive strengths:

- *Broad Installed Base with Industry Leading Customers.* Our MDP-250 disk sputtering system gained wide acceptance in the thin-film disk manufacturing industry and by the late 1990s was being used in the manufacture of approximately half of the thin-film disks used in hard disk drives worldwide. We believe that there are approximately 90 MDP-250s currently in use in production and research and development applications by customers such as HGST, Komag, Maxtor, Seagate and Showa Denko. We believe the majority of our active customers are now utilizing most of their capacity and that there is significant potential for these customers to both resume adding capacity and to upgrade the technical capability of their installed base to permit production of higher density disks capable of perpendicular recording. During 2003, we received orders for ten of our 200 Lean disk sputtering systems and delivered our first system in December 2003. The remaining systems are currently scheduled to be delivered in the first half of 2004. We believe this is the first production order from a major hard disk drive manufacturer for a new equipment platform capable of perpendicular recording.
- *Technology Leadership with Modular Next Generation Advanced Platform.* In 2003, we introduced our latest-generation disk sputtering system, the 200 Lean, which provides significantly enhanced capabilities relative to our installed base of MDP-250 systems. The 200 Lean provides higher throughput from a smaller footprint, which enables more thin-film disks to be manufactured per square-foot of factory. The flexible design of the 200 Lean allows rapid reconfiguration to accommodate product changeovers and new thin-film disk technology. The modular design of the 200 Lean also allows thin-film disk manufacturers to add additional process steps, as advanced thin-film disk technologies, such as perpendicular recording, are introduced.
- *Long-Term Commitment to Hard Disk Drive Industry.* We have been a hard disk drive equipment provider since 1991. We are one of only two companies that have announced next-generation disk sputtering equipment that can support perpendicular recording. We have continued to develop new technologies and have introduced the 200 Lean disk sputtering system to meet the needs for additional process steps needed to produce thin-film disks capable of perpendicular recording. In addition, our headquarters are strategically located in close proximity to our customers' hard disk drive development centers, and we are expanding our support center in Singapore to provide greater service to our customers' manufacturing facilities located in Southeast Asia.

Based on these competitive strengths, we believe that we are well positioned to maintain and enhance our market leading position in the disk sputtering equipment market.

### *Our Equipment Strategy*

We believe we can leverage our leadership position in disk sputtering equipment to increase our sales to thin-film disk manufacturers and apply our technology to new markets. The key elements of our strategy are as follows:

- *Become Preferred Solutions Provider in the Thin-Film Disk Industry.* Our goal is to become a preferred solutions provider to thin-film disk manufacturers. We believe that our 200 Lean provides our customers with an advanced modular platform that can address their future disk sputtering needs. By working in close partnership with our customers, we believe we are well positioned to provide new manufacturing solutions for other hard disk drive components. We believe we can integrate additional capabilities into the 200 Lean, enabling our customers to eliminate other stand-alone disk manufactur-

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ing equipment and reduce thin-film disk production time. We also believe we have an opportunity to develop and supply other equipment related to the manufacture of hard disk drives.

- *Deliver Highest Customer Value Proposition.* Our goal is to maintain our leadership in advanced disk sputtering equipment by providing equipment with the lowest cost of ownership. The 200 Lean's modular design provides customers the ability to reconfigure their disk manufacturing systems for rapid technology shifts and evolving technology roadmaps.
- *Expand Consumables, Spare Parts and Service Offerings.* We plan to increase the sale of disk sputtering equipment consumables, spare parts and service in order to increase our revenue opportunity per customer. In addition, growing these offerings will enable us to deepen and enhance our customer relationships. We believe the expected revenue from these offerings will help mitigate the impact of cyclical downturns in the disk sputtering equipment business. We believe that the close proximity of our service center in Singapore to a large number of hard disk drive manufacturers' facilities gives us a competitive advantage.
- *Leverage Existing Technology into New Markets.* In addition to expansion within our existing customer base, we intend to target other markets where we can apply our expertise in complex manufacturing equipment.

### **Our Equipment Products**

#### *200 Lean Disk Sputtering System*

The 200 Lean is our latest generation disk sputtering system. The 200 Lean provides significantly enhanced capabilities relative to the installed base of approximately 90 MDP-250 systems. The 200 Lean provides higher throughput from a smaller footprint in a flexible modular system, which enables more thin-film disks to be manufactured per square-foot of factory floor space and is designed to lower overall cost of ownership.

The key features of the 200 Lean include:

- *Modular Design.* The 200 Lean's modular design allows our customers to accommodate any number of thin-film disk manufacturing process steps required by their evolving technology roadmaps. The 200 Lean consists of a front-end robotic module that loads and unloads thin-film disks from the system, combined with any number of four-station process modules. Typical configurations of the 200 Lean have from three to six process modules, which results in systems capable of 12 to 24 process steps. Additional process modules can be easily added to already installed systems. For example, a customer could buy a 12-station 200 Lean to manufacture longitudinal media and at a later date upgrade the system to a 24-station system to manufacture perpendicular media.
- *Easy to Reconfigure.* Thin-film disk manufacturers produce many different designs that have short product life cycles, leading to frequent reconfiguration of disk sputtering equipment. The mechanical design and software control system of the 200 Lean allows rapid reconfiguration of systems by our customers. The 200 Lean is also easily reconfigured to process thin-film disks with glass or aluminum substrates of varying diameters and thicknesses.
- *Higher Throughput with Smaller Footprint.* The 200 Lean offers higher throughput (over 700 thin-film disks per hour) and more process stations in a more compact package than our industry-leading MDP-250 system. We believe that the 200 Lean has the highest disk throughput per square foot of factory space for a system capable of manufacturing perpendicular media.
- *High Availability.* The 200 Lean is designed to operate seven days a week, 24 hours a day with 95% availability.
- *Single Disk Processing.* The 200 Lean processes each disk sequentially through a series of single-disk process chambers. This eliminates interactions between adjacent process stations, providing a higher level of process control and thin-film uniformity.

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- *High-Vacuum Capability.* The 200 Lean operates at ten times the vacuum level of the installed base of MDP-250s. Higher vacuum levels lead to lower contamination and higher coating efficiency, as required to manufacture advanced media.
- *Suite of Process Station Options.* The 200 Lean offers a wide range of process stations, providing capabilities such as metal deposition, heating, cooling and carbon overcoating.

### *MDP-250 Disk Sputtering System*

We believe that the MDP-250 is used to manufacture approximately half the thin-film disks used worldwide to manufacture hard disk drives. The MDP-250 has twelve process stations that are separately vacuum pumped and vacuum isolated. The MDP-250 has a number of process station options, including multiple options for the sputtering of thin-films and carbon overcoats, heating stations, cooling stations and cleaning stations. Furthermore, the MDP-250's 12 process stations can be reconfigured to accommodate process changes.

### *Equipment Business Sales and Marketing*

Our Equipment business sales are made primarily through our direct sales force, although in Japan, we sell our products through a distributor, Matsubo. The selling process for our equipment products is a multi-level and long-term process, involving individuals from marketing, engineering, operations, customer service and senior management. The process involves making samples for the prospective customer and responding to their needs for moderate levels of machine customization. Installing and integrating new equipment requires a substantial investment by a customer. Sales of our systems depend, in significant part, upon the decision of a prospective customer to replace obsolete equipment or to increase manufacturing capacity by upgrading or expanding existing manufacturing facilities or by constructing new manufacturing facilities, all of which typically involve a significant capital commitment. Therefore, customers often require a significant number of product presentations and demonstrations before making a purchasing decision. Accordingly, our systems typically have a lengthy sales cycle, during which we may expend substantial funds and management time and effort with no assurance that a sale will result.

The production of large complex systems requires us to make significant investments in inventory both to fulfill customer orders and to maintain adequate supplies of spare parts to service previously shipped systems. We also maintain an inventory of spare parts at our Singapore subsidiary to support our customers in Singapore and Malaysia. We typically require our customers to pay for systems in three installments, with a portion of the system price billed upon receipt of an order, a portion of the system price billed upon shipment, and the balance of the system price and any sales tax due upon completing installation and acceptance of the system at the customer's factory. All customer product payments are recorded as customer advances pending revenue recognition.

### *Equipment Business Customers*

Our disk sputtering equipment customers include thin-film disk manufacturers, such as Fuji Electric, Komag, Showa Denko and Trace Storage Technology, and vertically integrated hard disk drive manufacturers, such as HGST, Maxtor and Seagate. The majority of our customers' product development programs are located in the United States. Our customers' manufacturing facilities are located in California, Singapore, Malaysia, Japan and Taiwan. In addition, HGST is developing a new media facility in China.

### *Equipment Business Customer Support*

We provide process and applications support, customer training, installation, start-up assistance and emergency service support to our equipment customers. Process and applications support is provided by our equipment process engineers, who also visit customers at their plants to assist in process development projects. We conduct training classes for our customers' process engineers, machine operators and machine service personnel. Additional training is also given to our customers during the machine installation. We have a subsidiary in Singapore to support our customers in Southeast Asia.

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We generally provide a warranty of at least one year on our equipment. During this warranty period any necessary non-consumable parts are supplied and installed without charge. Our employees provide field service support primarily in the United States, Singapore and Malaysia. In Japan, field service support is provided by our distributor, Matsubo, supplemented by our factory support. We and Matsubo stock consumables and spare parts to support the installed base of systems. These parts are generally available on a 24-hour per day basis.

### *Equipment Business Competition*

The principal competitive factors affecting the markets for our equipment products include price, product performance and functionality, integration and manageability of products, customer support and service, reputation and reliability. We have historically experienced intense competition worldwide from competitors including Anelva Corporation, Ulvac and Unaxis Holdings, Ltd., each of which has sold substantial numbers of systems worldwide. Anelva, Ulvac and Unaxis all have substantially greater financial, technical, marketing, manufacturing and other resources than we do. Currently Anelva and Intevac are the only companies that are offering products that address the sputtering requirements of advanced perpendicular recording. However, there can be no assurance that any of our competitors will not develop enhancements to, or future generations of, competitive products that offer superior price or performance features or that new competitors will not enter our markets and develop such enhanced products.

Given the lengthy sales cycle and the significant investment required to integrate equipment into the manufacturing process, we believe that once a thin-film disk manufacturer has selected a particular supplier's equipment for a specific application, that manufacturer generally relies upon that supplier's equipment and frequently will continue to purchase any additional equipment for that application from the same supplier. Accordingly, competition for customers in the equipment industry is intense, and suppliers of equipment may offer substantial pricing concessions and incentives to attract new customers or retain existing customers.

### **Imaging Business**

Our Imaging business develops and manufactures electro-optical sensors, cameras, and systems that permit highly sensitive detection of photons in the visible and near infrared portions of the spectrum, allowing vision in extreme low light situations.

#### *Imaging Industry Overview*

Imaging is the capture and display of light or heat, which is infrared radiation, emitted or reflected from an object. A segment of the imaging market has evolved into specialized technology for the capture of low light images. Low light imaging involves the capture and display of light at intensities of approximately one millionth, or less of, daytime light levels.

The U.S. military has determined that low light imaging technology that provides superiority in nighttime combat creates a significant tactical strategic advantage. Accordingly, the U.S. military has funded the development of night vision technology, which has evolved through three generations to today's widely deployed "Generation-III" night vision tubes. Typically, Generation-III night vision tubes are placed in front of a user's eyes, like a pair of binoculars, and produce a direct-view, "green glow" image. However, the military is now funding the development of next generation extreme low light imaging technology that provides digital video output and is more cost-effective and portable.

The commercial sector has taken a different approach to extreme low light imaging than the military. The initial extreme low light cameras for the commercial sector were based on charged coupled device, or CCD, technology, which is able to produce a digital output. CCD technology relies on long exposure times for its sensitivity, and as a result the initial cameras were used for static applications, like astronomy. Other commercial markets, such as metrology, life sciences and industrial process monitoring, adopted CCD technology. However, cameras for these new markets compromised sensitivity for dynamic applications with motion or short measurement times.

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As a result, two distinct forms of low light level imaging have evolved: the Generation-III night vision tube technology developed by the military, which provides direct-view analog imagery; and CCD technology, which can provide digital imagery, but is not well suited to dynamic applications.

### *Our Imaging Solution*

We have developed imaging technology that combines the low light capability of Generation-III with silicon-based digital video technology that we believe will enable us to provide a family of portable, cost-effective low light sensors and cameras. Our solution integrates three key elements into a compact sensor:

- a semiconductor photocathode, which converts incoming light into electrons,
- acceleration of those electrons into a digital imaging chip, and
- conversion of those electrons into a digital signal.

Elements of our proprietary solutions include:

*Advanced Photocathode Technology* — A photocathode is a semiconductor compound with the ability to convert light into electrons. We are developing a family of photocathodes that are engineered to optimize sensitivity at specific wavelengths ranging from the visible (0.40 microns) to the near infrared (1.65 microns). Our photocathodes have high quantum efficiencies, the efficiency with which incoming light photons are converted to electrons, and are extremely sensitive to incoming light. Some of our detectors, incorporating such photocathodes, can detect incoming light at levels as low as a single photon, which is the ultimate level of sensitivity.

*Use of Low Power CMOS Imaging Chips* — Historically, CCD sensors were the primary technology used in digital imaging. Recently, Complementary Metal Oxide Semiconductor, or CMOS sensors, which are generally lower cost and require less power than comparable CCD sensors, have been developed for consumer imaging applications. CMOS imaging chips are rapidly improving in power consumption, resolution and dynamic range. We have developed proprietary technologies and capabilities to incorporate CMOS sensors into our products to take advantage of these improvements. As a result, we believe we will be able to offer low cost, low power, extreme low light imaging sensors for portable applications in price sensitive markets.

*Increased Silicon Sensor Sensitivity* — We have developed proprietary technology to enable CMOS and CCD sensors to capture the accelerated electrons emitted from the photocathode more efficiently. Increasing the electron capture efficiency directly increases extreme low light imaging performance.

*Compact Ultra-High Vacuum Sensor Packaging* — Our compact ultra-high vacuum sensor package enables us to combine a megapixel imaging chip with our photocathodes in a package approximately one inch square and one quarter inch thick. Our proprietary design maintains close spacing between the photocathode and the silicon sensor to further enhance resolution. Our small package is particularly well suited for portable applications where size and weight are critical.

### *Low Light Imaging Market Opportunity*

We are designing our imaging solutions to address next generation military requirements and the dynamic applications of the commercial markets. Forecast International estimated the military market for legacy night vision systems and research programs to be \$347 million in 2003.

*Military Long Range Target Identification* — Current long-range nighttime surveillance systems are based on expensive thermal imaging camera systems, which image the thermal profile of a target. Thermal imaging systems become larger with increased range, which is problematic for aircraft and portable applications. Additionally, these systems only measure emitted heat and as a result produce relatively poor resolution images. Moreover, long range infrared imaging systems deployed by the U.S. military are not significantly superior to infrared imaging systems available to potential adversaries. The rules of engagement for U.S. military forces require positive identification prior to attack. This puts U.S. forces at a disadvantage to

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adversaries who are willing to attack targets that have been detected, but not positively identified. Accordingly, there is a need for a cost effective, compact, long-range imaging solution for target identification.

*Head Mounted Night Vision Systems* — Generation-III based night vision goggles, which have excellent extreme low light imaging performance, were widely deployed by the U.S. military for use by soldiers during the 1990's. However, these goggles are relatively large, heavy and lack video output. Additionally, potential adversaries are now deploying Generation-II+ goggles manufactured outside the United States with performance levels approaching that of Generation-III. Accordingly, the U.S. Army has developed a roadmap to maintain extreme low light imaging dominance for the individual soldier. A key element of this roadmap includes a transition from bulky direct-view night vision goggles to a miniature head mounted imaging system, including an extreme low light camera and video display. This approach addresses size and weight issues and enables connectivity to a wireless network for distribution of the imagery and other information. These improvements need to be realized while minimizing the cost of each soldier's system. The U.S. Army plans to begin deployment of this type of system by 2006.

*Security Cameras* — The world is becoming more security-conscious and increasingly relies on cameras for surveillance. The majority of the security market is served by closed circuit television cameras, which work well when sufficient light is available. However, extreme low light cameras are needed when sufficient light is not available, when it is not economical to provide lighting or when stealth is required. Markets for this capability include surveillance of international borders, airport perimeters, military bases, pipelines and nuclear power plants.

*Physical Sciences* — Companies in the physical sciences use extreme low light imaging to investigate the chemistry and physics of a wide variety of substances such as foods, medicines, materials and biological compounds. They need high sensitivity and increased speed and resolution to increase the accuracy of their measurements and the productivity of their measurement tools. For example, defects on semiconductor wafers are getting increasingly smaller and require improved measurement accuracy. An example in the pharmaceutical industry is the growing need for near infrared spectrometer imaging to determine the composition of medicines in real time.

*Life Sciences* — The life sciences market focuses on increasing the understanding of biology at the cellular level to improve health and quality of life. To image single living cells this market needs extreme low light cameras that operate at speeds significantly higher than cameras that are available today. Extreme low light cameras are required, because light can change the cells that are being imaged. High speed cameras are required, because changes happen very rapidly at the cellular level. Medical labs, hospitals and health research institutes also utilize these cameras for applications ranging from routine lab tests to advanced research.

### ***Our Imaging Strategy***

*Collaborate with Leading Development Organizations* — We collaborate with, and receive significant funding from, leading government research organizations on the development of our extreme low light technology. These organizations strongly influence development and procurement of advanced technologies by the U.S. military. For example, we have collaborated with the U.S. Army Night Vision Labs, the world leader in night vision technology, to facilitate the development and adoption of our night vision technology. We initially developed some of our sensors under a cost sharing agreement with the National Institute of Standards and Technology. More recently, we began working on a program with The Los Alamos National Laboratory to develop three-dimensional sensor technology.

*Become Leading Provider of Extreme Low Light Imaging Technology for the Military* — We are actively marketing our extreme low light imaging technology to the military. Our technology has been incorporated into weapons development programs such as the Airborne Laser (ABL), the Cost Effective Targeting System (CETS), and the Long-Range Identification System (LRID) programs. Our objective is for our LIVAR technology to become the standard for long-range target identification and for our extreme low light sensors to become the standard for head-mounted displays.

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*Leverage Proprietary Sensor Technology to Address Emerging Commercial Markets* — We are using our extreme low light imaging expertise to develop products for commercial markets. For example, in 2003 we completed development of our NightVista™ camera to address the security market. We believe the modular design of our NightVista platform, coupled with our use of standard silicon chips in our configurable sensors, will help to decrease our development time and cost to enter the physical and life sciences markets.

*Lower Manufacturing Costs* — The market for our cameras and sensors is price elastic, and low cost manufacturing will be critical to the rapid proliferation of our products. Our use of commercially available sensors and development of wafer die level manufacturing, as opposed to single die level manufacturing, are elements of our strategy to reduce product cost. Additionally, we have developed proprietary ultra-high vacuum assembly equipment to automate the assembly of the photocathode and the imaging chip. In developing this system, we utilized our expertise in the design and manufacture of complex, high throughput production equipment. This system is designed to decrease unit costs by increasing throughput and improving process controls and yields.

*Build Relationships with Strategic Sales Partners to Accelerate Access to End Markets* — We are focusing on the development and manufacture of extreme low light sensors and cameras. Our products are designed to be enabling technology for larger systems. As a result, we are developing relationships with leading systems manufacturers such as Boeing, Lockheed Martin Corporation and Northrop Grumman Corporation, in the military market, to provide us with the scale and scope necessary to become a leading provider of imaging solutions in our target markets.

### ***Our Imaging Products***

*LIVAR Camera and System Products* — Our Laser Illuminated Viewing and Ranging, or LIVAR, target identification system consists of a near infrared extreme low light camera integrated with an eye-safe laser illuminator. LIVAR uses a laser to illuminate a target and a camera to capture the reflected light and display an image. Currently the military uses systems such as forward-looking infrared systems and radar to detect targets. While these systems can detect targets at relatively long ranges, the resolution is relatively poor, and positive identification is often difficult or impossible. Our LIVAR system is designed to identify targets initially detected by forward-looking infrared or radar technology. Depending on the application, LIVAR can be used to identify targets at distances of up to 20 kilometers. We anticipate offering our LIVAR cameras and systems at prices that range from approximately \$50,000 to \$400,000. We do not expect significant revenues from deployment of LIVAR systems until 2006.

Current LIVAR programs and products include:

*Cost Effective Targeting System* — We are working under subcontract to DRS Sensor Systems to develop a LIVAR system for use on an unmanned surveillance vehicle being developed for the U.S. Army.

*Airborne Laser* — LIVAR cameras are an enabling technology for the laser targeting in Lockheed Martin's Airborne Laser program, in which a jumbo jet will use high-powered lasers to destroy ballistic missiles in flight.

*Classified Program* — The first weapons platform slated for deployment of LIVAR is nearing the end of its product development. We expect prototypes to be fielded in 2004 and volume production to follow approximately two years later.

