INTEVAC INC Form 10-K March 04, 2009

### 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, 2008

or

o 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)

Delaware

(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:

**Title of Each Class** 

## Name of Each Exchange on Which Registered

Common Stock (\$0.001 par value)

The Nasdaq Stock Market LLC (NASDAQ Global Select)

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

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. o Yes b No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. o Yes b No

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. b Yes o 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. [b]

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See definitions of large accelerated filer, accelerated filer and smaller reporting company in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer o Accelerated filer b Non-accelerated filer o Smaller reporting company o (Do not check if a smaller reporting company)

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). o Yes b No

The aggregate market value of voting stock held by non-affiliates of the Registrant, as of June 28, 2008 was approximately \$138,017,121 (based on the closing price for shares of the Registrant s Common Stock as reported by the Nasdaq Stock Market 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 4, 2009, 21,925,526 shares of the Registrant s Common Stock, \$0.001 par value, were outstanding.

## DOCUMENTS INCORPORATED BY REFERENCE.

Portions of the Registrant s Proxy Statement for the 2009 Annual Meeting of Stockholders 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.

### **TABLE OF CONTENTS**

PART I Item 1. Business Item 1A. Risk Factors Item 1B. Unresolved Staff Comments Item 2. Properties Item 3. Legal Proceedings Item 4. Submission of Matters to a Vote of Security-Holders PART II Item 5. Market for Registrant s Common Equity, Related Stockholder Matters and Issuer Purchases of **Equity Securities** Item 6. Selected Consolidated Financial Data Item 7. Management s Discussion and Analysis of Financial Condition and Results of Operations Item 7A. Quantitative and Qualitative Disclosures About Market Risk Item 8. Financial Statements and Supplementary Data **REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM** CONSOLIDATED BALANCE SHEETS CONSOLIDATED STATEMENTS OF OPERATIONS CONSOLIDATED STATEMENT OF STOCKHOLDERS EQUITY AND COMPREHENSIVE INCOME (LOSS) CONSOLIDATED STATEMENTS OF CASH FLOWS NOTES TO CONSOLIDATED FINANCIAL STATEMENTS Item 9. Changes In and Disagreements With Accountants on Accounting and Financial Disclosure Item 9A. Controls and Procedures REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM Item 9B. Other Information PART III Item 10. Directors, Executive Officers and Corporate Governance Item 11. Executive Compensation Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters Item 13. Certain Relationships and Related Transactions, and Director Independence Item 14. Principal Accountant Fees and Services PART IV Item 15. Exhibits and Financial Statement Schedules **SIGNATURES** SCHEDULE II -- VALUATION AND QUALIFYING ACCOUNTS EX-10.11 EX-10.12 EX-21.1 EX-23.1 EX-23.2 EX-31.1 EX-31.2 EX-32.1

#### CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

Certain information in this Annual Report on Form 10-K (report or Form 10-K) of Intevac, Inc. and its subsidiaries (Intevac or the Company), including Management s Discussion and Analysis of Financial Condition and Results of Operations in Item 7, is forward-looking in nature. All statements in this report, including those made by the management of Intevac, other than statements of historical fact, are forward-looking statements. Examples of forward-looking statements include statements regarding Intevac s future financial results, operating results, cash flows and cash deployment strategies, business strategies, costs, products, working capital, competitive positions, management s plans and objectives for future operations, research and development, acquisitions and joint ventures, growth opportunities, customer contracts, investments, liquidity, declaration of dividends, and legal proceedings, as well as market conditions and industry trends. These forward-looking statements are based on management s estimates, projections and assumptions as of the date hereof and include the assumptions that underlie such statements. Forward-looking statements may contain words such as may, will. should. could. would. expect, anticipate. believe, estimate, predict, potential and continue, the negative of these terms, or other comparable terminology. Any expectations based on these