*SALSA Program* — In the Systems for Airborne Laser Sensing and Analysis, or SALSA, program, we are working with the Air Force Research Laboratory and Kirkland Air Force Base to develop wafer level manufacturing to enable lower cost LIVAR sensors.

*Long Range Identification* — We are working with Northrop Grumman to integrate a LIVAR camera into an existing laser illuminator used by Special Operations Forces to designate targets for laser-guided bombs. The integration of LIVAR into this system is designed to allow the Special Operations Forces to complete their missions at much longer ranges from the target.

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*LIVAR 2200 Portable System* — The LIVAR 2200 is a prototype portable target identification system we developed for military use.

*LIVAR 120 Camera* — The model 120 is a standalone LIVAR camera that we sell to developers of long-range imaging systems.

*NightVista Cameras* — The NightVista camera is an extreme low light CMOS-based day/night video camera for security applications that currently offers up to 1.3 mega-pixel resolution. Its camera body is small enough to fit into a two-inch cube, and its power consumption is less than 1500 milliwatts. As a result, the NightVista is well suited for portable battery-powered applications. The NightVista outputs digital video in several standard formats and is easily integrated with other digital technologies. The NightVista reprocesses and optimizes extreme low light images and is configurable to end user requirements. We offer the NightVista at a list price of \$5,000, less than the price of a Generation-III based security camera.

Our Imaging business generally invoices its research and development customers either as costs are incurred, or as program milestones are achieved, depending upon the particular contract terms. As a government contractor, we invoice customers using estimated annual rates approved by the Defense Contracts Audit Agency (“DCAA”). A majority of our contracts are Cost Plus Fixed Fee (“CPFF”) contracts. On any CPFF contract, 15% of the fee is withheld pending completion of the program and DCAA’s annual audit of our actual rates. The withheld portion of the fee is included in accounts receivable until paid.

### ***Our Imaging Competition***

The principal competitive factors affecting our products include price, extreme low light sensitivity, signal to noise ratio, power consumption, resolution, size, integratability, reliability, reputation and customer support and service. We face substantial competition for our imaging products and many of our competitors have greater resources than we do.

In the military market, ITT Industries and Northrop Grumman, who are large and well-established defense contractors, are the primary U.S. manufacturers of image intensifier tubes used in Generation-III night vision devices and their derivative products. Our extreme low light cameras are intended to displace Generation-III night vision based products and we expect that ITT and Northrop Grumman will continue to enhance the performance of their products and aggressively promote their sales. Furthermore, CMC Electronics, DRS, FLIR Systems and Raytheon manufacture cooled infrared sensors and cameras which are presently used in long-range target identification systems, with which our LIVAR target identification sensors and cameras compete.

In the security market, we face competition from companies such as ElectroPhysics, ITT and Texas Instruments. These competitors’ products are based on image intensifier tubes manufactured by ITT and Northrop Grumman and by foreign suppliers. Electron multiplying CCDs manufactured by Texas Instruments and E2V also are used in cameras that compete with our low light level security products. In the physical and life sciences market, companies such as Andor, E2V, Hamamatsu and Roper Scientific offer competitive products. In the security product area, competitive products to our NightVista camera based on electron multiplying CCDs and image intensifier tubes are offered by a number of companies.

### **Manufacturing**

We conduct all of our Equipment business manufacturing at our facility in Santa Clara, California. Our equipment manufacturing operations include electromechanical assembly, mechanical and vacuum assembly, fabrication of sputter sources, and system assembly, alignment and testing. We make extensive use of the local supplier infrastructure serving the semiconductor equipment business. We purchase vacuum pumps, valves, instrumentation and fittings, power supplies, printed wiring board assemblies, computers and control circuitry, and custom mechanical parts made by forging, machining and welding. We also have our own small fabrication center that supports our engineering departments and makes some of the machined parts used in our products.



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Our Imaging business manufacturing includes the manufacture of advanced photocathodes and sensors, lasers, cameras and integrated camera systems. We make extensive use of advanced manufacturing techniques and equipment, and our operations include vacuum, electromechanical and optical system assembly. As with our Equipment business, we make use of the supplier infrastructure serving the semiconductor, camera and optics manufacturing industries for our Imaging business. In manufacturing our sensors, we purchase wafers, components, processing supplies and chemicals. In manufacturing our camera systems, we purchase printed circuit boards, electromechanical components and assemblies, mechanical components and enclosures, optical components and computers.

### **Intellectual Property**

We currently hold 28 patents issued in the United States and 34 patents issued in foreign countries, and have patent applications pending in the United States and foreign countries. Of the 28 U.S. patents, 15 relate to our Equipment business, and 13 relate to our Imaging business. Of the foreign patents, 13 relate to our Equipment business, and 21 relate to our Imaging business. In addition, we have the right to utilize certain patents under licensing arrangements with Litton Industries, Stanford University and Alum Rock Technology. We hold substantial trade secrets in the imaging area related to photocathode fabrication and processing and to silicon chip packaging for vacuum compatibility and high electron sensitivity. We also have significant process integration intellectual property related to vacuum packaging of a photocathode and a silicon semiconductor chip.

We have executed a strategy to protect our intellectual property investment by using internal company funds for development of new concepts and inventions. This minimizes customer ownership of new intellectual property that we develop. This is particularly important due to the large amount of government-funded research and development in our Imaging business.

### **Customer Concentration**

Historically, a significant portion of our revenue in any particular period has been attributable to sales to a limited number of customers. In 2003, Komag, Seagate, Lockheed Martin and equipment sales through Matsubo, our Japanese distributor, each accounted for more than 10% of our revenues, and in aggregate accounted for 66% of revenues. In 2002, Seagate, Toppoly and the U.S. Army Communications-Electronics Command each accounted for more than 10% of our revenues, and in aggregate accounted for 74% of revenues. In 2001, equipment sales through Matsubo, our Japanese distributor, accounted for 49% of revenues. Our largest customers change from period to period, and it is expected that sales of our products to relatively few customers will continue to account for a high percentage of our revenues in the foreseeable future.

Foreign sales accounted for 64% of revenues in 2003, 52% of revenues in 2002 and 73% of revenues in 2001. The majority of our foreign sales are to companies in the Far East, and we anticipate that sales to customers in the Far East will continue to be a significant portion of our equipment revenues.

### **Employees**

At December 31, 2003, we had 180 employees, including 29 contract employees. Of these 180 employees, 85 were in research and development, 58 in manufacturing, and 37 in administration, customer support and marketing. Of the 180 employees, 106 were in the Equipment business, 49 were in the Imaging business, and 25 were in corporate.

### **Compliance with Environmental Regulations**

We are subject to a variety of governmental regulations relating to the use, storage, discharge, handling, emission, generation, manufacture, treatment and disposal of toxic or otherwise hazardous substances, chemicals, materials or waste. We treat the cost of complying with government regulations and operating a safe workplace as a normal cost of business and allocate the cost of these activities to all functions, except where the cost of those activities can be isolated and charged to a specific function. The environmental standards and regulations promulgated by government agencies in Santa Clara, California are rigorous and set

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a high standard of compliance. We believe our costs of compliance with these regulations and standards are comparable to other companies operating similar facilities in Santa Clara, California.

### Certain Factors Which May Affect Future Operating Results

***We have a recent history of significant losses and may not regain profitability. If we do not establish profitable operations in the future, then our share price is likely to decline.***

The majority of our revenues and gross profit has historically been derived from sales of disk sputtering equipment. Sales of our disk sputtering equipment have been severely depressed since the middle of 1998. Also, our Imaging business has yet to earn an annual profit. We have experienced an operating loss in each of the last five fiscal years. For fiscal 2003, our operating loss was \$10.7 million, and as of December 31, 2003, we had an accumulated deficit of \$21.3 million. To regain profitability, we will need to generate and sustain substantially higher revenue while maintaining reasonable cost and expense levels. We cannot assure you that we will regain profitability in the near future, or at all, and if we do regain profitability we cannot assure you that we will be able to sustain profitability on a going-forward basis. If we fail to regain profitability within the time frame expected by securities analysts or investors, then the market price of our common stock will likely decline.

***If the projected growth in demand for hard disk drives does not materialize and our customers do not replace or upgrade their installed base of disk sputtering systems, then future sales of our disk sputtering systems will suffer.***

Since the middle of 1998, there has been virtually no demand for new disk sputtering systems, as thin-film disk manufacturers have been burdened with overcapacity and have not been investing in new disk sputtering equipment. Recently, however, overcapacity has diminished, and three of our customers have announced plans for major capacity expansions. Sales of our equipment for capacity expansions are dependent on the capacity expansion plans of our customers and upon whether our customers select our equipment for their capacity expansions. We have no control over our customers' expansion plans, and we cannot assure you that they will select our equipment if they do expand their capacity. Our customers may not implement capacity expansion plans, or we may fail to win orders for equipment for those capacity expansions, which could have a material adverse effect on our business and our operating results. In addition, some manufacturers may choose to purchase used systems from other manufacturers rather than purchasing new systems from us. Furthermore, if hard disk drives were to be replaced by an alternative technology as a primary method of digital storage, demand for our products would decrease.

Sales of our new 200 Lean disk sputtering systems are also dependent on obsolescence and replacement of the installed base of disk sputtering equipment. If technological advancements are developed that extend the useful life of the installed base of systems, then any sales of our 200 Lean will be limited to the capacity expansion needs of our customers, which would have a material adverse effect on our operating results.

***Our operating results fluctuate significantly from quarter to quarter, which may cause the price of our stock to decline.***

Over the last 8 quarters, our revenues per quarter have fluctuated between \$12.1 million and \$4.6 million. Over the same period our operating loss as a percentage of revenues has fluctuated between approximately 90% and 5% of revenues. We anticipate that our revenues and operating margins will continue to fluctuate. We expect this fluctuation to continue for a variety of reasons, including:

- changes in the demand, due to seasonality and other factors, for the computer systems, storage subsystems and consumer electronics that contain the thin-film disks that our customers produce using our systems;
- delays or problems in the introduction of our new products; and
- announcements of new products, services or technological innovations by us or our competitors.

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Additionally, because our systems are priced in the millions of dollars and we sell a relatively small number of systems, our business is inherently subject to fluctuations in revenue from quarter to quarter due to factors such as timing of orders, acceptance of new systems by our customers or cancellation of those orders. As a result, we believe that quarter-to-quarter comparisons of our revenues and operating results may not be meaningful and that these comparisons may not be an accurate indicator of our future performance. Our operating results in one or more future quarters may fail to meet the expectations of investment research analysts or investors, which could cause an immediate and significant decline in the trading price of our common shares.

***We sell our equipment products to a small number of large customers.***

Historically, a significant portion of our revenue in any particular period has been attributable to sales to a limited number of customers. In 2003, three of our customers, in the aggregate, accounted for 75% of our equipment revenues. In addition, our backlog of 200 Lean systems at December 31, 2003 is from a single customer. Orders from a relatively limited number of thin-film disk manufacturers have accounted for, and likely will continue to account for, a substantial portion of our revenues. The loss of, or delays in purchasing by, any one of our large customers would significantly reduce potential future revenues. Furthermore, the concentration of our customer base may lead customers to demand pricing and other terms unfavorable to us.

***We operate in an intensely competitive marketplace, and our competitors have greater resources than we do.***

In the market for our disk sputtering systems, we have experienced competition from competitors such as Anelva Corporation, a subsidiary of NEC Corporation, Ulvac Technologies, Inc. and Unaxis Holdings, Ltd, each of which has sold substantial numbers of systems worldwide. In the market for our imaging products, we experience competition from companies such as ITT Industries, Inc. and Northrop Grumman Corporation, the primary U.S. manufacturers of Generation-III night vision devices and their derivative products. Our competitors have substantially greater financial, technical, marketing, manufacturing and other resources than we do. We cannot assure you that our competitors will not develop enhancements to, or future generations of, competitive products that will offer superior price or performance features. Likewise, we cannot assure you that new competitors will not enter our markets and develop such enhanced products. Accordingly, competition for our customers is intense, and our competitors have historically offered substantial pricing concessions and incentives to attract our customers or retain their existing customers.

***The majority of our future revenues is dependent on new products. If these new products are not successful, then our results of operations will be adversely affected.***

Our success in developing and selling new products depends upon a variety of factors, including our ability to predict future customer requirements accurately, technological advances, total cost of ownership of our systems, our introduction of new products on schedule, our ability to manufacture our systems cost-effectively and the performance of our systems in the field. Our new product decisions and development commitments must anticipate continuously evolving industry requirements significantly in advance of sales. We have invested heavily, and continue to invest, in the development of new products. Our 200 Lean disk sputtering system is designed to address the demand for increased areal density in hard disk drives and our customers' concurrent need to produce more complex thin-film disks. Our future revenues depend on the industry recognizing the need for improved recording methodologies and the need for disk sputtering systems that facilitate manufacturing of advanced media with technologies such as perpendicular recording. Our future revenues also depend significantly on the market acceptance of our 200 Lean disk sputtering system, which we have only recently introduced and which competes against a product that has been on the market longer. Our new products will typically bear higher production and warranty costs in comparison to our more established product lines. Additionally, our gross margins on our new products may be lower and more difficult to predict. We continue to invest heavily to develop products for the thin-film disk manufacturing industry. In addition, our LIVAR target identification and low light level camera technologies are designed to offer significantly improved capability to military customers. We are also developing commercial products based on the

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technology we have developed in our Imaging business. None of our imaging products is currently being manufactured in commercial volumes or available for general sale, and we may encounter unforeseen difficulties when we commence general production of these products. Our Imaging business will require substantial further investment in sales and marketing, in product development and in additional production facilities, and in particular we need to acquire sensor fabrication facilities in order to expand our operations. We cannot assure you that we will succeed in these activities or generate significant sales of new products. Failure of any of these products to perform as intended, or failure to penetrate their markets and develop into profitable product lines, would have a material adverse effect on our business.

***Demand for capital equipment is cyclical, which subjects our business to long periods of depressed revenues interspersed with periods of unusually high revenues.***

Our Equipment business sells equipment to capital intensive industries, which sell commodity products such as disk drives. When demand for these commodity products exceeds capacity, demand for new capital equipment such as ours tends to be amplified. Conversely, when supply of these commodity products exceeds demand, the demand for new capital equipment such as ours tends to be depressed. The hard disk drive industry has historically been subject to multi-year cycles because of the long lead times and high costs involved in adding capacity.

The cyclical nature of the capital equipment industry means that in some years we will have unusually high sales of new systems, and that in other years our sales of new systems will be severely depressed. The timing, length and volatility of these cycles are difficult to predict. These changes have affected the timing and amounts of our customers' capital equipment purchases and investments in new technology. For example, sales of systems for thin-film disk production have been severely depressed since the middle of 1998. In addition, our thin-film disk manufacturing customers are generally more sensitive to the cyclical nature of the hard disk drive industry, because many of their customers have internal thin-film disk manufacturing operations and will cut back their purchases of disks from outside suppliers first in an industry downturn. If we fail to anticipate or respond quickly to the industry business cycle, it could have a material adverse effect on our business.

***Our sales cycle is long and unpredictable, which requires us to incur high sales and marketing expenses with no assurance that a sale will result.***

The sales cycle for our equipment systems can be a year or longer, involving individuals from many different areas of our company and numerous product presentations and demonstrations for our prospective customers. Our sales process for these systems also includes the production of samples and customization of products for our prospective customers. Additionally, our Imaging business is subject to long sales cycles as a result of government procurement cycles. As a result, we may not recognize revenue from efforts to sell particular products for extended periods of time, during which we may expend substantial funds and management time and effort with no assurance that a sale will result.

***Our products are complex, constantly evolving and often must be customized to individual customer requirements.***

The systems we manufacture and sell in our Equipment business have a large number of components and are highly complex, which require us to make substantial investments in research and development. If we were to fail to develop, manufacture and market new systems or to enhance existing systems, that failure would have an adverse effect on our business. We may experience delays and technical and manufacturing difficulties in future introduction or volume production of new systems or enhancements. In addition, some of the systems that we manufacture must be customized to meet individual customer site or operating requirements. In some cases, we market and commit to deliver new systems, modules and components with advanced features and capabilities that we are still in the process of designing. We have limited manufacturing capacity and engineering resources and may be unable to complete the development, manufacture and shipment of these products, or to meet the required technical specifications for these products, in a timely manner. Failure to deliver these products on time, or failure to deliver products that perform to all contractually committed

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specifications, could have adverse effects on our business, including rescheduling of backlog, failure to achieve customer acceptance as anticipated, unanticipated rework and warranty costs, penalties for non-performance, cancellation of orders, or return of products for credit. In addition, we may incur substantial unanticipated costs early in a product's life cycle, such as increased engineering, manufacturing, installation and support costs, that we may be unable to pass on to the customer. Sometimes we work closely with our customers to develop new features and products. In connection with these transactions, we sometimes offer a period of exclusivity to these customers. Any of these factors could have a material adverse effect on our business.

***Our Imaging business depends heavily on government contracts, which are subject to immediate termination and funded in increments. The termination of or failure to fund one or more of these contracts could have a negative impact on our operations.***

We sell our products directly to the U.S. government, as well as to prime contractors for various U.S. government programs. Generally, government contracts are subject to oversight audits by government representatives and contain provisions permitting termination, in whole or in part, without prior notice at the government's convenience upon the payment of compensation only for work done and commitments made at the time of termination. We cannot assure you that one or more of the government contracts under which we or our customers operate will not be terminated under these circumstances. Also, we cannot assure you that we or our customers would be able to procure new government contracts to offset the revenues lost as a result of any termination of existing contracts, nor can we assure you that we or our customers will continue to remain in good standing as federal contractors. The loss of one or more government contracts by us or our customers could have a material adverse effect on our operating results.

Furthermore, the funding of multi-year government programs is subject to congressional appropriations, and there is no guarantee that Congress will make further appropriations. The loss of funding for a government program would result in a loss of anticipated future revenues attributable to that program. That could increase our overall costs of doing business and have a material adverse effect on our operating results.

In addition, sales to the U.S. government and its prime contractors may be affected by changes in procurement policies, budget considerations and political developments in the United States or abroad. The influence of any of these factors, which are beyond our control, could also negatively impact our financial condition. We also may experience problems associated with advanced designs required by the government which may result in unforeseen technological difficulties and cost overruns. Failure to overcome these technological difficulties and the occurrence of cost overruns would have a material adverse effect on our business.

***Our sales of disk sputtering systems are dependent on substantial capital investment by our customers, far in excess of the cost of our products.***

Our customers must make extremely large capital expenditures in order to purchase our systems and other related equipment and facilities. These costs are far in excess of the cost of our systems alone. The magnitude of such capital expenditures requires that our customers have access to large amounts of capital and that they be willing to invest that capital over long periods of time to be able to purchase our equipment. The thin-film disk manufacturing industry has not made significant additions to its production capacity until recently. Some of our potential customers may not be willing or able to make the magnitude of capital investment required, especially during a downturn in either the overall economy or the hard disk drive industry.

***Our stock price is volatile.***

The market price and trading volume of our common stock has been subject to significant volatility, and this trend may continue. In particular, our historical trading volume has been low, and the market price of our common stock has increased dramatically in recent months. Over the past 12 months, the closing price of our common stock, as traded on The Nasdaq National Market, has fluctuated from a low of \$3.52 to a high of \$17.92 per share. Our stock price is currently trading at or near its seven-year high. The value of our common

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stock may decline regardless of our operating performance or prospects. Factors affecting our market price include:

- our perceived prospects;
- variations in our operating results and whether we achieve our key business targets;
- the limited number of shares of our common stock available for purchase or sale in the public markets;
- sales or purchases of large blocks of our stock;
- changes in, or our failure to meet, our earnings estimates;
- changes in securities analysts' buy or sell recommendations;
- differences between our reported results and those expected by investors and securities analysts;
- announcements of new contracts, products or technological innovations by us or our competitors;
- market reaction to any acquisitions, joint ventures or strategic investments announced by us or our competitors;
- our high fixed operating expenses, including research and development expenses;
- developments in the financial markets; and
- general economic, political or stock market conditions in the United States and other major regions in which we do business.

Recent events have caused stock prices for many companies, including ours, to fluctuate in ways unrelated or disproportionate to their operating performance. The general economic, political and stock market conditions that may affect the market price of our common stock are beyond our control. The market price of our common stock at any particular time may not remain the market price in the future. In the past, securities class action litigation has been instituted against companies following periods of volatility in the market price of their securities. Any such litigation, if instituted against us, could result in substantial costs and a diversion of management's attention and resources.

***Our dependence on suppliers for certain parts, some of them sole-sourced, makes us vulnerable to manufacturing interruptions and delays, which could affect our ability to meet customer demand.***

We are a manufacturing business. Purchased parts constitute the largest component of our product cost. Our ability to manufacture depends on the timely delivery of parts, components, and subassemblies from suppliers. We obtain some of the key components and sub-assemblies used in our products from a single supplier or a limited group of suppliers. If any of our suppliers fail to deliver quality parts on a timely basis, we may experience delays in manufacturing, which could result in delayed product deliveries or increased costs to expedite deliveries or develop alternative suppliers. Development of alternative suppliers could require redesign of our products. Any or all of these factors could have a material adverse effect on our business and operating results.

***Our business depends on the integrity of our intellectual property rights.***

The success of our business depends upon integrity of our intellectual property rights and we cannot assure you that:

- any of our pending or future patent applications will be allowed or that any of the allowed applications will be issued as patents;
- any of our patents will not be invalidated, deemed unenforceable, circumvented or challenged;
- the rights granted under our patents will provide competitive advantages to us;

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- any of our pending or future patent applications will issue with claims of the scope that we sought, if at all;
- other parties will not develop similar products, duplicate our products or design around our patents; or
- our patent rights, intellectual property laws or our agreements will adequately protect our intellectual property or competitive position.

Failure to protect our intellectual property rights adequately could have a material adverse effect on our business.

We provide products that are expected to have long useful lives and that are critical to our customers' operations. From time to time, as part of business agreements, we place portions of our intellectual property into escrow to provide assurance to our customers that our technology will be available to them in the event that we are unable to support them at some point in the future.

From time to time, we have received claims that we are infringing third parties' intellectual property rights. We cannot assure you that third parties will not in the future claim that we have infringed current or future patents, trademarks or other proprietary rights relating to our products. Any claims, with or without merit, could be time-consuming, result in costly litigation, cause product shipment delays or require us to enter into royalty or licensing agreements. Such royalty or licensing agreements, if required, may not be available on terms acceptable to us. Any of the foregoing could have a material adverse effect on our business.

***Our business is based in Northern California, where operating costs are high and competition for employees is intense.***

Our U.S. operations are located in Santa Clara, California, where the cost of doing business is extremely high. Failure to manage these costs well could have a material adverse effect on our operating results. Additionally, our operating results depend, in part, upon our ability to retain and attract qualified management, engineering, marketing, manufacturing, customer support, sales and administrative personnel. The cost of living in Northern California is also extremely high, which increases the cost and difficulty of recruiting new employees. Furthermore, we compete with various similar industries, such as the semiconductor industry, for the same pool of skilled employees. Failure to attract and retain qualified personnel could have a material adverse effect on our business.

***Business interruptions, such as earthquakes or other natural or man-made disasters, could disrupt our operations and adversely affect our business.***

Our U.S. facilities are located in an area of California that has experienced power outages and earthquakes and is considered seismically active. Our operations are vulnerable to interruption by fire, earthquake, power loss, telecommunications failure, unauthorized intrusion and other catastrophic events beyond our control. Our contingency plans for addressing these kinds of events may not be sufficient to prevent system failures and other interruptions in our operations that have a material adverse effect on our business. Additionally, our suppliers' suffering similar business interruptions could have an adverse effect on our manufacturing ability. If any natural or man-made disasters do occur, our operations could be disrupted for prolonged periods, which could have a material adverse effect on our business.

***Changes in demand caused by fluctuations in interest and currency exchange rates may reduce our international sales.***

Sales and operating activities outside of the United States are subject to inherent risks, including fluctuations in the value of the U.S. dollar relative to foreign currencies, tariffs, quotas, taxes and other market barriers, political and economic instability, restrictions on the export or import of technology, potentially limited intellectual property protection, difficulties in staffing and managing international operations and potentially adverse tax consequences. We earn a significant portion of our revenue from international sales, and there can be no assurance that any of these factors will not have an adverse effect on our ability to sell our products or operate outside the United States.

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We currently quote and sell the majority of our products in U.S. dollars. From time to time, we may enter into foreign currency contracts in an effort to reduce the overall risk of currency fluctuations to our business. However, there can be no assurance that the offer and sale of products denominated in foreign currencies, and the related foreign currency hedging activities, will not adversely affect our business.

Our principal competitor for disk sputtering equipment is based in Japan and has a cost structure based on the Japanese yen. Accordingly, currency fluctuations could cause the price of our products to be more or less competitive than our principal competitor's products. Currency fluctuations will decrease or increase our cost structure relative to those of our competitors, which could lessen the demand for our products and affect our competitive position.

***We routinely evaluate acquisition candidates and other diversification strategies.***

We have completed a number of acquisitions as part of our efforts to expand and diversify our business. For example, our business was initially acquired from Varian Associates in 1991. We acquired our gravity lubrication and rapid thermal processing product lines in two acquisitions. We sold the rapid thermal processing product line in November 2002. We also acquired our RPC electron beam processing business in late 1997, and subsequently closed this business. We intend to continue to evaluate new acquisition candidates, divestiture and diversification strategies. Any acquisition involves numerous risks, including difficulties in the assimilation of the acquired company's employees, operations and products, uncertainties associated with operating in new markets and working with new customers, and the potential loss of the acquired company's key employees. Additionally, unanticipated expenses, difficulties and consequences may be incurred relating to the integration of technologies, research and development, and administrative and other functions. Any future acquisitions may also result in potentially dilutive issuance of equity securities, acquisition- or divestiture-related write-offs or the assumption of debt and contingent liabilities. Any of the above factors could have a material adverse effect on our business.

***We use hazardous materials and are subject to risks of non-compliance with environmental and safety regulations.***

We are subject to a variety of governmental regulations relating to the use, storage, discharge, handling, emission, generation, manufacture, treatment and disposal of toxic or otherwise hazardous substances, chemicals, materials or waste. If we fail to comply with current or future regulations, such failure could result in suspension of our operations, alteration of our manufacturing process, or substantial civil penalties or criminal fines against us or our officers, directors or employees. Additionally, these regulations could require us to acquire expensive remediation or abatement equipment or to incur substantial expenses to comply with them. Failure to properly manage the use, disposal or storage of, or adequately restrict the release of, hazardous or toxic substances could subject us to significant liabilities.

***Our directors, executive officers and affiliates control a significant portion of our outstanding common stock.***

Based on the shares outstanding on December 31, 2003, our current directors, executive officers and affiliates, in the aggregate, beneficially owned 41.2% of our outstanding shares of common stock (26.4% after completion of our secondary offering in February 2004). These shareholders, acting together, are able to exert significant control on matters requiring approval by our shareholders, including the election of directors and approval of significant corporate transactions.

***Future sales of shares of our common stock by our officers, directors and affiliates could cause our stock price to decline.***

Substantially all of our common stock may be sold without restriction in the public markets. Shares held by our directors, executive officers and affiliates are subject to volume and manner of sale restrictions, and as otherwise described in the following sentence. We have an agreement with Foster City LLC and Redemco, LLC, that gives Foster City and Redemco the right to require us, after the end of the 180-day period following



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February 5, 2004, to file a registration statement on Form S-3, registering the resale of all shares of our common stock held by Foster City and Redemco. Sales of a substantial number of shares of common stock in the public market or the perception that these sales could occur could materially and adversely affect our stock price and make it more difficult for us to sell equity securities in the future at a time and price we deem appropriate.

*Anti-takeover provisions in our charter documents and under California law could prevent or delay a change in control, which could negatively impact the value of our common stock by discouraging a favorable merger or acquisition of us.*

Our articles of incorporation authorize our board of directors to issue up to 10,000,000 shares of preferred stock and to determine the powers, preferences, privileges, rights, including voting rights, qualifications, limitations and restrictions of those shares, without any further vote or action by the shareholders. The rights of the holders of our common stock will be subject to, and may be adversely affected by, the rights of the holders of any preferred stock that we may issue in the future. The issuance of preferred stock could have the effect of delaying, deterring or preventing a change in control and could adversely affect the voting power of your shares. In addition, provisions of California law could make it more difficult for a third party to acquire a majority of our outstanding voting stock by discouraging a hostile bid, or delaying or deterring a merger, acquisition or tender offer in which our shareholders could receive a premium for their shares or a proxy contest for control of our company or other changes in our management.

### **Item 2. *Properties***

We lease a 119,583 square foot facility in Santa Clara, California. The two-story facility includes offices, manufacturing, engineering labs and clean rooms. All of our operations, with the exception of our Singapore customer support office and a sensor fabrication facility, are housed at the Santa Clara facility. In February 2004, we executed an amendment to the lease for the Santa Clara facility which extended the lease for five years. The lease for the Santa Clara facility now expires in March 2012. We also lease a facility of approximately 2,400 square feet in Singapore to house the Singapore customer support organization. This lease expires in June 2004. Although we believe that our current facilities are suitable and adequate for our current operations, we plan to acquire larger facilities in Singapore. In January 2004, we entered into a lease for a sensor fabrication facility. This 9,505 square foot facility is located in Fremont, California. We operate with two full manufacturing shifts. We believe that we have sufficient productive capacity to meet our current needs.

### **Item 3. *Legal Proceedings***

From time to time we are involved in litigation incidental to the conduct of our business. We are not party to any lawsuit or proceeding that, in our opinion, is likely to seriously harm our business.

### **Item 4. *Submission of Matters to a Vote of Security-Holders***

No matters were submitted to a vote of security-holders during the fourth quarter of the fiscal year covered by this Annual Report on Form 10-K.

**EXECUTIVE OFFICERS AND DIRECTORS**

Certain information about Intevac’s directors and executive officers as of March 5, 2004 is listed below:

Name	Age	Position
<i>Executive Officers and Directors:</i>		
Norman H. Pond	65	Chairman of the Board
Kevin Fairbairn	50	President, Chief Executive Officer and Director
Verle Aebi	49	President of Photonics Technology Division
Charles B. Eddy III	53	Vice President, Finance and Administration, Chief Financial Officer, Treasurer and Secretary
David Dury(1)	55	Director
Stanley J. Hill	62	Director
David N. Lambeth(2)	56	Director
Robert Lemos (1)(2)	63	Director
Arthur L. Money(1)	64	Director
<i>Other Key Officers:</i>		
Kimberly Burk	38	Human Resources Director
Stephen Gustafson	32	Director, Imaging Operations
Timothy Justyn	41	Vice President, Equipment Operations
Christopher Lane	37	Vice President and General Manager, Commercial Imaging Division

(1) Member of Audit Committee

(2) Member of Compensation Committee

*Mr. Pond* is a founder of Intevac and has served as Chairman of the Board since February 1991. Mr. Pond served as President and Chief Executive Officer from February 1991 until July 2000 and again from September 2001 through January 2002. Mr. Pond holds a BS in physics from the University of Missouri at Rolla and an MS in physics from the University of California at Los Angeles.

*Mr. Fairbairn* joined Intevac as President and Chief Executive Officer in January 2002 and was appointed a director in February 2002. Before joining Intevac, Mr. Fairbairn was employed by Applied Materials from July 1985 to January 2002, most recently as Vice-President and General Manager of the Conductor Etch Organization with responsibility for the Silicon and Metal Etch Divisions. From 1996 to 1999, Mr. Fairbairn was General Manager of Applied Materials’ Plasma Enhanced Chemical Vapor Deposition Business Unit and from 1993 to 1996, he was General Manager of Applied Materials’ Plasma Silane CVD Product Business Unit. Mr. Fairbairn holds an MA in Engineering Sciences from Cambridge University.

*Mr. Aebi* has served as President of the Photonics Division since July 2000. Mr. Aebi served as General Manager of the Photonics Division since May 1995 and was elected as a Vice President of the Company in September 1995. From 1988 through 1994, Mr. Aebi was the Engineering Manager of our night vision business, where he was responsible for new product development in the areas of advanced photocathodes and image intensifiers. Mr. Aebi holds a BS in physics and an MS in electrical engineering from Stanford University.

*Mr. Eddy* has served as Vice President, Finance and Administration, Chief Financial Officer, Treasurer and Secretary since April 1991. Mr. Eddy holds a BS in engineering science from the University of Virginia and an MBA from Dartmouth College.

*Mr. Dury* has served as a director of Intevac since July 2002. Mr. Dury is a co-founder of Mentor Capital Group, a venture capital firm. From 1996 to 2000, Mr. Dury served as Senior Vice-President and Chief Financial Officer of Aspect Development, a software development firm. Mr. Dury holds a BA in psychology

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from Duke University and an MBA from Cornell University. He is also a director of Phoenix Technologies Ltd.

*Mr. Hill* was appointed as a director of Intevac in March 2004. Mr. Hill joined Kaiser Aerospace and Electronics Corporation (“Kaiser”), a privately held manufacturer of electronics and electro-optical systems, in 1969 and served as Chief Executive Officer and Chairman of both Kaiser and K Systems, Inc., Kaiser’s parent company, from 1997 to 2000. Prior to his appointment as Chief Executive Officer, Mr. Hill served in a number of executive positions at Kaiser. Mr. Hill holds a BS in Mechanical Engineering from the University of Maine and a Master of Engineering from the University of Connecticut and has completed post graduate studies at the University of Santa Clara business school. He is also a director of First Aviation Services, Inc.

*Dr. Lambeth* has served as a director of Intevac since May 1996. Dr. Lambeth has been Professor of both Electrical and Computer Engineering and Material Science Engineering at Carnegie Mellon University since 1989. Dr. Lambeth was Associate Director of the Data Storage Systems at Carnegie Mellon University from 1989 to 1999. Since 1988, Dr. Lambeth has been the owner of Lambeth Systems, an engineering consulting and research firm. Dr. Lambeth holds a BS in electrical engineering from the University of Missouri and a Ph.D. in physics from the Massachusetts Institute of Technology.

*Mr. Lemos* has served as a director of Intevac since August 2002. Mr. Lemos retired from Varian Associates, Inc. in 1999 after 23 years, including serving as Vice-President and Chief Financial Officer from 1988 to 1999. Mr. Lemos has a BS in Business from the University of San Francisco, a JD in law from Hastings College and an LLM in law from New York University.

*Mr. Money* has served as a director of Intevac since October 2003. Mr. Money served as the Assistant Secretary of Defense for Command, Control, Communication and Intelligence (C3I) from October 1999 to April 2001. Prior to his Senate confirmation in that role, he was the Senior Civilian Official, Office of the Assistant Secretary of Defense (C3I) from February 1998. Mr. Money also served as the Chief Information Officer for the Department of Defense from 1998 to 2001. From 1996 to 1998, he served as Assistant Secretary of the Air Force for Research, Development and Acquisition. Prior to his government service, Mr. Money held senior management positions with ESL Inc., a subsidiary of TRW, and the TRW Avionics and Surveillance Group. He is also a director of CACI International, Essex Corporation, Intelli-Check, Rainbow Technologies, Inc., Silicon Graphics, Inc. and Terremark Worldwide, Inc. Mr. Money holds an MS in Mechanical Engineering from the University of Santa Clara and a BS in Mechanical Engineering from San Jose State University.

*Ms. Burk* has served as Human Resources Director since May 2000. Prior to joining Intevac, Ms. Burk served as Human Resources Manager of Moen, Inc. from 1999 to 2000 and served as Human Resources Manager of Lawson Mardon from 1994 to 1999. Ms. Burk holds a BS in Sociology from Northern Illinois University.

*Mr. Gustafson* has served as Director of Imaging Operations since February 2003. Before joining Intevac in May 2002, Mr. Gustafson was employed by Applied Materials as a Sr. Operations Manager in the Conductor Etch Organization. Mr. Gustafson holds a BA in Humanities and an MS in Industrial Engineering from San Jose State University.

*Mr. Justyn* has served as Vice President, Equipment Operations since April 1997. Mr. Justyn joined Intevac in February 1991 and has served in various roles in our Equipment Products Division and our former night vision business. Mr. Justyn holds a BS in Chemical Engineering from the University of California, Santa Barbara.

*Mr. Lane* has served as General Manager of the Commercial Imaging Division since he joined Intevac in July 2002 and was elected a Vice-President in February 2003. Before joining Intevac, from 1990 to July 2002, Mr. Lane was employed by Applied Materials, most recently as Director of Engineering, CVD and Etch, in the Conductor Etch Organization. Mr. Lane holds a BS in Mechanical Engineering, a MS in Engineering Management and a MBA, all from California Polytechnic State University at San Luis Obispo.

PART II

**Item 5. Market for Registrant's Common Equity and Related Shareholder Matters**

Our common stock is listed on The Nasdaq National Market under the symbol "IVAC." As of December 31, 2003, there were approximately 117 holders of record of our common stock. Because many of our shares of common stock are held by brokers and other institutions on behalf of shareholders, we are unable to estimate the total number of shareholders represented by these record holders.

The following table sets forth the high and low closing sale prices per share as reported on The Nasdaq National Market for the periods indicated.

	<u>High</u>	<u>Low</u>
Fiscal 2002		
First Quarter	\$ 4.39	\$2.38
Second Quarter	5.11	2.50
Third Quarter	4.25	2.06
Fourth Quarter	4.00	3.49
Fiscal 2003:		
First Quarter	\$ 5.07	\$3.52
Second Quarter	6.87	3.75
Third Quarter	9.95	6.72
Fourth Quarter	17.35	9.70

**Dividend Policy**

We currently anticipate that we will retain our earnings, if any, for use in the operation of our business and do not expect to pay cash dividends on our capital stock in the foreseeable future.

**Recent Sales of Unregistered Securities**

In the fourth quarter of 2003, \$29,542,000 in aggregate principle amount of our 6 1/2% convertible subordinated notes due 2009 was converted either voluntarily or automatically pursuant to its terms into 4,220,283 shares of Intevac Common Stock. The conversions occurred pursuant to Rule 3(a)(9) of the Securities Act of 1933, as amended.

**Item 6. Selected Consolidated Financial Data**

The following table presents our selected financial data and is qualified by reference to, and should be read in conjunction with, the consolidated financial statements of Intevac, including the notes thereto, and Management's Discussion and Analysis of Financial Condition and Results of Operations, each appearing elsewhere in this report.

	Year Ended December 31,				
	2003	2002	2001	2000	1999
	(In thousands, except per share data)				
<b>Consolidated Statement of Operations Data:</b>					
Net revenues:					
Systems and components	\$ 27,738	\$ 27,625	\$ 43,599	\$ 30,074	\$ 35,895
Technology development	8,556	6,159	7,885	5,975	7,067
Total net revenues	36,294	33,784	51,484	36,049	42,962
Cost of net revenues:					
Systems and components	19,689	20,009	30,025	20,658	32,511
Technology development	6,032	5,150	7,988	6,022	5,907
Goodwill write-off	—	—	—	1,056	—
Inventory provisions	743	1,316	3,716	6,323	1,992
Total cost of net revenues	26,464	26,475	41,729	34,059	40,410
Gross profit	9,830	7,309	9,755	1,990	2,552
Operating expenses:					
Research and development	12,037	10,846	14,478	10,576	14,136
Selling, general and administrative	8,448	7,752	6,745	4,415	7,226
Restructuring and other	—	—	—	(638)	3,069
Total operating expenses	20,485	18,598	21,223	14,353	24,431
Operating loss	(10,655)	(11,289)	(11,468)	(12,363)	(21,879)
Interest expense	(1,787)	(2,981)	(2,912)	(3,033)	(3,711)
Interest income and other income, net	177	16,452	2,473	3,072	9,831
Income (loss) before income taxes	(12,265)	2,182	(11,907)	(12,324)	(15,759)
Provision for (benefit from) income taxes	38	(6,592)	5,029	—	(5,989)
Net income (loss)	\$(12,303)	\$ 8,774	\$(16,936)	\$(12,324)	\$ (9,770)
Basic earnings per share:					
Net income (loss)	\$ (0.95)	\$ 0.73	\$ (1.42)	\$ (1.04)	\$ (0.83)
Shares used in per share calculations	12,948	12,077	11,955	11,803	11,777
Diluted earnings per share:					
Net income (loss)	\$ (0.95)	\$ 0.66	\$ (1.42)	\$ (1.04)	\$ (0.83)
Shares used in per share calculations	12,948	15,262	11,955	11,803	11,777
<b>Consolidated Balance Sheet Data:</b>					
Cash, cash equivalents and short-term investments	\$ 19,507	\$ 28,457	\$ 18,157	\$ 38,403	\$ 40,895
Working capital	22,638	31,309	27,160	41,093	51,579
Total assets	55,975	60,298	60,165	83,936	94,382
Long-term debt	—	30,568	37,545	41,245	43,188
Total shareholders' equity	30,869	10,545	1,408	17,804	29,623

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

*The following discussion and analysis contains forward-looking statements which involve risks and uncertainties. Words such as "believes," "expects," "anticipates" and the like indicate forward-looking statements. These forward looking statements include comments related to our projected revenue, gross margin, operating expense, income tax expense, effective tax rate and cash balances; our projected customer requirements for new capacity and technology upgrades for our installed base of thin-film disk manufacturing equipment and when, and if, our customers will place orders for these products, PTD's ability to proliferate its technology into major military weapons programs; CID's ability to develop and introduce commercial imaging products; and the timing of delivery and/or acceptance of our backlog for revenue. Our actual results may differ materially from the results discussed in the forward-looking statements for a variety of reasons, including those set forth under "Certain Factors Which May Affect Future Operating Results" and should be read in conjunction with the Consolidated Financial Statements and related Notes contained elsewhere in this Annual Report on Form 10-K.*

**Overview**

Our operations include two businesses, an Equipment business and an Imaging business. Our Equipment business consists of the Equipment Products Division, which we refer to as EPD, and our Imaging business consists of two divisions, the Photonics Technology Division, which we refer to as PTD, and the Commercial Imaging Division, which we refer to as CID. The Equipment Products Division designs, manufactures, markets and services complex capital equipment that deposits highly engineered thin films of material onto disks used in hard disk drives; the Photonics Technology Division is developing extreme low light sensors, cameras and systems for sale to military and government markets; and the Commercial Imaging Division is developing commercial extreme low light sensors and cameras based on our technology.

**Equipment Business**

In the early 1990s we developed a system to deposit magnetic films and protective overcoats onto thin-film disks used in hard disk drives. This system gained wide acceptance and by the late 1990s was being used to manufacture approximately half of the thin-film disks used in hard disk drives worldwide. We believe that there are approximately 90 Intevac systems currently in use in production and research and development applications. Also in the late 1990s, the hard disk drive industry went through significant consolidation, and there are now only eight significant manufacturers of thin-film disks, some of whom also manufacture hard disk drives. As a result of an increasingly smaller number of customers and the high average selling price of our products, our equipment revenues tend to be volatile from quarter to quarter. In addition, our Equipment business has historically been subject to capital spending cycles. For example, in the period from 1995 through the middle of 1998, we sold \$300 million of disk manufacturing equipment. Since then, our disk equipment revenues have averaged approximately \$20 million per year and have consisted primarily of the sale of a limited number of systems, technology upgrades, parts and service for the installed base of our systems.

We believe the majority of thin-film disk manufacturers are now utilizing most of their capacity. During 2003, three of these manufacturers announced plans for major thin-film disk manufacturing capacity expansions. Also during 2003, we received orders from one customer for ten of our 200 Lean disk sputtering systems. We believe that the expected introduction in 2005 of high density thin-film disks based on perpendicular recording techniques will also require thin-film disk manufacturers to significantly upgrade the technical capability of their installed base of manufacturing equipment to accommodate the additional number of process steps predicted to be required by perpendicular recording technology roadmaps.

We have also manufactured both deposition and rapid thermal processing equipment used in the manufacture of flat panel displays. Since 2000, revenues from sales of flat panel display manufacturing systems totaled \$36.5 million. In late 2002 we sold our rapid thermal processing product line to Photon Dynamics of San Jose, California. Since then, we have focused our sputtering equipment efforts on disk manufacturing and have not taken orders for any new flat panel display manufacturing systems.

### Imaging Business

Our Imaging business develops and manufactures electro-optical sensors, cameras and systems that permit highly sensitive detection of photons in the visible and near infrared portions of the spectrum, allowing imaging in extreme low light situations. The majority of the funding for our Photonics Technology Division's activities has come from research and development contracts with the United States Government and its contractors, with the balance being funded internally. Our military products include LIVAR systems for positive target identification at long range and extreme low light sensors and cameras for use in short- to medium-range military applications.

Developing advanced products for the military involves long development cycles, as products move through successive multi-year stages of technology demonstration, engineering and manufacturing product development, prototype production and then product deployment. Each stage in this process requires ongoing government funding. To date, the majority of our Imaging business revenues has been derived from contract research and development, rather than product sales. In July 2002, in order to shorten the time to market and to increase the number of markets for our imaging products, we began to develop imaging products for commercial markets. We have developed a NightVista security camera and are planning to develop and introduce products that address other commercial markets. Revenues from these activities have not yet been material, and we have funded the development of the products in our Commercial Imaging Division internally.

### Critical Accounting Policies

The preparation of financial statements and related disclosures in conformity with accounting principles generally accepted in the United States of America ("US GAAP") requires management to make judgments, assumptions and estimates that affect the amounts reported. Note 2 of Notes to Consolidated Financial Statements describes the significant accounting policies used in the preparation of the consolidated financial statements. Certain of these significant accounting policies are considered to be critical accounting policies, as defined below.

A critical accounting policy is defined as one that is both material to the presentation of our financial statements and requires management to make difficult, subjective or complex judgments that could have a material effect on our financial conditions and results of operations. Specifically, critical accounting estimates have the following attributes: 1) We are required to make assumptions about matters that are highly uncertain at the time of the estimate; and 2) different estimates we could reasonably have used, or changes in the estimate that are reasonably likely to occur, would have a material effect on our financial condition or results of operations.

Estimates and assumptions about future events and their effects cannot be determined with certainty. We base our estimates on historical experience and on various other assumptions believed to be applicable and reasonable under the circumstances. These estimates may change as new events occur, as additional information is obtained and as our operating environment changes. These changes have historically been minor and have been included in the consolidated financial statements as soon as they become known. In addition, management is periodically faced with uncertainties, the outcomes of which are not within its control and will not be known for prolonged periods of time. These uncertainties are discussed in the prior section entitled "Certain Factors Which May Affect Future Operating Results." Based on a critical assessment of our accounting policies and the underlying judgments and uncertainties affecting the application of those policies, management believes that our consolidated financial statements are fairly stated in accordance with US GAAP, and provide a meaningful presentation of our financial condition and results of operation.

We believe the following critical accounting policies affect the more significant judgments and estimates we make in preparing our consolidated financial statements. We also have other key accounting policies and accounting estimates related to the collectibility of trade receivables, valuation of deferred tax assets and prototype product costs. We believe that these other accounting policies and other accounting estimates either do not generally require us to make estimates and judgments that are as difficult or subjective, or it is less likely that they would have a material impact on our reported results of operation for a given period.

### ***Revenue Recognition***

Certain of our system sales with customer acceptance provisions are accounted for as multiple-element arrangements. If we have previously met defined customer acceptance levels with the specific type of system, then we recognize revenue for the fair market value of the system upon shipment and transfer of title, and recognize revenue for the fair market value of installation and acceptance services when those services are completed. We estimate the fair market value of the installation and acceptance services based on our actual historical experience. For systems that have generally not been demonstrated to meet product specifications prior to shipment, revenue recognition is usually deferred until customer acceptance.

### ***Inventories***

Inventories are generally stated at the lower of cost or market. The carrying value of inventory is reduced for estimated excess and obsolescence by the difference between its costs and the estimated market value based on assumptions about future demand. We evaluate the inventory carrying value for potential excess and obsolete inventory exposures by analyzing historical and anticipated demand. In addition, inventories are evaluated for potential obsolescence due to the effect of known and anticipated engineering change orders and new products. If actual demand were to be substantially lower than estimated, additional inventory adjustments would be required, which could have a material adverse effect on our business, financial condition and results of operation.

### ***Warranty***

We provide for the estimated cost of warranty when revenue is recognized. Our warranty is per contract terms and is typically 12 months from customer acceptance. In some cases we market extended warranty periods beyond 12 months to our customers. We use estimated repair or replacement costs along with our actual warranty experience to determine our warranty obligation. We exercise judgment in determining the underlying estimates. Should actual warranty costs differ substantially from our estimates, revisions to the estimated warranty liability would be required, which could have a material adverse effect on our business, financial condition and results of operations.

## **Results of Operations**

*Net revenues.* Net revenues consist primarily of sales of equipment used to manufacture thin-film disks, equipment used to manufacture flat panel displays, related equipment and system components, and contract research and development related to the development of electro-optical devices and systems. Net revenues totaled \$36.3 million, \$33.8 million and \$51.5 million in 2003, 2002 and 2001, respectively.

Equipment revenues totaled \$26.7 million, \$27.1 million and \$42.7 million in 2003, 2002 and 2001, respectively. Equipment revenues declined slightly between 2003 and 2002 as a result of the closure of the fabrication center in 2002. Equipment revenues decreased in 2002 due to a decrease in sales of flat panel manufacturing systems and disk system upgrades and components, partially offset by an increase in sales of disk manufacturing systems. We delivered, and recognized revenue on, five of our D-STAR deposition systems during 2001. During 2002 we delivered upgrades to the five systems and one new D-STAR system. Revenue was recognized on the five upgrades during 2003 while the new system remained pending final customer acceptance at December 31, 2003. Net revenues for 2002 and 2001 include \$7.1 million and \$6.8 million, respectively, of sales of rapid thermal processing equipment, a product line we sold in November 2002. Our fabrication center, which manufactured machined parts, contributed sales to outside customers of \$604,000 and \$1.8 million in 2002 and 2001, respectively. The fabrication center was closed in September 2002. We replaced the fabrication center with a smaller model shop during 2003. The model shop manufactures engineering prototypes and parts for use in our products.

The thin-film disk manufacturing industry has now consolidated into a small number of large manufacturers. We believe that the majority of our active customers now utilize most of their capacity and that there is significant potential for these customers to both resume adding capacity and to upgrade the technical capability of their installed base to permit production of high density disks for perpendicular recording rather



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than the current longitudinal technology. While we have received orders for ten of our 200 Lean disk sputtering systems from one customer, we are not able to accurately predict when other of our customers will begin placing significant equipment orders again, or if they will place those orders with us. This subjects us to a high degree of uncertainty in projecting our 2004 revenue.

Imaging revenues totaled \$9.5 million, \$6.7 million and \$8.8 million in 2003, 2002 and 2001, respectively. Imaging revenues increased in 2003 due primarily to an increase in revenues from contract research and development and, to a lesser extent, increased revenue from the sale of prototype products. Imaging revenues decreased in 2002 as a result of a decrease in revenues from contract research and development. Imaging revenues in 2004 are expected to be primarily derived from contract research and development, but we also expect increased product revenue late in 2004, both from LIVAR target identification systems and from the introduction of commercial imaging products. Substantial growth in future Imaging revenues is dependent on proliferation of our technology into major military weapons programs, obtaining production subcontracts for these programs and the successful launch of our commercial products.

Our backlog of orders at December 31, 2003 was \$43.3 million, as compared to a December 31, 2002 backlog of \$18.2 million. The \$43.3 million of backlog at December 31, 2003 consisted of \$40.5 million of Equipment backlog and \$2.8 million of Imaging backlog. The \$18.2 million of backlog at December 31, 2002 consisted of \$15.0 million of Equipment backlog and \$3.2 million of Imaging backlog. The increase in Equipment backlog was primarily the result of orders for ten Intevac 200 Lean disk sputtering systems. Most of our backlog at December 31, 2003 is scheduled for either customer acceptance or delivery during the first half of 2004.

Significant portions of our revenues in any particular period have been attributable to sales to a limited number of customers. In 2003, Komag, Seagate, Lockheed Martin and equipment sales through Matsubo, our Japanese distributor, each accounted for more than 10% of our revenues, and in aggregate accounted for 66% of revenues. In 2002, Seagate, Toppoly and the U.S. Army Communications-Electronics Command each accounted for more than 10% of our consolidated net revenues and in aggregate accounted for 74% of consolidated net revenues. In 2001, equipment sales through Matsubo accounted for 49% of consolidated net revenues. Our largest customers tend to change from period to period.

International sales totaled \$23.2 million, \$17.5 million and \$37.3 million in 2003, 2002 and 2001, respectively, accounting for 64%, 52% and 73% of net revenues. The increase in international sales in 2003 over 2002 was primarily due to an increase in net revenues from disk system upgrades and components. The decrease in international sales in 2002 compared to 2001 was primarily due to a decrease in net revenues from flat panel manufacturing systems and, to a lesser extent, to a decrease in net revenues from disk system upgrades and components. Substantially all of our international sales are to customers in the Far East. Our mix of domestic versus international sales will change from period to period depending on the location of our largest customers in each period.

*Gross margin.* Cost of net revenues consists primarily of purchased materials and costs attributable to contract research and development, and also includes fabrication, assembly, test and installation labor and overhead, customer-specific engineering costs, warranty costs, royalties, provisions for inventory reserves and scrap. Gross margin was 27%, 22% and 19% in 2003, 2002 and 2001, respectively.

Gross margin in Equipment was 27%, 24% and 23% in 2003, 2002 and 2001, respectively. Equipment gross margin in 2003 improved over 2002 due primarily to a reduction in inventory provisions and improved absorption of manufacturing overhead due to an increase in manufacturing volume late in the year. 2003 gross margin was negatively impacted by poor margins achieved on the five D-Star deposition system upgrades recognized for revenue and the sale of one used disk sputtering system at a reduced price. Equipment gross margin in 2002 improved slightly over 2001 due primarily to lower production costs and by a reduction in inventory provisions, partially offset by the under-absorption of manufacturing overhead due to low manufacturing volume. Equipment gross margin in 2001 was reduced by high initial costs to manufacture our redesigned flat panel manufacturing systems and establishment of \$2.4 million of inventory reserves related to a cancelled order for a custom flat panel system. The 2004 gross margin for the Equipment business will vary

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depending on a number of factors, including costs to manufacture the initial 200 Lean systems, pricing offered the initial purchaser of 200 Lean systems, factory utilization and pricing achieved on future orders.

Gross margin in Imaging was 26%, 11% and (2%) in 2003, 2002 and 2001, respectively. Imaging gross margin improved in 2003 due to most of the revenue being derived from fully funded, rather than cost-shared, research and development contracts and from the sale of prototype products. Imaging gross margins improved in 2002 over 2001 due to a higher portion of the revenue being derived from fully funded research and development contracts versus cost-sharing research and development contracts. Imaging gross margins in 2001 were negatively impacted by a significant portion of revenue being derived from cost-sharing research and development contracts versus fully funded research and development contracts.

*Research and development.* Research and development expense consists primarily of prototype materials, salaries and related costs of employees engaged in ongoing research, design and development activities for disk manufacturing equipment, flat panel manufacturing equipment and imaging products. Research and development expense totaled \$12.0 million, \$10.8 million and \$14.5 million in 2003, 2002 and 2001, respectively, representing 33%, 32% and 28% of net revenue. The increase in research and development expense in 2003 was primarily the result of higher spending for the 200 Lean disk sputtering system and for commercial imaging products, partially offset by decreased spending for flat panel products. The decrease in spending from 2001 to 2002 was the result of the completion during 2001 of the design activities related to development of the D-STAR, RTP and MDP-200 platforms, partially offset by increased expenses related to the development of imaging technology and products. We expect that research and development spending in 2004 will be comparable to 2003 as a result of projected decreases in Imaging, partially offset by projected increases in Equipment.

Research and development expenses do not include costs of \$6.0 million, \$5.2 million and \$8.0 million in 2003, 2002 and 2001, respectively, related to contract research and development, which are included in cost of net revenues. Research and development expenses also do not include costs of \$248,000, \$309,000 and \$508,000 incurred by us in 2003, 2002 and 2001, respectively, and reimbursed under the terms of research and development cost sharing agreements related to development of disk manufacturing equipment.

*Selling, general and administrative.* Selling, general and administrative expense consists primarily of selling, marketing, customer support, financial and management costs and also includes production of customer samples, travel, liability insurance, legal and professional services and bad debt expense. Domestic sales and international sales of disk manufacturing products in Singapore, Malaysia and Taiwan are made by our direct sales force, whereas other international sales of disk manufacturing and other products are made by distributors and representatives that provide services such as sales, installation, warranty and customer support. We also have a subsidiary in Singapore to support customers in Southeast Asia.

Selling, general and administrative expense totaled \$8.4 million, \$7.8 million and \$6.7 million in 2003, 2002, and 2001, respectively, representing 23%, 23% and 13% of net revenue. The increase in 2003 over 2002 was primarily the result of \$1.1 million of surplus facility costs being recorded in selling, general and administrative expense, partially offset by a reduction in representative commissions paid. The increase in 2002 over 2001 was primarily the result of representative commissions paid on the sale of flat panel manufacturing systems, an increase in selling, general and administrative personnel in PTD and \$198,000 of surplus facility costs being recorded in selling, general and administrative expenses. We expect that selling, general and administrative expenses will increase in 2004 over the amount spent in 2003 due primarily to a projected increase in headcount, travel and employee benefit costs.

*Interest expense.* Interest expense consists primarily of interest on our convertible notes and amortization of debt issuance costs. Interest expense totaled \$1.8 million, \$3.0 million and \$2.9 million in 2003, 2002 and 2001, respectively. The decrease in interest expense in 2003 was due to a reduction in the convertible notes outstanding, as a result of both the exchange offer completed in 2002 and the conversion of our 2009 notes in the fourth quarter of 2003. The increase in interest expense in 2002 over 2001 was due primarily to the write-off of \$0.5 million of debt offering costs from the original convertible note offering in 1997 as a result of the exchange of these notes for our 2009 convertible notes. The remaining \$1.0 million of our 2004 convertible notes will be redeemed in March 2004.

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*Interest income and other, net.* Interest income and other, net totaled \$177,000, \$16.5 million and \$2.5 million in 2003, 2002 and 2001, respectively. Interest income and other, net in 2003 consisted of \$390,000 of dividends from 601 California Avenue LLC, a \$287,000 gain on the sale of the rapid thermal processing product line, \$269,000 of interest income on investments and \$72,000 of early payment discounts and other income, partially offset by \$841,000 of expense related to the disposition of fixed assets. Interest income and other, net in 2002 consisted of \$284,000 of interest income on investments, a \$15.4 million gain on the sale of the rapid thermal processing product line, a \$324,000 gain on the sale of fixed assets, \$390,000 of dividends from 601 California Avenue LLC and \$26,000 of early payment discounts and other income. Interest income and other, net in 2001 consisted of \$1.2 million of interest income on investments, a \$1.4 million gain from the repurchase of our convertible notes, \$390,000 of dividends from 601 California Avenue LLC, a \$803,000 loss on the disposition of Pacific Gas and Electric commercial paper and \$233,000 of early payment discounts and other income.

*Provision for (benefit from) income taxes.* In 2003, we recorded income tax expense of \$38,000, due primarily to foreign tax expense on income earned by our Singapore subsidiary. Our net deferred tax asset totaled zero at December 31, 2003, net of a \$16.7 million valuation allowance. We have substantial net operating loss carry-forwards which can be used to limit the taxes paid in the future and to reduce our effective tax rate to less than the statutory income tax rates in effect.

In 2002, we recorded an income tax benefit of \$6.6 million. This resulted from the enactment of the Job Creation and Worker Assistance Act of 2002 which increased the length of time, from two years to five years, over which losses incurred in 2001 and 2002 could be carried back against taxes paid in prior years. We paid federal income taxes of approximately \$5.2 million for 1996, \$0.9 million for 1997 and \$0.5 million for 1998. Our federal tax returns, and any refunds resulting from them, are subject to audit for three years from the date filed. Our net deferred tax asset totaled zero at December 31, 2002, net of a \$12.1 million valuation allowance.

In 2001, we recorded \$5.0 million of income tax expense to provide additional valuation allowance against deferred tax assets. Our net deferred tax assets totaled zero at December 31, 2001, net of a \$19.2 million valuation allowance established due to the uncertainty of realizing certain tax credits, loss carry-forwards and other deferred tax assets.

## Liquidity and Capital Resources

Our operating activities used cash of \$10.3 million in 2003. The cash used was primarily the result of the net loss incurred and an increase in accounts receivable, partially offset by an increase in customer advances, a decrease in inventory and by depreciation. Operating activities provided cash of \$820,000 in 2002. The cash provided was primarily a result of the refund of federal income taxes paid in prior years, decreases in accounts receivable and inventory, depreciation and amortization, partially offset by the operating loss. Operating activities in 2001 used cash of \$11.8 million, primarily due to the net loss incurred, which was partially offset by depreciation, amortization and an increase in the valuation allowance against deferred tax assets.

Our investing activities in 2003 used cash of \$1.9 million as the result of the purchase of fixed assets, which was partially offset by additional proceeds from the sale of the rapid thermal processing product line. Investing activities in 2002 provided cash of \$16.8 million as a result of the sale of the rapid thermal processing product line and the sale of equipment, which was partially offset by the purchase of fixed assets. Investing activities in 2001 provided cash of \$28.9 million as a result of the net sale of investments, which was partially offset by the purchase of fixed assets.

Our financing activities provided cash of \$3.2 million in 2003 due primarily to the sale of Intevac common stock to our employees through our employee benefit plans. Financing activities used cash of \$7.4 million in 2002, primarily as a result of the exchange of most of our convertible notes due 2004 for new convertible notes due 2009 and cash. On July 12, 2002 we completed the exchange of \$36.3 million in aggregate principal amount of our convertible notes due 2004 for \$29.5 million of our new 6 1/2% Convertible Subordinated Notes due 2009 and \$7.6 million in cash, including \$0.9 million for accrued interest. Sales of Intevac common stock to our employees through our employee benefit plans provided cash of \$0.3 million in 2002. Financing activities in 2001 used cash of \$3.7 million, due to the repurchase of a portion of the convertible notes and the

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repayment of the Cathode Technology debt, partially offset by the sale of Intevac stock to employees under our employee benefit plans.

At December 31, 2003, we had \$19.5 million of cash and cash equivalents. Subsequent to December 31, 2003, we completed the public offering of 4,750,000 shares of common stock at a price of \$15.00 per share. Of the shares offered, 2,969,000 newly issued and outstanding shares were sold by us and 1,781,000 shares were sold by a selling shareholder. The net proceeds to us were approximately \$41.6 million after deducting underwriting discounts and offering expenses. We intend to undertake approximately \$3.0 to \$4.0 million in capital expenditures during the next 12 months, and we believe our existing cash and cash equivalent balances will be sufficient to meet our cash requirements for the next twelve months.

We have incurred operating losses each year since 1998 and cannot predict with certainty when we will return to operating profitability. We believe an upturn in demand for the type of disk manufacturing equipment we produce is occurring, and we had orders for ten disk manufacturing systems in our backlog at December 31, 2003, with the revenue from those orders all expected in 2004. This backlog leads us to believe that our financial results in 2004 will be significantly improved.

### Contractual Obligations

In the normal course of business, we enter into various contractual obligations that will be settled in cash. These obligations consist primarily of operating lease obligations. The expected future cash flows required to meet these obligations as of December 31, 2003 are shown in the table below. More information on these contractual obligations is available in Part II, Item 8, "Financial Statements and Supplementary Data."

	Payments due by period				
	Total	<1 Year	1-3 Years	3-5 Years	>5 Years
			(In thousands)		
Operating lease obligations	\$10,427	\$3,079	\$6,510	\$838	\$ —
Total	\$10,427	\$3,079	\$6,510	\$838	\$ —

### Item 7A. Quantitative and Qualitative Disclosures About Market Risk

*Interest rate risk.* The table below presents principal amounts and related weighted-average interest rates by year of maturity for our debt obligations as of December 31, 2003.

	2004	2005	2006	2007	2008	Beyond	Total	Fair Value
				(In thousands)				
Short-term debt								
Fixed rate	\$1,025	—	—	—	—	—	\$1,025	\$1,025
Average rate	6.50%	—	—	—	—	—		

*Foreign exchange risk.* From time to time, we enter into foreign currency forward exchange contracts to economically hedge certain of our anticipated foreign currency transaction, translation and re-measurement exposures. The objective of these contracts is to minimize the impact of foreign currency exchange rate movements on our operating results. At December 31, 2003, we had no foreign currency forward exchange contracts.

**Item 8. *Financial Statements and Supplementary Data***

**INTEVAC, INC.**

**CONSOLIDATED FINANCIAL STATEMENTS**

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**REPORT OF GRANT THORNTON LLP, INDEPENDENT AUDITORS**

The Board of Directors and Shareholders  
Intevac, Inc.

We have audited the accompanying consolidated balance sheets of Intevac, Inc. as of December 31, 2003 and 2002 and the related consolidated statements of operations and comprehensive income, shareholders' equity and cash flows for each of the three years in the period ended December 31, 2003. 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 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 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 management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of Intevac, Inc. at December 31, 2003 and 2002, and the consolidated results of its operations and its cash flows for each of the three years in the period ended December 31, 2003, in conformity with accounting principles generally accepted in the United States of America.

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

Grant Thornton LLP

San Jose, California  
January 30, 2004

## INTEVAC, INC.

**CONSOLIDATED BALANCE SHEETS**  
(In thousands)

	December 31,	
	2003	2002
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents	\$ 19,507	\$28,457
Trade and other accounts receivable, net of allowances of \$22 and \$269 at December 31, 2003 and 2002	14,016	4,991
Income taxes recoverable	—	214
Inventories, including \$5,431 and \$9,914 held at customer locations at December 31, 2003 and 2002	13,108	15,871
Prepaid expenses and other current assets	1,113	961
	47,744	50,494
Total current assets		
Property, plant and equipment, at cost:		
Leasehold improvements	6,225	5,751
Machinery and equipment	16,529	16,216
	22,754	21,967
Less accumulated depreciation and amortization	16,958	15,174
	5,796	6,793
Investment in 601 California Avenue LLC	2,431	2,431
Debt issuance costs, net of amortization of \$3,058 and \$2,482 at December 31, 2003 and 2002	1	577
Other long term assets	3	3
	\$ 55,975	\$60,298
	\$ 55,975	\$60,298
<b>LIABILITIES AND SHAREHOLDER'S EQUITY</b>		
Current liabilities:		
Convertible notes	\$ 1,025	\$ —
Accounts payable	3,396	1,739
Accrued payroll and related liabilities	1,610	1,379
Other accrued liabilities	2,643	3,723
Customer advances	16,432	12,344
	25,106	19,185
Total current liabilities		
Convertible notes	—	30,568
Commitments	—	—
Shareholders' equity:		
Undesignated preferred stock, no par value, 10,000 shares authorized, no shares issued and outstanding	—	—
Common stock, no par value:		
Authorized shares — 50,000		
Issued and outstanding shares — 16,953 and 12,125 at December 31, 2003 and 2002, respectively	51,982	19,389
Accumulated other comprehensive income	223	189
Accumulated deficit	(21,336)	(9,033)
	30,869	10,545
Total shareholders' equity		
	\$ 55,975	\$60,298
	\$ 55,975	\$60,298

See accompanying notes.





## INTEVAC, INC.

**CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE INCOME**  
(In thousands, except per share amounts)

	Years Ended December 31,		
	2003	2002	2001
Net revenues:			
Systems and components	\$ 27,738	\$ 27,625	\$ 43,599
Technology development	8,556	6,159	7,885
Total net revenues	36,294	33,784	51,484
Cost of net revenues:			
Systems and components	19,689	20,009	30,025
Technology development	6,032	5,150	7,988
Inventory provisions	743	1,316	3,716
Total cost of net revenues	26,464	26,475	41,729
Gross profit	9,830	7,309	9,755
Operating expenses:			
Research and development	12,037	10,846	14,478
Selling, general and administrative	8,448	7,752	6,745
Total operating expenses	20,485	18,598	21,223
Operating loss	(10,655)	(11,289)	(11,468)
Interest expense	(1,787)	(2,981)	(2,912)
Interest income	269	284	1,245
Other income and expense, net	(92)	16,168	1,228
Income (loss) before income taxes	(12,265)	2,182	(11,907)
Provision for (benefit from) income taxes	38	(6,592)	5,029
Net income (loss)	\$(12,303)	\$ 8,774	\$(16,936)
Other comprehensive income:			
Foreign currency translation adjustments	34	67	122
Total adjustments	34	67	122
Total comprehensive income (loss)	\$(12,269)	\$ 8,841	\$(16,814)
Basic income (loss) per share:			
Net income (loss)	\$ (0.95)	\$ 0.73	\$ (1.42)
Shares used in per share amounts	12,948	12,077	11,955
Diluted income (loss) per share:			
Net income (loss)	\$ (0.95)	\$ 0.66	\$ (1.42)
Shares used in per share amounts	12,948	15,262	11,955

See accompanying notes.

## INTEVAC, INC.

**CONSOLIDATED STATEMENT OF SHAREHOLDERS' EQUITY**  
(In thousands)

	Common Stock		Accumulated Other Comprehensive Income	Retained Earnings (Accum. Deficit)	Total Shareholders' Equity
	Shares	Amount			
Balance at January 1, 2001	11,844	\$18,675	\$ —	\$ (871)	\$ 17,804
Shares issued in connection with:					
Exercise of stock options	41	13	—	—	13
Employee stock purchase plan	119	405	—	—	405
Foreign currency translation adjustment	—	—	122	—	122
Net loss	—	—	—	(16,936)	(16,936)
Balance at December 31, 2001	12,004	\$19,093	\$122	\$(17,807)	\$ 1,408
Shares issued in connection with:					
Exercise of stock options	13	19	—	—	19
Employee stock purchase plan	108	273	—	—	273
Compensation expense in the form of stock options	—	4	—	—	4
Foreign currency translation adjustment	—	—	67	—	67
Net income	—	—	—	8,774	8,774
Balance at December 31, 2002	12,125	\$19,389	\$189	\$ (9,033)	\$ 10,545
Shares issued in connection with:					
Exercise of stock options	530	2,988	—	—	2,988
Employee stock purchase plan	78	200	—	—	200
Conversion of convertible notes due 2009	4,220	29,375	—	—	29,375
Compensation expense in the form of stock options	—	30	—	—	30
Foreign currency translation adjustment	—	—	34	—	34
Net loss	—	—	—	(12,303)	(12,303)
Balance at December 31, 2003	16,953	\$51,982	\$223	\$(21,336)	\$ 30,869

See accompanying notes.

## INTEVAC, INC.

**CONSOLIDATED STATEMENTS OF CASH FLOWS**  
(In thousands)

	Years Ended December 31,		
	2003	2002	2001
<b>Operating activities</b>			
Net income (loss)	\$(12,303)	\$ 8,774	\$(16,936)
Adjustments to reconcile net income (loss) to net cash and cash equivalents provided by (used in) operating activities:			
Depreciation	1,963	2,577	3,916
Deferred income taxes	—	—	4,988
Amortization of intangibles	—	—	7
Amortization of debt offering costs	87	672	244
Inventory provisions	743	1,316	3,716
Gain on sale of Rapid Thermal Processing product line	(287)	(15,428)	—
Gain on sale of equipment	—	(324)	—
Gain on purchase of convertible notes	—	(23)	(1,408)
Compensation expense in the form of common stock	30	4	—
Loss on disposal of investment	—	—	803
Loss on disposal of equipment	841	13	8
Changes in assets and liabilities:			
Accounts receivable	(8,804)	2,264	1,547
Inventory	2,028	3,359	(7,252)
Prepaid expenses and other assets	(152)	(492)	366
Accounts payable	1,657	(890)	(129)
Accrued payroll and other accrued liabilities	(526)	118	1,211
Customer advances	4,473	(1,120)	(2,853)
Total adjustments	2,053	(7,954)	5,164
Net cash and cash equivalents provided by (used in) operating activities	(10,250)	820	(11,772)
<b>Investing activities</b>			
Purchase of investments	—	—	(5,463)
Proceeds from sales and maturities of investments	—	—	38,447
Net proceeds from sale of Rapid Thermal Processing product line	287	17,780	—
Proceeds from sale of equipment	7	535	—
Purchase of equipment	(2,199)	(1,480)	(4,050)
Net cash and cash equivalents provided by (used in) investing activities	(1,905)	16,835	28,934
<b>Financing activities</b>			
Proceeds from issuance of common stock	3,188	292	418
Repurchase of Intevac convertible notes	—	(225)	(2,257)
Exchange of Intevac convertible notes due 2004	—	(7,483)	—
Repayment of notes payable	—	—	(1,904)
Net cash and cash equivalents provided by (used in) financing activities	3,188	(7,416)	(3,743)
Effect of exchange rate changes on cash	17	61	122
Net increase (decrease) in cash and cash equivalents	(8,950)	10,300	13,541
Cash and cash equivalents at beginning of period	28,457	18,157	4,616
Cash and cash equivalents at end of period	\$ 19,507	\$ 28,457	\$ 18,157
Cash paid (received) for:			
Interest	\$ 1,987	\$ 2,456	\$ 2,715
Income taxes	2	2	2
Income tax refund	(214)	(6,369)	—

Other non-cash changes:

Inventories transferred to (from) property, plant and equipment	\$	—	\$	(514)	\$	(2,322)
Exchange of \$36.3M of convertible notes due 2004 for \$29.5M of convertible notes 2009 (exchange completed July 2002)		—		—		—
Conversion of convertible notes due 2009 into common stock		29,375		—		—

See accompanying notes.

INTEVAC, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

**1. Business and Nature of Operations**

We are the world's leading provider of thin-film disk sputtering equipment for the thin-film disk industry and a developer of leading technology for extreme low light imaging sensors, cameras and systems. We operate two businesses: Equipment and Imaging.

Our Equipment business designs, manufactures, markets and services complex capital equipment used in the sputtering, or deposition, of highly engineered thin-films of material onto thin-film disks which are used in hard disk drives. Hard disk drives are the primary storage medium for digital data and function by magnetically storing data on thin-film disks. These thin-film disks are created in a sophisticated manufacturing process involving a variation of many steps, including plating, annealing, polishing, texturing, sputtering and lubrication.

Our Imaging business develops and manufactures electro-optical sensors, cameras, and systems that permit highly sensitive detection of photons in the visible and near infrared portions of the spectrum, allowing vision in extreme low light situations.

**2. Summary of Significant Accounting Policies**

*Basis of Presentation*

The consolidated financial statements include the accounts of Intevac and its wholly owned subsidiaries. All inter-company transactions and balances have been eliminated.

*Revenue Recognition*

We recognize revenue using guidance from SEC Staff Accounting Bulletin No. 104, "Revenue Recognition." Our policy allows revenue recognition when persuasive evidence of an arrangement exists, delivery has occurred or services have been rendered, the price is fixed or determinable, and collectibility is reasonably assured. On January 1, 2003, we changed our revenue recognition policy for system orders received after December 31, 2002.

*System Revenue Recognition for Orders Received After December 31, 2002.* Certain of our system sales with customer acceptance provisions are accounted for as multiple-element arrangements. If we have previously met defined customer acceptance levels with the specific type of system, then we recognize revenue for the fair market value of the system upon shipment and transfer of title, and recognize revenue for the fair market value of installation and acceptance services when those services are completed. For systems that have generally not been demonstrated to meet product specifications prior to shipment, revenue recognition is usually deferred until customer acceptance. In the event that our customer chooses not to complete installation and acceptance, and our obligations under the contract to complete installation, acceptance or any other tasks, with the exception of warranty obligations, have been fully discharged, then we recognize any remaining revenue to the extent that collectibility under the contract is reasonably assured.

The revenue recognition policy outlined above and implemented for system orders received after December 31, 2002 was adopted to better conform our revenue recognition policies to industry accounting practice for companies selling similar equipment. The effect of adopting this policy in years prior to 2003 would have been no change in 2002 revenues and a decrease in 2001 revenues of \$1.5 million. The effect on net income (loss) of adopting this policy in years prior to 2003 would have been no effect on 2002 net income and an increase in 2001 net loss of \$33,000. There would have been no effect on earnings (loss) per share in any of the three years. The adoption of this policy had no effect on revenues or net loss in 2003.

*System Revenue Recognition for Orders Received Before December 31, 2002.* Revenues for systems that were ordered prior to December 31, 2002 are recognized upon customer acceptance. For memory and flat

INTEVAC, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

panel systems shipped through a distributor, revenue is typically recognized after the distributor has accepted the system at our factory and the system has been shipped. For memory and flat panel systems sold directly to end customers, revenue is recognized after installation and acceptance of the system at the customer site. When we believe that there may be higher than normal end user installation and acceptance issues for systems shipped through a distributor, such as when the first unit of a newly designed system is delivered, we defer revenue recognition until the distributor's customer has also accepted the system.

*Accounting Treatment for Systems.* For periods both before and after December 31, 2002, during the period that a system is undergoing customer acceptance (either distributor or end user), the value of the system remains in inventory, and any payments received, or amounts invoiced, related to the system are included in customer advances. When revenue is recognized on the system, the inventory is charged to cost of net revenues, the customer advance is liquidated, and the customer is billed for the unpaid balance of the system revenue.

*Other Systems and Non-System Revenue Recognition.* Revenues for systems without installation and acceptance provisions, as well as revenues from technology upgrades, spare parts, consumables and prototype products built by the Imaging business are generally recognized upon shipment. Service and maintenance contract revenue, which to date has been insignificant, is recognized ratably over applicable contract periods or as the service is performed.

*Obligations After Shipment.* Our shipping terms are generally FOB shipping point, but in some cases are FOB destination. For systems sold directly to the end user, our obligations remaining after shipment typically include installation, end user factory acceptance and warranty. For systems sold to distributors, typically the distributor assumes responsibility for installation and end user customer acceptance. In some cases, the distributor will assume some or all of the warranty liability. For products other than systems and system upgrades, warranty is the only obligation we have after shipment.

*Technology Development Revenue Recognition.* We perform best efforts research and development work under various government-sponsored research contracts. Typically, for each contract, we commit to perform certain research and development efforts up to an agreed upon amount. In connection with these contracts, we receive funding on an incremental basis up to a ceiling. Some of these contracts are cost sharing in nature, where we are reimbursed for a portion of the total costs expended. Revenue on these contracts is recognized in accordance with contract terms, typically as costs are incurred. In the event that total cost incurred under a particular contract over-runs its agreed upon amount, we may be liable for the additional costs.

These contracts are accounted for under ARB No. 43, Chapter 11, Section A, which addresses Cost-Plus-Fixed-Fee Contracts. The contracts are all cost-type, with financial terms that are a mixture of fixed fee, no fee and cost sharing. The deliverables under each contract range from providing reports to providing prototype hardware. In none of the contracts is there an obligation for either party to continue the program once the funds have been expended. The efforts can be terminated at any time for convenience, in which case we would be reimbursed for our actual incurred costs, plus fee, if applicable, for the completed effort. We own the entire right, title and interest to each invention discovered under the contract, unless we specifically give up that right. The U.S. Government has a paid-up license to use any invention/intellectual property developed under these contracts for government purposes only. In addition, we have, from time to time, negotiated with third parties to fund a portion of our costs in return for granting them a joint interest in the technology rights developed pursuant to the contract.

*Trade Receivables and Doubtful Accounts*

We evaluate the collectibility of trade receivables on an ongoing basis and provides reserves against potential losses when appropriate. Management analyzes historical bad debts, customer concentrations,

## INTEVAC, INC.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

customer credit worthiness, changes in customer payment tendencies and current economic trends when evaluating the adequacy of the allowance for doubtful accounts. Customer accounts are written off against the allowance when the amount is deemed uncollectible.

Included in trade receivables are unbilled receivables of \$1,065,000 and \$614,000 at December 31, 2003 and December 31, 2002, respectively.

*Warranty*

Our typical warranty is 12 months from customer acceptance. In some cases we market extended warranty periods beyond 12 months to our customers. The warranty period on used systems is generally shorter than 12 months. During this warranty period any necessary non-consumable parts are supplied and installed. The warranty period on consumable parts is limited to their reasonable usable life. A provision for the estimated warranty cost is recorded at the time revenue is recognized.

The following table displays the activity in the warranty provision account for 2003 and 2002:

	2003	2002
	(In thousands)	
Beginning balance	\$ 845	\$ 906
Expenditures incurred under warranties	(909)	(794)
Accruals for product warranties issued during the reporting period	474	410
Adjustments to previously existing warranty accruals	124	323
	<u>          </u>	<u>          </u>
Ending balance	\$ 534	\$ 845
	<u>          </u>	<u>          </u>

*Guarantees*

We have entered into agreements with customers and suppliers that include limited intellectual property indemnification obligations that are customary in the industry. These guarantees generally require us to compensate the other party for certain damages and costs incurred as a result of third party intellectual property claims arising from these transactions. The nature of the intellectual property indemnification obligations prevents us from making a reasonable estimate of the maximum potential amount we could be required to pay our customers and suppliers. Historically, we have not made any significant indemnification payments under such agreements and no amount has been accrued in the accompanying consolidated financial statements with respect to these indemnification obligations.

*International Distribution Costs*

We make payments to agents and representatives under agreements related to international sales in return for obtaining orders and providing installation and warranty services. These payments to agents and representatives are included in selling, general and administrative expenses. These amounts totaled approximately \$119,000, \$300,000 and \$141,000 for the years ended December 31, 2003, 2002 and 2001, respectively.

*Customer Advances*

Customer advances generally represent nonrefundable deposits invoiced by the Company in connection with receiving customer purchase orders and other events preceding acceptance of systems. Customer advances related to products that have not been shipped to customers and included in accounts receivable were \$4.7 million and \$0 at December 31, 2003 and 2002, respectively.

INTEVAC, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

*Cash, Cash Equivalents and Short-term Investments*

We consider all highly liquid investments with a maturity of three months or less when purchased to be cash equivalents.

Short-term investments consist principally of highly rated debt instruments with maturities generally between one and twelve months and are carried at fair value. These investments are typically short-term in nature and therefore bear minimal interest rate risk.

Management determines the appropriate classification of debt securities at the time of purchase and reevaluates such designation as of each balance sheet date. All debt securities are classified as available-for-sale under Statement of Financial Accounting Standards (“SFAS”) No. 115 “Accounting for Certain Investments in Debt and Equity Securities.” Securities classified as available-for-sale are reported at fair market value with the related unrealized gains and losses included in retained earnings. Realized gains and losses and declines in value judged to be other-than-temporary on available-for-sale securities are included in other income and expenses. The cost of securities sold is based on the specific identification method.

Cash and cash equivalents represent cash accounts and money market funds. Included in accounts payable is \$635,000 and \$459,000 of book overdraft at December 31, 2003 and December 31, 2002, respectively.

*Valuation of Long-lived and Intangible Assets and Goodwill*

We assess the impairment of identifiable intangibles, long-lived assets and goodwill whenever events or changes in circumstances indicate that the carrying value may not be recoverable. Factors we consider important which could trigger an impairment review include the following:

- significant underperformance relative to expected historical or projected future operating results;
- significant changes in the manner of our use of the acquired assets or the strategy for our overall business; and
- significant negative industry or economic trends.

When we determine that the carrying value of long-lived assets, intangibles or goodwill may not be recoverable based upon the existence of one or more of the above indicators of impairment, we measure any impairment based on a projected discounted cash flow method using a discount rate determined by our management to be commensurate with the risk inherent in our current business model.

*Prototype Costs*

Prototype product costs that are not paid for under research and development contracts and are in excess of fair market value are charged to research and development expense.

*Foreign Exchange Contracts*

We may enter into foreign currency forward exchange contracts to hedge certain of its foreign currency transaction, translation and re-measurement exposures. Our accounting policies for some of these instruments are based on our designation of such instruments as hedging transactions. Instruments not designated as a hedge transaction will be “marked to market” at the end of each accounting period. The criteria we use for designating an instrument as a hedge include effectiveness in exposure reduction and one-to-one matching of the derivative financial instrument to the underlying transaction being hedged. Gains and losses on foreign currency forward exchange contracts that are designated and effective as hedges of existing transactions are recognized in income in the same period as losses and gains on the underlying transactions are recognized and generally offset.



## INTEVAC, INC.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

As of December 31, 2003 and 2002, Intevac had no foreign currency forward exchange contracts outstanding.

*Financial Instruments*

The carrying amount of the short-term financial instruments (cash and cash equivalents, short-term investments, accounts receivable and certain other liabilities) approximates fair value due to the short-term maturity of those instruments. Based on the quoted market prices for the same or similar issues or on the current rates offered for debt of the same remaining maturities, the fair value of the \$1.0 million of outstanding convertible notes as of December 31, 2003 is \$1.0 million.

*Inventories*

Inventories for systems and components are stated at the lower of cost or market. Inventories consist of the following:

	December 31,	
	2003	2002
	(In thousands)	
Raw materials	\$ 3,306	\$ 3,329
Work-in-progress	4,371	2,628
Finished goods	5,431	9,914
	\$13,108	\$15,871

Finished goods inventory consists primarily of completed systems at customer sites that are undergoing installation and acceptance testing.

Inventory reserves included in the above numbers were \$10.2 million and \$9.6 million at December 31, 2003 and December 31, 2002, respectively. Each quarter, we analyze our inventory (raw materials, WIP and finished goods) against the forecast demand for the next 12 months. Parts with no forecast requirements in that period are considered excess and inventory provisions are established to write those parts down to zero net book value. During this process, some inventory is identified as having no future use or value to us and is disposed of against the reserves.

During the year ended December 31, 2003, \$743,000 was added to inventory reserves based on the quarterly analysis and \$698,000 of inventory was disposed of and charged to the reserve. Inventory reserves increased by an additional \$588,000 due primarily to reserves charged against research & development for prototype systems built in inventory.

During the year ended December 31, 2002, \$1.3 million was added to inventory reserves based on the quarterly analysis and \$4.2 million of inventory was disposed of and charged to the reserve. Most of the disposed inventory related to two MDP 250K Disk Sputtering systems that had been written down to estimated salvage value in 2000. Inventory reserves were further reduced by \$0.2 million due to the sale of the rapid thermal processing product line.

*Property, Plant and Equipment*

Equipment and leasehold improvements are carried at cost less accumulated depreciation and amortization. Gains and losses on dispositions are reflected in the Consolidated Statements of Operations and Comprehensive Income.

Depreciation for machinery and equipment is computed using the straight-line method over the estimated useful lives of the assets, which are generally three to seven years. Amortization of leasehold improvements is

INTEVAC, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

computed using the shorter of the remaining terms of the leases or the estimated economic useful lives of the improvements.

*Intangible Assets*

We amortize intangible assets on a straight-line basis over the estimated useful lives, which range from two to seven years.

*Comprehensive Income*

SFAS No. 130, "Reporting Comprehensive Income" requires unrealized gains or losses on our available-for-sale securities and the foreign currency translation adjustments, which prior to the adoption were reported separately in shareholders' equity, to be included in other comprehensive income. As of December 31, 2003, the \$223,000 balance of accumulated other comprehensive income is comprised entirely of accumulated foreign currency translation adjustments.

*Employee Stock Plans*

At December 31, 2003, we had two stock-based employee compensation plans, which are described more fully in Note 10. We account for those plans under the recognition and measurement principles of APB Opinion No. 25, "Accounting for Stock Issued to Employees", and related Interpretations. No stock-based employee compensation cost is reflected in net income, as all options granted under those plans had an exercise price equal to the market value of the underlying common stock on the date of grant. Intevac does not have any plans to adopt the fair value requirements of SFAS No. 123 for reporting purposes, unless mandated by GAAP.

Pro forma information regarding net income (loss) and earnings (loss) per share is required by SFAS No. 123, which also requires that the information be determined as if we had accounted for our employee stock options granted subsequent to December 31, 1994 under the fair value method of this Statement. The fair value for these options was estimated at the date of grant using a Black-Scholes multiple option pricing model with the following weighted average assumptions for 2003, 2002 and 2001, respectively: risk-free interest rates of 1.62%, 1.64% and 3.03%; dividend yields of 0.0%, 0.0% and 0.0%; volatility factors of the expected market price of Intevac's common stock of 0.943, 0.933 and 0.946; and a weighted-average expected life of the option of 2.22, 2.68 and 2.63 years.

The Black-Scholes option valuation model was developed for use in estimating the fair value of traded options that have no vesting restrictions and are fully transferable. In addition, option models require the input of highly subjective assumptions including the expected stock price volatility. Because Intevac's employee stock options have characteristics significantly different from those of traded options, and because changes in the subjective assumptions can materially affect the fair value estimate, in management's opinion, the existing models do not necessarily provide a reliable single measure of the fair value of its employee stock options.

Under the 2003 Employee Stock Purchase Plan (the "ESPP"), we are authorized to issue up to 358,197 shares of common stock to participating employees. Under the terms of the ESPP, employees can choose to have up to 10% of their annual base earnings withheld to purchase Intevac's common stock. The purchase price of the stock is 85% of the lower of the subscription date fair market value or the purchase date fair market value. Under the ESPP, we sold 77,749, 108,020 and 118,904 shares to employees in 2003, 2002 and 2001, respectively. As of December 31, 2003, 358,197 shares remained reserved for issuance under the ESPP. We do not recognize compensation cost related to employee purchase rights under the plan. To comply with the pro forma reporting requirements of SFAS No. 123, compensation cost is estimated for the fair value of the employees' purchase rights using the Black-Scholes model with the following assumptions for those rights granted in 2003, 2002 and 2001, respectively: risk-free interest rates of 1.43%, 1.12% and 1.93% dividend

## INTEVAC, INC.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

yield of 0.0%, 0.0% and 0.0%; expected volatility of 0.940, 0.933 and 0.946; and an expected life of 2.00, 1.50 and 2.00 years (the offering period ended July 31, 2003 for the subscription period that began in February 2002). The weighted average fair value of those purchase rights granted in 2003, 2002 and 2001 were \$5.24, \$2.47 and \$2.78, respectively per share.

The following table illustrates the effect on net income (loss) and earnings (loss) per share if we had applied the fair value-recognition provisions of SFAS No. 123, "Accounting for Stock-Based Compensation", to stock-based employee compensation.

	2003	2002	2001
	—————	—————	—————
	(In thousands, except per share data)		
Net income (loss), as reported	\$(12,303)	\$8,774	\$(16,936)
Deduct: Total stock-based employee compensation expense determined under fair value based method for all awards, net of related tax effects	(683)	(157)	(895)
	—————	—————	—————
Pro forma net income (loss)	\$(12,986)	\$8,617	\$(17,831)
	—————	—————	—————
Earnings per share:			
Basic — as reported	\$ (0.95)	\$ 0.73	\$ (1.42)
Basic — pro forma	\$ (1.00)	\$ 0.71	\$ (1.49)
Diluted — as reported	\$ (0.95)	\$ 0.66	\$ (1.42)
Diluted — pro forma	\$ (1.00)	\$ 0.65	\$ (1.49)

*Financial Presentation*

Certain prior year amounts in the Consolidated Financial Statements have been reclassified to conform to 2003 presentation.

## INTEVAC, INC.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

*Net income (loss) per share*

The following table sets forth the computation of basic and diluted loss per share:

	2003	2002	2001
	(In thousands)		
Numerator:			
Numerator for basic income (loss) per share — income (loss) available to common stockholders	\$(12,303)	\$ 8,774	\$(16,936)
Effect of dilutive securities:			
6 1/2% convertible notes(1)	—	1,338	—
	<u>—</u>	<u>1,338</u>	<u>—</u>
Numerator for diluted earnings (loss) per share — income (loss) available to common stockholders after assumed conversions	\$(12,303)	\$10,112	\$(16,936)
	<u>—</u>	<u>1,338</u>	<u>—</u>
Denominator:			
Denominator for basic earnings (loss) per share — weighted-average shares	12,948	12,077	11,955
Effect of dilutive securities:			
Employee stock options(2)	—	137	—
6 1/2% convertible notes(1)	—	3,048	—
	<u>—</u>	<u>3,185</u>	<u>—</u>
Dilutive potential common shares	—	3,185	—
	<u>—</u>	<u>3,185</u>	<u>—</u>
Denominator for diluted earnings (loss) per share — adjusted weighted-average shares and assumed conversions	12,948	15,262	11,955
	<u>—</u>	<u>3,185</u>	<u>—</u>

(1) Diluted EPS for the twelve-month periods ended December 31, 2003 and 2001 excludes “as converted” treatment of the convertible notes, as their inclusion would be anti-dilutive. The number of “as converted” shares excluded from the twelve-month periods ended December 31, 2003 and 2001 was 3,619,134 and 1,954,910, respectively.

(2) Potentially dilutive securities, consisting of shares issuable upon exercise of employee stock options, are excluded from the calculation of diluted EPS as their effect would be anti-dilutive. The weighted average number of employee stock options excluded from the twelve-month periods ended December 31, 2003, 2002 and 2001 was 1,731,305, 1,328,278 and 1,637,268, respectively.

*Use of Estimates*

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America 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 revenue and expenses during the reporting period. Actual results inevitably will differ from those estimates, and such differences may be material to the financial statements.

*New Accounting Pronouncements*

In June 2001, the Financial Accounting Standards Board (“FASB”) issued SFAS No. 143, “Accounting for Asset Retirement Obligations.” SFAS 143 requires that asset retirement obligations that are identifiable upon acquisition and construction, and during the operating life of a long-lived asset be recorded as a liability using the present value of the estimated cash flows. A corresponding amount would be capitalized as part of

INTEVAC, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

the asset's carrying amount and amortized to expense over the asset's useful life. We adopted the provisions of SFAS 143 effective January 1, 2003. The adoption of this statement did not have a material impact on our financial statements.

In July 2002, FASB issued SFAS No. 146, "Accounting for Costs Associated with Exit or Disposal Activities" which supercedes EITF No. 94-3, "Liability Recognition for Certain Employment Termination Benefits and Other Costs to Exit an Activity." SFAS No. 146 requires that a liability for a cost associated with an exit or disposal activity be recognized when the liability is incurred, whereas EITF No. 94-3 had recognized the liability at the commitment date to an exit plan. Adoption of this standard is effective for exit or disposal activities that are initiated after December 31, 2002. The adoption of this statement did not have a material impact on our financial statements.

In November 2002, the Emerging Issues Task Force ("EITF") issued EITF 00-21 "Revenue Arrangements with Multiple Deliverables." EITF 00-21 prescribes a method to account for contracts that have multiple elements or deliverables. It provides guidance on how to allocate the value of a contract to its different deliverables, as well as guidance on when to recognize revenue allocated to each deliverable over its performance period. The provisions of EITF 00-21 apply to revenue arrangements entered into in the fiscal periods beginning after June 15, 2003. The adoption of EITF No. 00-21 did not have a material impact on our financial statements.

In May 2003, FASB issued SFAS No. 150, "Accounting for Certain Financial Instruments with Characteristics of both Liabilities and Equity." SFAS No. 150 requires certain financial instruments that have both equity and liability characteristics to be classified as a liability on the balance sheet. SFAS No. 150 is effective for the first interim period beginning after June 15, 2003. The adoption of this statement did not have a material impact on our financial statements.

**3. Concentrations**

*Credit Risk and Significant Customers*

Financial instruments that potentially subject us to significant concentrations of credit risk consist of cash equivalents, short-term investments, accounts receivable and foreign exchange forward contracts. We generally invest our excess cash in money market funds and in commercial paper, which have contracted maturities generally within one year. By policy, our investments in commercial paper, certificates of deposit, Eurodollar time deposits, or banker's acceptances are rated A1/P1 or better. In 2001, we recorded a loss of \$803,000 on our investment in commercial paper issued by Pacific Gas & Electric. Our accounts receivables tend to be concentrated in a limited number of customers. At December 31, 2003, two customers accounted for 18% and 44%, respectively of our accounts receivables and in aggregate accounted for 62% of net accounts receivable.

Our largest customers tend to change from period to period. Historically, a significant portion of our revenues in any particular period have been attributable to sales to a limited number of customers. In 2003, four customers accounted for 25%, 18%, 13% and 10%, respectively, of our consolidated revenues and in aggregate accounted for 66% of net revenues. In 2002, three customers accounted for 42%, 21%, and 11%, respectively, of our consolidated revenues and in aggregate accounted for 74% of net revenues. In 2001, one customer accounted for 49% of our consolidated net revenues. Intevac performs credit evaluations of its customers' financial conditions and requires deposits on system orders but does not generally require collateral or other security to support customer receivables.

*Products*

Disk manufacturing and flat panel manufacturing equipment together contributed a significant portion of our revenues in 2003, 2002 and 2001. We expect that our ability to maintain or expand our current levels of

## INTEVAC, INC.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

revenues and to return to operating profitability in the future will depend upon our success in enhancing our existing systems and developing and manufacturing competitive disk manufacturing equipment, such as our 200 Lean, and our success in developing both military and commercial products based on our LIVAR and low light technology.

#### 4. Sale of Rapid Thermal Processing Product Line

In the fourth quarter of 2002, we sold our Rapid Thermal Processing product line to Photon Dynamics, Inc. (“PDI”) for \$20 million in cash and the assumption of certain liabilities. \$2 million of the cash payment was held in escrow and was not included in total assets on the consolidated balance sheet as of December 31, 2002, due to the contingencies related to the release of these funds from escrow. In connection with this sale, we recorded a gain in 2002 of \$15.4 million, which is included in other income and expense, net on the Consolidated Statement of Operations and Comprehensive Income. The following table recaps the gain from the sale and the effect on Intevac’s balance sheet for the year ended December 31, 2002 (in thousands):

Cash received from PDI (excluding the \$2 million in escrow)	\$18,000
Less: Accounts receivable transferred to PDI	(594)
Inventory transferred to PDI	(1,911)
Warranty and retrofit liability transferred to PDI	163
Other assets and liabilities transferred to PDI	(10)
Expenses associated with the transaction	(220)
	<hr/>
Net gain on sale	\$15,428
	<hr/>

In the fourth quarter of 2003, we received \$287,000, net of expenses, from the escrow. This amount is included in other income and expense, net on the Consolidated Statement of Operations and Comprehensive Income. The remainder of the funds in escrow were returned to PDI.

#### 5. Equity Investments

##### *601 California Avenue LLC*

In 1995, we entered into a Limited Liability Company Operating Agreement (the “Operating Agreement”), which expires December 31, 2015, with 601 California Avenue LLC (the “LLC”), a California limited liability company formed and owned by Intevac and certain shareholders of Intevac at that time. Under the Operating Agreement we transferred our leasehold interest in the site of our discontinued night vision business (the “Site”) in exchange for a preferred share in the LLC with a face value of \$3,900,000. We are accounting for the investment under the cost method and have recorded our investment in the LLC at \$2,431,000, which represents our historical carrying value of the leasehold interest in the Site. The preferred share in the LLC pays a 10% annual cumulative preferred dividend.

During 1996, the LLC formed a joint venture with Stanford University (the “Stanford JV”). The Stanford JV developed the property and has leased the property through August 2009. The LLC is a profitable enterprise whose primary asset is its interest in the Stanford JV. The Company received dividends of \$390,000 from the LLC in each of the last three years. As of December 31, 2003 all outstanding cumulative dividends on the preferred share had been paid. These dividends are included in other income and expense.

#### 6. Commitments

We lease certain facilities under non-cancelable operating leases that expire at various times up to March 2007. The facility leases require Intevac to pay for all normal maintenance costs. The lease for the primary facility in Santa Clara includes an option to extend the lease for an additional five-year period.

## INTEVAC, INC.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Future minimum rental payments under these leases at December 31, 2003 are as follows (in thousands):

2004	\$ 3,079
2005	3,192
2006	3,318
2007	838
	<hr/>
Total	\$10,427
	<hr/>

Gross rental expense was approximately \$2,940,000, \$2,873,000 and \$2,993,000 for the years ended December 31, 2003, 2002 and 2001, respectively.

Subsequent to December 31, 2003, we executed a lease amendment for our Santa Clara facility which extended the lease term to March 2012.

### 7. Employee Benefit Plan

In 1991, we established a defined contribution retirement plan with 401(k) plan features. The plan covers all United States employees eighteen years and older. Employees may make contributions by a percentage reduction in their salaries, not to exceed the statutorily prescribed annual limit. We made cash contributions of \$234,000, \$276,000 and \$301,000 for the years ended December 31, 2003, 2002 and 2001, respectively. Employees may choose among twelve investment options for their contributions and their share of Intevac's contributions, and they are able to move funds between investment options at any time. Intevac's common stock is not one of the investment options. Administrative expenses relating to the plan are insignificant.

### 8. Convertible Notes

During the first quarter of 1997, we completed an offering of \$57.5 million of our 6 1/2% Convertible Subordinated Notes (the "2004 Notes"), which mature March 1, 2004. Interest is payable each March 1st and September 1st. The notes are convertible into shares of Intevac's common stock at \$20.625 per share. Expenses associated with the offering of approximately \$2.3 million were deferred. Such expenses are being amortized to interest expense over the term of the notes.

On July 12, 2002 we completed the exchange of \$36.3 million in aggregate principal amount of our 2004 Notes for \$29.5 million of our new 6 1/2% Convertible Subordinated Notes due 2009 (the "2009 Notes") and \$7.6 million in cash, including \$0.9 million for accrued interest. The 2009 Notes were convertible, at the holders' option, into Intevac common shares at a conversion price of \$7.00 per share. \$1.3 million in aggregate principal amount of the 2004 Notes remained outstanding after the closing of the exchange offer.

In accounting for the exchange of the convertible notes, we wrote off \$0.4 million of debt issuance costs related to the 2004 Notes, reflecting the portion of such costs attributable to the convertible notes exchanged. The remaining debt issuance costs will be amortized to interest expense over the remaining life of the 2004 Notes. In connection with the exchange offer, we incurred \$0.8 million of offering costs. Of this amount, \$0.2 million represented the cash portion of the exchange offer and was expensed during the 3 months ended September 28, 2002. The \$0.6 million balance of the exchange offering costs were amortized to interest expense over the life of the 2009 Notes. There was no gain or loss associated with this transaction, as \$36.3 million of 2004 Notes were exchanged for \$36.3 million of cash and new securities.

During 2002, in addition to the note exchange described above, we repurchased \$0.3 million, face value, of our 2004 Notes. The repurchase resulted in a gain of \$23,000. During 2001, we repurchased \$3.7 million, face value, of our 2004 Notes. The repurchase resulted in a gain of \$1.4 million. In accordance with adoption of SFAS No. 145, the gain on the note repurchase is included in Other income and expense, net on the Consolidated Statement of Operations and Comprehensive Income.

## INTEVAC, INC.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

On October 31, 2003, we issued a notice of automatic conversion of our 2009 Notes pursuant to their terms. \$20.1 million in aggregate principal amount of these notes was outstanding, which converted into an aggregate of approximately 2,871,857 shares of Intevac common stock at a conversion price of \$7.00 per share. The automatic conversion occurred on November 10, 2003. Prior to the issuance of the notice of automatic conversion, \$9.4 million in aggregate principal amount of these notes had been tendered for conversion by the holders, resulting in the issuance of 1,348,426 shares of Intevac common stock.

**9. Segment Reporting***Segment Description*

We have two reportable operating segments: Equipment and Imaging. Our Equipment business designs, manufactures, markets and services complex capital equipment used in the sputtering, or deposition, of highly engineered thin-films of material onto thin-film disks which are used in hard disk drives. Our Imaging business develops and manufactures electro-optical sensors, cameras and systems that permit highly sensitive detection of photons in the visible and near infrared portions of the spectrum, allowing vision in extreme low light situations.

Included in corporate activities are general corporate expenses, less an allocation of corporate expenses to operating units equal to 3%, 1% and 1% of net revenues in 2003, 2002 and 2001, respectively. Assets of corporate activities include unallocated cash and short-term investments, deferred income tax assets (which were written off in 2001) and certain intangibles and other assets.

*Segment Profit or Loss and Segment Assets*

We evaluate performance and allocate resources based on a number of factors including, profit or loss from operations and future revenue potential. The accounting policies of the reportable segments are the same as those described in the summary of significant accounting policies.

*Business Segment Net Revenues*

	2003	2002	2001
		(In thousands)	
Equipment	\$26,748	\$27,100	\$42,723
Imaging	9,546	6,684	8,761
Total	\$36,294	\$33,784	\$51,484



## INTEVAC, INC.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

*Business Segment Profit & Loss*

	2003	2002	2001
		(In thousands)	
Equipment(1)	\$ (3,993)	\$ (5,139)	\$ (7,234)
Imaging(2)	(4,155)	(3,829)	(2,595)
Corporate activities	(2,507)	(2,321)	(1,639)
Operating loss	(10,655)	(11,289)	(11,468)
Interest expense	(1,787)	(2,981)	(2,912)
Interest income	269	284	1,245
Other income and expense, net	(92)	16,168	1,228
Income (loss) before income taxes	\$(12,265)	\$ 2,182	\$(11,907)

(1) Includes inventory provisions of \$451,000, \$847,000 and \$3,830,000 in 2003, 2002 and 2001, respectively.

(2) Includes inventory provisions of \$292,000, \$469,000 and (\$114,000) in 2003, 2002 and 2001, respectively.

*Business Segment Assets*

	2003	2002
		(In thousands)
Equipment	\$25,462	\$20,162
Imaging	7,702	7,719
Corporate activities	22,811	32,417
Total assets	\$55,975	\$60,298

*Business Segment Property, Plant & Equipment*

Additions	2003	2002	
			(In thousands)
Equipment	\$1,196	\$ 89	
Imaging	788	1,203	
Corporate activities	310	188	
Total additions	\$2,294	\$1,480	
Depreciation	2003	2002	2001
			(In thousands)
Equipment	\$ 456	\$1,346	\$2,559
Imaging	1,240	860	799
Corporate activities	267	371	558
Total depreciation	\$1,963	\$2,577	\$3,916

## INTEVAC, INC.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

*Geographic Area Net Trade Revenues*

	2003	2002	2001
		(In thousands)	
United States	\$13,133	\$16,332	\$14,154
Far East	23,155	17,150	36,363
Europe	—	301	827
Rest of World	6	1	140
	<u>        </u>	<u>        </u>	<u>        </u>
Total revenues	\$36,294	\$33,784	\$51,484
	<u>        </u>	<u>        </u>	<u>        </u>

**10. Shareholders' Equity**

Intevac's Articles of Incorporation authorize 10,000,000 shares of Preferred Stock. The Board of Directors has the authority to issue the Preferred Stock in one or more series and to fix the price, rights, preferences, privileges and restrictions thereof, including dividend rights, dividend rates, conversion rights, voting rights, terms of redemption, redemption prices, liquidation preferences and the number of shares constituting any series or the designation of such series, without further vote or action by the shareholders.

*Stock Option/ Stock Issuance Plans*

The Board of Directors approved adoption of the 1995 Stock Option/ Stock Issuance Plan (the "1995 Plan") in 1995. The 1995 Plan, as amended in 2000, serves as the successor equity incentive program to our 1991 Stock Option/ Stock Issuance Plan (the "1991 Plan"). Upon adoption of the 1995 Plan, all shares available for issuance under the 1991 Plan were transferred to the 1995 Plan. The 1995 Plan is divided into two separate components: the Discretionary Option Grant Program and the Stock Issuance Program. Under the Option Grant Program, Intevac may grant either incentive stock options or nonqualified options or implement stock appreciation rights provisions at the discretion of the Board of Directors. Exercisability, option price, and other terms are determined by the Board of Directors, but the option price shall not be less than 85% and 100% of the fair market value for nonqualified options and incentive stock options, respectively, as determined by the Board of Directors. As of December 31, 2003, 1,535,606 shares of common stock are authorized for future issuance under the 1995 Plan. Options granted under the 1995 Plan are exercisable upon vesting and vest over periods of up to five years. Options currently expire no later than ten years from the date of grant. The 1995 Plan expires no later than September 30, 2005.

In 1995, the Board of Directors approved adoption of the Employee Stock Purchase Plan (the "ESPP"). In 2003, our shareholders approved adoption of the 2003 Employee Stock Purchase Plan which serves as the successor to the ESPP.

## INTEVAC, INC.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

A summary of our stock option activity and related information for the years ended December 31 follows:

	2003		2002		2001	
	Options	Weighted-Average Exercise Price	Options	Weighted-Average Exercise Price	Options	Weighted-Average Exercise Price
Outstanding — beginning of year	1,850,082	\$5.02	1,802,022	\$5.22	1,570,297	\$5.39
Granted	259,000	8.03	429,800	3.19	341,900	3.90
Exercised	(530,248)	5.64	(13,400)	1.46	(41,149)	0.30
Forfeited	(152,549)	5.73	(368,340)	4.00	(69,026)	5.32
Outstanding — end of year	1,426,285	5.26	1,850,082	5.02	1,802,022	5.22
Exercisable at end of year	840,518	\$5.67	1,188,382	\$5.81	1,062,242	\$5.89
Weighted-average per share fair value of options granted during the year		\$3.64		\$1.58		\$1.93

## Outstanding and Exercisable by Price Range as of December 31, 2003

Range of Exercise Prices	Options Outstanding			Options Exercisable	
	Number Outstanding As of December 31, 2003	Weighted Average Remaining Contractual Life	Weighted Average Exercise Price	Number Exercisable As of December 31, 2003	Weighted Average Exercise Price
\$ 2.175 – \$ 2.630	273,666	7.50 yrs	\$ 2.59	119,499	\$ 2.54
\$ 3.063 – \$ 4.750	529,550	7.84 yrs	\$ 3.74	227,900	\$ 3.77
\$ 5.000 – \$ 7.500	418,469	3.99 yrs	\$ 5.99	396,929	\$ 6.02
\$ 7.625 – \$10.000	118,100	7.57 yrs	\$ 7.95	48,100	\$ 8.10
\$11.625 – \$15.500	71,500	9.59 yrs	\$14.73	33,000	\$15.16
\$21.250 – \$21.250	15,000	2.37 yrs	\$21.25	15,000	\$21.25
\$ 2.175 – \$21.250	1,426,285	6.65 yrs	\$ 5.26	840,518	\$ 5.67

## INTEVAC, INC.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

## 11. Income Taxes

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

	Years Ended December 31,		
	2003	2002	2001
Federal:			
Current	\$—	\$(6,585)	\$ —
Deferred	—	—	3,771
	—	(6,585)	3,771
State:			
Current	2	2	—
Deferred	—	—	1,217
	2	2	1,217
Foreign:			
Current	36	(9)	41
Total	\$38	\$(6,592)	\$5,029

The tax benefits associated with exercises of nonqualified stock options and disqualifying dispositions of stock acquired through the incentive stock option and employee stock purchase plans reduced taxes currently payable for 2003, 2002 and 2001 as shown above by \$0, \$0 and \$0, respectively. Such benefits are credited to additional paid-in capital when realized.

Deferred income taxes reflect the net tax effects of temporary differences between losses reported and the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. Significant components of our deferred tax assets computed in accordance with SFAS No. 109 are as follows (in thousands):

	December 31,	
	2003	2002
Deferred tax assets:		
Vacation accrual, rent accrual and warranty reserve	\$ 1,041	\$ 1,167
Depreciation	1,431	1,370
Inventory valuation	3,803	3,534
Research and other tax credit carry-forwards	557	513
Federal and State NOL carry-forward	9,046	4,962
Other	857	587
	16,735	12,133
Valuation allowance for deferred tax assets	(16,685)	(12,083)
Total deferred tax assets	\$ 50	\$ 50
Deferred tax liabilities:		
Other	\$ 50	\$ 50
Total deferred tax liabilities	\$ 50	\$ 50
Net deferred tax assets	\$ —	\$ —

## INTEVAC, INC.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

The valuation allowance increased by \$4.6 million during 2003 due to the uncertainty of realizing certain tax credit and loss carry-forwards, and other deferred tax assets. The Federal and State net operating loss carry-forwards of \$24.7 million and \$10.7 million expire at various dates through 2023 and 2014, respectively, if not previously utilized.

A reconciliation of the income tax provision on income from continuing operations at the federal statutory rate of 34% to the income tax provision at the effective tax rate is as follows (in thousands):

	Years Ended December 31,		
	2003	2002	2001
Income taxes (benefit) computed at the federal statutory rate	\$(4,159)	\$ 766	\$(4,125)
State taxes (net of federal benefit)	(434)	109	(408)
Research and other tax credits	(44)	(142)	(1,033)
Effect of tax rate changes and other permanent differences	73	(181)	44
Valuation allowance	4,602	(7,144)	10,551
Total	\$ 38	\$(6,592)	\$ 5,029

## 12. Other Accrued Liabilities

	December 31,	
	2003	2002
	(In thousands)	
Accrued product warranties	\$ 534	\$ 845
Accrued interest expense	22	662
Accrued rent expense	1,290	1,435
Accrued sales & use tax	142	559
Other	655	222
Total other accrued liabilities	\$2,643	\$3,723

## 13. Quarterly Consolidated Results of Operations (Unaudited)

	Three Months Ended			
	March 29, 2003	June 28, 2003	Sept. 27, 2003	Dec. 31, 2003
	(In thousands, except per share data)			
Net sales	\$12,015	\$ 4,587	\$ 7,616	\$12,076
Gross profit	1,160	1,119	2,880	4,671
Net income (loss)(1)	(4,006)	(4,797)	(2,899)	(601)
Basic earnings per share	\$ (0.33)	\$ (0.39)	\$ (0.24)	\$ (0.04)
Diluted earnings per share	(0.33)	(0.39)	(0.24)	(0.04)

## INTEVAC, INC.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

	Three Months Ended			
	March 30, 2002	June 29, 2002	Sept. 28, 2002	Dec. 31, 2002
	(In thousands, except per share data)			
Net sales	\$ 6,670	\$8,385	\$ 6,737	\$11,992
Gross profit	963	2,003	1,342	3,001
Net income (loss)(1)(2)(3)	(2,142)	852	(3,878)	13,942
Basic earnings per share	\$ (0.18)	\$ 0.07	\$ (0.32)	\$ 1.15
Diluted earnings per share	(0.18)	0.07	(0.32)	0.86

- (1) Net income (loss) for the three months ended December 31, 2003 and December 31, 2002 includes a gain of \$287,000 and \$15.4 million, respectively, from the sale of the rapid thermal processing product line.
- (2) Net income (loss) for the three months ended March 30, 2002, June 29, 2002 and December 31, 2002 include tax benefits of \$2.2 million, \$4.2 million and \$223,000, respectively, booked as a result of the enactment of the Job Creation and Worker Assistance Act of 2002.
- (3) Net income (loss) for the three months ended December 31, 2002 includes a gain of \$324,000 from the sale of fabrication shop fixed assets.

**14. Subsequent Event**

On February 10, 2004, we completed the public offering of 4,750,000 shares of common stock at a price of \$15.00 per share. Of the shares offered, 2,969,000 newly issued and outstanding shares were sold by us and 1,781,000 shares were sold by a selling shareholder. The net proceeds to us are approximately \$41.6 million after deducting underwriting discounts and offering expenses.

**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.* An evaluation was carried out under the supervision and with the participation of Intevac's management, including our Chief Executive Officer and our Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures (as defined in Rule 13a-15(e) under the Securities Exchange Act of 1934, as amended, the "Exchange Act") as of the end of the period covered by this annual report. Based on that 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 Exchange Act is recorded, processed, summarized and reported within the time periods specified in Securities and Exchange Commission rules and forms.

*Changes in internal controls.* No change in Intevac's internal controls over financial reporting was identified in connection with the evaluation required by Rule 13a-15(d) of the Exchange Act that occurred during our fourth quarter ended December 31, 2003 that has materially affected, or is reasonably likely to materially affect, Intevac's internal controls over financial reporting.

**PART III**

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

The information required by this item relating to the Company's directors and nominees, disclosure relating to compliance with Section 16 (a) of the Securities Exchange Act of 1934, and information regarding our code of ethics is included under the captions "Election of Directors," "Section 16(a) Beneficial Ownership Reporting Compliance," and "Code of Ethics" in the Company's Proxy Statement for the 2004 Annual Meeting of Shareholders and is incorporated herein by reference. The information required by this item relating to the Company's executive officers and key employees is included under the caption "Executive Officers and Directors" under Item 4 in Part I of this Annual Report on Form 10-K.

**Item 11. *Executive Compensation***

The information required by this item is included under the caption "Executive Compensation and Related Information" in the Company's Proxy Statement for the 2004 Annual Meeting of Shareholders and is incorporated herein by reference.

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### Item 12. *Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters*

*Securities authorized for issuance under equity compensation plans.* The following table summarizes the number of outstanding options granted to employees and directors, as well as the number of securities remaining available for future issuance, under our equity compensation plans at December 31, 2003.

Plan Category	(a) Number of securities to be issued upon exercise of outstanding options, warrants and rights	(b) Weighted-average exercise price of outstanding options, warrants and rights	(c) Number of securities remaining available for future issuance under equity compensation plans(1)
Equity compensation plans approved by security holders(2)	1,426,285	\$5.26	467,515
Equity compensation plans not approved by security holders	—	\$ —	—
Total	1,426,285	\$5.26	467,515

(1) Excludes securities reflected in column (a).

(2) Included in the column (c) amount are 358,197 shares available for future issuance under Intevac's 2003 Employee Stock Purchase Plan.

The other information required by this item is included under the caption "Ownership of Securities" in the Company's Proxy Statement for the 2004 Annual Meeting of Shareholders and is incorporated herein by reference.

### Item 13. *Certain Relationships and Related Transactions*

The information required by this item is included under the caption "Certain Transactions" in the Company's Proxy Statement for the 2004 Annual Meeting of Shareholders and is incorporated herein by reference.

### Item 14. *Principal Accountant Fees and Services*

The information required by this item is included under the caption "Fees Paid To Accountants For Services Rendered" in the Company's Proxy Statement for the 2004 Annual Meeting of Shareholders and is incorporated herein by reference.

## PART IV

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

(a) List of Documents filed as part of this Annual Report on Form 10-K.

1. The following consolidated financial statements of Intevac, Inc. are filed in Part II, Item 8 of this Report on Form 10-K:

Report of Grant Thornton LLP, Independent Auditors

Consolidated Balance Sheets — December 31, 2003 and 2002

Consolidated Statements of Operations and Comprehensive Income for the years ended December 31, 2003, 2002 and 2001

Consolidated Statement of Shareholders' Equity for the years ended December 31, 2003, 2002 and 2001

Consolidated Statements of Cash Flows for the years ended December 31, 2003, 2002 and 2001

Notes to Consolidated Financial Statements — Years Ended December 31, 2003, 2002 and 2001





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### 2. Financial Statement Schedules.

The following financial statement schedule of Intevac, Inc. is filed in Part IV, Item 14(a) of this Annual Report on Form 10-K:

#### Schedule II — Valuation and Qualifying Accounts

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

### 3. Exhibits

Exhibit Number	Description
*****2.1	Asset Purchase Agreement between Intevac, Inc. and Photon Dynamics, Inc. dated as of October 22, 2002
*3.1	Amended and Restated Articles of Incorporation of the Registrant
*3.2	Bylaws of the Registrant
***4.2	Indenture, dated as of February 15, 1997, between the Company and State Street Bank and Trust Company of California, N.A. as Trustee, including the form of the Convertible Notes
*****4.3	Indenture, dated as of July 12, 2002, between the Company and State Street Bank and Trust Company of California, N.A. as Trustee, including the form of the Convertible Notes
4.4	Registration Rights Agreement, dated January 16, 2004, between the Company, Redemco, LLC and Foster City LLC
*10.1†	The Registrant's 1991 Stock Option/ Stock Issuance Plan
*10.2†	The Registrant's 1995 Stock Option/ Stock Issuance Plan, as amended
*10.3†	The Registrant's Employee Stock Purchase Plan, as amended
****10.5	Lease, dated February 5, 2001 regarding the space located at 3560, 3570 and 3580 Bassett Street, Santa Clara, California
*10.8	601 California Avenue LLC Limited Liability Operating Agreement, dated July 28, 1995
*10.9†	The Registrant's 401(k) Profit Sharing Plan
21.1	Subsidiaries of the Registrant
23.1	Consent of Grant Thornton LLP, Independent Auditors
24.1	Power of Attorney (see page 60)
31.1	Certification of President and Chief Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2	Certification of Vice-President, Finance and Administration, Chief Financial Officer, Treasurer and Secretary Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32.1	Certifications Pursuant to U.S.C. 1350, adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

\* Previously filed as an exhibit to the Registration Statement on Form S-1 (No. 33-97806)

\*\* Previously filed as an exhibit to the Registration Statement on Form S-1 (No. 333-05531)

\*\*\* Previously filed as an exhibit to the Registration Statement on Form S-3 (No. 333-24275)

\*\*\*\* Previously filed as an exhibit to the Company's Annual Report on Form 10-K for the year ended December 31, 2000

\*\*\*\*\* Previously filed as an exhibit to the Company's Report on Form 8-K filed November 14, 2002

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† Management compensatory plan or arrangement required to be filed as an exhibit pursuant to Item 15(c) of Form 10-K

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

- (1) On October 21, 2003, the registrant filed a report on Form 8-K regarding the issuance of a press release announcing its results for the three months ended September 27, 2003.
- (2) On December 23, 2003, the registrant filed a report on Form 8-K regarding the issuance of two press releases, one announcing the shipment of the first 200 Lean and the second announcing the death of director H. Joseph Smead.
- (3) On January 5, 2004, the registrant filed a report on Form 8-K regarding the issuance of a press release announcing its preliminary results for the three months ended December 31, 2003.
- (4) On January 30, 2004, the registrant filed a report on Form 8-K regarding the issuance of a press release announcing its results for the three months ended December 31, 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 March 16, 2004.

INTEVAC, INC.

By: /s/ CHARLES B. EDDY III

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Charles B. Eddy, III  
 Vice President, Finance and Administration,  
 Chief Financial Officer, Treasurer and Secretary  
 (Principal Financial and Accounting Officer)

**POWER OF ATTORNEY**

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Kevin Fairbairn and Charles B. Eddy III, and each of them, as his true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution, for him and in his name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this Report on Form 10-K, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or any of them, or their or his substitute or substitutes, may lawfully 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.

Signature	Title	Date
/s/ KEVIN FAIRBAIRN <hr/> Kevin Fairbairn	President, Chief Executive Officer and Director (Principal Executive Officer)	March 16, 2004
/s/ NORMAN H. POND <hr/> Norman H. Pond	Chairman of the Board	March 16, 2004
/s/ CHARLES B. EDDY III <hr/> Charles B. Eddy III	Vice President, Finance and Administration, Chief Financial Officer Treasurer and Secretary (Principal Financial and Accounting Officer)	March 16, 2004
/s/ DAVID DURY <hr/> David Dury	Director	March 16, 2004
<hr/> Stanley J. Hill	Director	

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Signature	Title	Date
<hr/> <i>/s/ DAVID N. LAMBETH</i> <hr/> David N. Lambeth	Director	March 16, 2004
<hr/> <i>/s/ ROBERT LEMOS</i> <hr/> Robert Lemos	Director	March 16, 2004
<hr/> <i>/s/ ARTHUR L. MONEY</i> <hr/> Arthur L. Money	Director	March 16, 2004

## SCHEDULE II — VALUATION AND QUALIFYING ACCOUNTS

## INTEVAC, INC.

Description	Balance at Beginning of Period	Additions (Reductions)		Deductions - Describe	Balance at End of Period
		Charged (Credited) to Costs and Expenses	Charged (Credited) to Other Accounts		
(In thousands)					
Year ended December 31, 2001:					
Deducted from asset accounts:					
Allowance for doubtful accounts	\$ 113	\$ 41	\$ 71	\$ —	\$ 225
Inventory provisions	8,747	3,716	896	698(2)	12,661
Year ended December 31, 2002:					
Deducted from asset accounts:					
Allowance for doubtful accounts	\$ 225	\$ 73	\$ —	\$ 29(1)	\$ 269
Inventory provisions	12,661	1,316	(229)	4,189(2)	9,559
Year ended December 31, 2003:					
Deducted from asset accounts:					
Allowance for doubtful accounts	\$ 269	\$ (143)	\$ 6	\$ 110(1)	\$ 22
Inventory provisions	9,559	743	588	698(2)	10,192

(1) Write-offs of amounts deemed uncollectible.

(2) Write-off of inventory having no future use or value to the Company

EXHIBIT INDEX

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## EXHIBIT 4.4

### INTEVAC, INC.

#### REGISTRATION RIGHTS AGREEMENT

This Registration Rights Agreement (this "AGREEMENT") is effective as of January 16, 2004 by and among Intevac, Inc., a California corporation (the "COMPANY"), and Redemco, LLC and Foster City LLC (collectively, the "SHAREHOLDERS").

WHEREAS, in consideration for the agreement of the Shareholders not to sell or otherwise dispose of any shares of Company Common Stock (as defined below) for a period of 180 days after the date of the final prospectus relating to the Pending Offering (as defined below) other than any such shares sold in the Pending Offering itself, the Company agrees to grant the Shareholders the registration rights set forth in this Agreement.

1. Definitions. As used in this Agreement:

(a) "COMPANY COMMON STOCK" means the Company's common stock, no par value.

(b) "EXCHANGE ACT" means the Securities Exchange Act of 1934, as amended.

(c) "FORM S-3" means such form under the Securities Act as in effect on the date hereof or any registration form under the Securities Act subsequently adopted by the SEC that similarly permits inclusion or incorporation of substantial information by reference to other documents filed by the Company with the SEC.

(d) "HOLDER" means each Shareholder, for so long as such Shareholder continues to hold the Shares, and any permitted transferee thereof pursuant to Section 13 hereof.

(e) "LOCK-UP TERMINATION DATE" means the date that is 180 days after the date of the final prospectus related to the Pending Offering.

(f) "PENDING OFFERING" means the Company's public offering of shares of Company Common Stock through a registration on Form S-3 to be filed with the SEC on or about December 19, 2003.

(g) "REGISTRABLE SECURITIES" means the Shares, together with all other shares of Company Common Stock issued in respect thereof (by way of stock split, dividend or otherwise); provided, however, that such shares of Company Common Stock shall only be treated as Registrable Securities if and so long as they have not been (A) sold to or through a broker or dealer or underwriter in a public distribution or a public securities transaction, or (B) sold in a transaction exempt from the registration and prospectus delivery requirements of the Securities Act under Section 4(1) thereof so that all transfer restrictions and restrictive legends with respect thereto are removed upon the consummation of such sale.

(h) "SEC" means the Securities and Exchange Commission.

(i) "SECURITIES ACT" means the Securities Act of 1933, as amended.

(j) "SHARES" means all 3,255,969 shares of Company Common Stock held by Redemco, LLC and all 2,344,031 shares of Company Common Stock of Foster City LLC as of the date hereof, less all shares sold by Foster City LLC in the Pending Offering.

(k) "SIGNIFICANT HOLDER" means each Shareholder and any other Holder who, at the time of a sale of Registrable Securities pursuant to a registration statement filed in accordance with Section 3 hereof, holds more than 200,000 shares of Company Common Stock.

2. Request for Registration. At any time after the Lock-Up Termination Date, either Shareholder may provide to the Company a written request that the Company effect a registration on Form S-3 of Registrable Securities then held by each Holder to permit the resale of such Registrable Securities to the public by each Holder or its distributees under the Securities Act (it being understood that only the Shareholders originally party hereto, and not their subsequent distributees, shall have the right to request a registration hereunder, though such distributees shall be permitted to participate in such registration should it be so requested).

3. Registration. Promptly upon receipt of a request pursuant to Section 2, the Company shall use commercially reasonable efforts to cause the Registrable Securities referred to in such request to be registered under the Securities Act, and in connection therewith, use commercially reasonable efforts to prepare and file with the SEC a registration statement on Form S-3 covering the disposition of the Registrable Securities requested to be registered, and to have such registration statement become effective as soon as reasonably practicable thereafter; provided, however, that each Holder shall provide all such information and materials to the Company and take all such action as may be required in order to permit the Company to comply with all applicable requirements of the SEC and to obtain any desired acceleration of the effectiveness of such registration statement. Such provision of information and materials is a condition precedent to the obligations of the Company pursuant to this Agreement. The Company shall not be required to effect more than one (1) registration under this Agreement. The offering made pursuant to such registration shall not be underwritten.

4. Postponement of Registration. Notwithstanding the foregoing, the Company shall be entitled to postpone the filing or declaration of effectiveness of the registration statement prepared and filed pursuant to Section 3 for a reasonable period of time, but not in excess of ninety (90) calendar days after receipt of the request pursuant to Section 2, if the Board of Directors of the Company, acting in good faith, determines that there exists material nonpublic information about the Company which the Board does not wish to disclose in a registration statement, which information would otherwise be required by the Securities Act to be disclosed in the registration statement to be filed pursuant to Section 3 above.

5. Obligations of the Company. Subject to the limitations of Sections 4, 7 and 13, the Company shall:

(a) keep the registration statement filed in accordance with Section 3 hereof effective until the earlier of (A) one (1) year after the effective date thereof or (B) such time as all Registrable Securities have been sold thereunder;

(b) prepare and file with the SEC such amendments and supplements to such registration statement and the prospectus used in connection therewith as may be necessary to comply with the provisions of the Securities Act with respect to the sale or other disposition of all securities proposed to be registered in such registration statement;

(c) furnish to each Holder whose Registrable Securities are included in such registration such number of copies of any prospectus (including any preliminary prospectus and any amended or supplemented prospectus) in conformity with the requirements of the Securities Act, and such other documents, as such Holder may reasonably request in order to effect the offering and sale of the shares of the Registrable Securities to be offered and sold by such Holder, but only while the Company shall be required under the provisions hereof to cause the registration statement to remain current; and

(d) use its commercially reasonable efforts to register or qualify the shares of the Registrable Securities covered by such registration statement under the securities or blue sky laws of such jurisdictions as each Holder whose Registrable Securities are included in such registration shall reasonably request (provided that the Company shall not be required in connection therewith or as a condition thereto to qualify to do business or to file a general consent to service of process in any such jurisdiction where it has not been qualified).

6. Selling Procedures Applicable to Significant Holders. Any sale of Registrable Securities by a Significant Holder pursuant to the registration statement filed in accordance with Section 3 hereof shall be subject to the following conditions and procedures:

(a) Shareholder Notice: The selling Significant Holder shall provide written notice (a "SHAREHOLDER NOTICE") to the Company no less than four

(4) business days prior to such Significant Holder's intended sale. Within three

(3) business days of receipt of the Shareholder Notice, the Company will inform such Significant Holder in writing if the registration statement and final prospectus then on file with the SEC is current and otherwise complies with the Securities Act such that sales may be made thereunder. Beginning immediately upon receipt of notice from the Company that the registration statement is current and complies with the Securities Act, such Significant Holder shall then have ten (10) business days to sell the Registrable Securities proposed to be sold, unless the notice from the Company specifies that no sale may be made until the date of intended sale, as specified in the Shareholder Notice, in which case the Significant Holder must wait until the date of the intended sale to make such sale and shall then have ten (10) business days thereafter to make such sale (each, a "SELLING PERIOD"). After such Selling Period, the seller shall once again comply with the procedures set forth in this Section 6(a) prior to any further sales.

Each Shareholder Notice shall be in writing to the Company at the following address:

Intevac, Inc. 3560 Bassett Street Santa Clara, California 95054 Attention: Chief Financial Officer Telephone No.: (408) 986-9888 Facsimile No.: (408) 727-5739

(b) Updating the Prospectus: If the Company informs the selling Significant Holder that the registration statement or final prospectus then on file with the SEC is not current or otherwise does not comply with the Securities Act, the Company shall use commercially reasonable efforts to provide to the selling Significant Holder a current prospectus that complies with the Securities Act on or before the date of the intended sale of the Registrable Securities as disclosed in the Shareholder Notice; provided, however, that for a period of not more than ninety (90) days, the Company shall have the right to delay the preparation of a current prospectus that complies with the Securities Act without explanation to such Significant Holder.

(c) Blackout Periods: Each Significant Holder who is or becomes an affiliate of the Company, as such term is defined in Rule 501 promulgated under the Securities Act, agrees to be bound by the Company's Insider Trading Policies as such may be in effect from time to time for so long as such Significant Holder remains an affiliate of the Company. The Company agrees to provide a copy of the Insider Trading Policy to each Significant Holder who is or becomes an affiliate at the time such holder is determined to be an affiliate and at the time of any material revisions to the policy.

(d) Maximum Shares Sold: Each Significant Holder agrees that such Significant Holder will not, during any ninety (90) day period, sell a number of Registrable Securities that exceeds the limit on shares that could be sold in a ninety (90) day period by such Significant Holder set forth in Rule 144(e) promulgated under the Securities Act (or a similar successor rule), as in effect at the time of sale. In the event a Significant Holder desires to sell more than the number of Registrable Securities permitted by the preceding sentence, such Significant Holder may notify the Company. The Company and that Significant Holder shall then cooperate in good faith to determine if such a sale may be made in a manner and to an extent that, in the Company's judgment, would not have a detrimental effect on the Company or the trading market for the Company Common Stock.

(e) Sales Other than Pursuant to the Registration Statement:

No Holder shall be required to comply with the provisions of this Section 6 with respect to any sale of shares of Company Common Stock, including the Shares, not effected under a registration statement filed pursuant to this Agreement, provided that such sale is effected in compliance with Rule 144 (including Rule 144(k)) or another exemption from the registration requirements of the Securities Act.

7. Suspension of Registration Statement. Notwithstanding any other provision of this Agreement, if:

(i) the Company receives any request by the SEC or any other federal or state governmental authority during the period of effectiveness of the registration statement for amendments or supplements to the registration statement or related prospectus or for additional information relating to the registration statement,

(ii) the SEC or any other federal or state governmental authority issues any stop order suspending the effectiveness of the registration statement or the initiation of any proceedings for that purpose,

(iii) the Company receives any notification with respect to the suspension of the qualification or exemption from qualification of any of the Registrable Securities for sale in any jurisdiction or the initiation or threatening of any proceeding for such purpose,

(iv) any event happens that makes any statement made in the registration statement or related prospectus or any document incorporated or deemed to be incorporated therein by reference untrue in any material respect or which requires the making of any changes in the registration statement or prospectus so that, in the case of the registration statement, it will not contain an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading, and that in the case of the prospectus, it will not contain an untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading, or

(v) the Company's Board of Directors determines that it is advisable to suspend use of the prospectus for a discrete period of time due to pending corporate developments, public filings with the Commission or that there exists material nonpublic information about the Company that the Board of Directors, acting in good faith, determines not to disclose in a registration statement.

then the Company shall send notice of such event to the Holders that use of the prospectus has been suspended, and each Holder shall thereafter not dispose of Registrable Securities covered by the registration statement or prospectus until copies of a supplemented or amended prospectus are distributed to the Holders or until the Holders are advised in writing by the Company that the use of the applicable prospectus may be resumed. The Company shall use its commercially reasonable efforts to ensure that the use of the prospectus may be resumed as soon as practicable. The Company shall use its commercially reasonable efforts to obtain the withdrawal of any order suspending the effectiveness of the registration statement, or the lifting of any suspension of the qualification (or exemption from qualification) of any of the securities for sale in any jurisdiction, at the earliest practicable moment. The Company shall, upon the occurrence of any event contemplated by clause, (iv) prepare a supplement or post-effective amendment to the registration statement or a supplement to the related prospectus or any document incorporated therein by

reference or file any other required document so that, as thereafter delivered to the purchasers of the Registrable Securities being sold thereunder, such prospectus will not contain an untrue statement of a material fact or omit to state a material fact necessary to make the statements therein, in light of the circumstances under which they were made, not misleading.

8. Availability of Form S-3. The Company represents that it is currently eligible to utilize Form S-3 and agrees that the Company will not intentionally take any action that would preclude the Company's eligibility to use Form S-3.

9. Expenses. The Holders whose Registrable Securities are included in the registration shall pay, pro rata based upon the number of Registrable Securities so included, all of the out-of-pocket expenses incurred by the Company, and all underwriting or selling discounts and commissions, in connection with the registration of Registrable Securities pursuant to this Agreement, including, without limitation, all SEC, National Association of Securities Dealers, Inc. and blue sky registration and filing fees, printing expenses, transfer agents' and registrars' fees, and the reasonable fees and disbursements of the Company's outside counsel, any special counsel for the Holders and the Company's independent accountants. Each Shareholder shall reimburse the Company for any expenses described herein paid by the Company (i.e., it shall be the responsibility of each Shareholder, and not of the Company, to collect pro rata reimbursement amounts from such Shareholder's distributees, as applicable), with the amount of reimbursement for which each Shareholder shall be responsible being equal to the amount of such expenses multiplied by a fraction, the numerator of which is the number of Registrable Securities included in the registration for the benefit of such Shareholder and such Shareholder's distributees, and the denominator of which is equal to the total number of Registrable Securities included in the registration.

10. Reports Under Securities Exchange Act of 1934. The Company agrees to:

(a) use all commercially reasonable efforts to file with the SEC in a timely manner all reports and other documents required of the Company under the Securities Act and the Exchange Act, and to make and keep public information available as defined in Rule 144 under the Securities Act; and

(b) furnish to each Holder forthwith upon request (i) a written statement by the Company that it has complied with the reporting requirements of the Securities Act and the Exchange Act, or that it qualifies as a registrant whose securities may be resold pursuant to Form S-3 (at any time that it so qualifies), (ii) a copy of the most recent annual or quarterly report of the Company and (iii) such other information as may be reasonably requested in availing each Holder of any rule or regulation of the SEC which permits the selling of any such securities pursuant to Form S-3.

11. Indemnification.

(a) Indemnification by the Company. The Company will indemnify each Holder whose Registrable Securities are included in the registration pursuant to this Agreement against all claims, losses, damages and liabilities (or actions in respect thereof), arising out of or based on any untrue statement of a material fact contained in any registration statement, final prospectus, or any

amendment or supplement thereto, incident to such registration, or based on any omission to state therein a material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances in which they were made, not misleading, and, subject to Section 11(c), will reimburse each such Holder, for any legal and any other out-of-pocket expenses reasonably incurred in connection with investigating, preparing or defending any such claim, loss, damage, liability or action, provided that the Company will not be liable in any such case to the extent that any such claim, loss, damage, or liability arises out of or is based on any untrue statement or omission or alleged untrue statement or omission made in reliance upon and in conformity with written information furnished to the Company by such Holder for use therein.

(b) Indemnification by Holders. Each Holder will indemnify the Company, each of its directors and officers, its legal counsel and independent accountants, each underwriter, if any, of the Company's securities covered by such a registration statement, each person who controls the Company or such underwriter within the meaning of Section 15 of the Securities Act, against all claims, losses, damages and liabilities (or actions in respect thereof) arising out of or based on any untrue statement of a material fact contained in any such registration statement, final prospectus, or any amendment or supplement thereto, incident to registration pursuant to this Agreement or based on any omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading, and, subject to Section 11(c), will reimburse the Company, such directors, officers, legal counsel, independent accountants, underwriters or control persons for any legal or any other expenses reasonably incurred in connection with investigating, preparing or defending any such claim, loss, damage, liability or action, in each case to the extent, but only to the extent, that such untrue statement or omission, or alleged untrue statement or omission is made in such registration statement, final prospectus, or any amendment or supplement thereto, in reliance upon and in conformity with written information furnished to the Company by such Holder for use therein; provided, however, that the obligations of each Holder hereunder shall be several and not joint and shall be limited to an amount equal to the respective proceeds (after commissions) from the sale of Registrable Securities by such Holder as contemplated herein.

(c) Defending Claims. Each party entitled to indemnification under this Section 11 (the "INDEMNIFIED PARTY") shall give notice to the party required to provide indemnification (the "INDEMNIFYING PARTY") promptly after such Indemnified Party receives written notice of any claim as to which indemnity may be sought, and shall permit the Indemnifying Party to assume and conduct the defense of any such claim or any litigation resulting therefrom, and the Indemnified Party may participate in such defense at the Indemnified Party's expense; provided that if the Indemnified Party reasonably concludes that there may be one or more legal defenses available to it that are not available to the Indemnifying Party, or that a conflict or potential conflict exists between the Indemnified and Indemnifying Party, then the Indemnified Party may retain its own counsel at the expense of the Indemnifying Party. Notwithstanding the foregoing, the failure of any Indemnified Party to give notice as provided herein shall not relieve the Indemnifying Party of its obligations under this Agreement, except to the extent, but only to the extent, that the Indemnifying Party's ability to defend against such claim or litigation is impaired as a result of such failure to give notice.

12. Assignment of Registration Rights. The rights of a Holder pursuant to this Agreement are solely for the benefit of such Holder and are not transferable to any other person or entity, except

(a) transfers by operation of law to such Holder's heirs and successors and (b) transfers by the Shareholders of their rights under this Agreement (specifically excluding the Shareholders' rights under Section 2 of this Agreement, which rights are not assignable) to the partners or members of such Shareholder in connection with distributions by such Shareholder of Registrable Securities in accordance with pro rata equity ownership interests.

13. Amendment of Registration Rights. The Company, with the consent of the Holders of a majority of the Registrable Securities then outstanding, may amend the registration rights granted hereunder.

14. Termination. The registration rights set forth in this Agreement shall terminate with respect to a Holder (and the shares held by such Holder shall cease to constitute Registrable Securities) upon the date upon which all securities that qualify as Registrable Securities as of the date hereof that are then held by such Holder can be sold pursuant to paragraph (k) of Rule 144 under the Securities Act.

15. Obligations of Holders. By exercising any rights hereunder, each Holder shall be deemed to assume all obligations of a Holder hereunder as though such Holder were a signatory hereto. The Company may require Holders to execute an instrument whereby such Holders expressly assume all obligations of Holders hereunder as a condition precedent to any obligations of the Company hereunder.



IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed effective as of January 16, 2004.

**REDEMCO, LLC**

By: /s/ ANN BECHER SMEAD

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Ann Becher Smead  
Managing Member

**FOSTER CITY LLC**

By: /s/ ANN BECHER SMEAD

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Ann Becher Smead  
Manager and Vice-President

**INTEVAC, INC.**

By: /s/ CHARLES B. EDDY III

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Charles B. Eddy III  
Chief Financial Officer



**SUBSIDIARIES OF THE REGISTRANT**

1. Lotus Technologies, Inc. -- California
2. Intevac Foreign Sales Corporation -- Barbados
3. Intevac Asia Private Limited -- Singapore
4. Intevac Malaysia Sdn Bhd - Malaysia
5. IRPC, Inc. -- California



**CONSENT OF GRANT THORNTON LLP, INDEPENDENT AUDITORS**

We consent to the incorporation by reference in the Registration Statements (Form S-8 Nos. 33-99648, 333-35801, 333-65421, 333-95629 and 333-50166) pertaining to the 1995 Stock Option/Stock Issuance Plan and the Employee Stock Purchase Plan and in the Registration Statements (Form S-3 Nos. 333-24275 and 333-111342) of Intevac, Inc. of our report dated January 30, 2004, with respect to the consolidated financial statements and schedule of Intevac, Inc. included in the Annual Report on Form 10-K for the year ended December 31, 2003.

/s/ GRANT THORNTON LLP

San Jose, California  
March 15, 2004

**EXHIBIT 31.1**

**CERTIFICATIONS**

I, Kevin Fairbairn certify that:

1. I have reviewed this Annual Report on Form 10-K of Intevac, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the registrant and have:
  - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - (b) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - (c) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - (a) All significant deficiencies and material weaknesses in the design or operation of internal controls over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

*Date: March 16, 2004*

*/s/ KEVIN FAIRBAIRN*  
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*Kevin Fairbairn*  
*President, Chief Executive Officer and Director*

**EXHIBIT 31.2**

**CERTIFICATIONS**

I, Charles B. Eddy certify that:

1. I have reviewed this Annual Report on Form 10-K of Intevac, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the registrant and have:
  - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - (b) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - (c) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - (a) All significant deficiencies and material weaknesses in the design or operation of internal controls over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

*Date: March 16, 2004*

*/s/ CHARLES B. EDDY III  
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Charles B. Eddy III  
Vice President, Finance and Administration,  
Chief Financial Officer, Treasurer and Secretary*

**EXHIBIT 32.1**

**CERTIFICATION OF CHIEF EXECUTIVE OFFICER AND CHIEF FINANCIAL OFFICER  
PURSUANT TO  
18 U.S.C. SECTION 1350,  
AS ADOPTED PURSUANT TO**

SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

I, Kevin Fairbairn, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that the Annual Report of Intevac, Inc. on Form 10-K for the period ended December 31, 2003 fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and that information contained in such Form 10-K fairly presents in all material respects the financial condition and results of operations of Intevac, Inc.

*By: /s/ KEVIN FAIRBAIRN*

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*Name: Kevin Fairbairn*  
*Title: President, Chief Executive*  
*Officer and Director*

I, Charles B. Eddy III, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that the Annual Report of Intevac, Inc. on Form 10-K for the period ended December 31, 2003 fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and that information contained in such Form 10-K fairly presents in all material respects the financial condition and results of operations of Intevac, Inc.

*By: /s/ CHARLES B. EDDY III*

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*Name: Charles B. Eddy III*  
*Title: Vice President, Finance and Administration,*  
*Chief Financial Officer, Treasurer and*  
*Secretary*

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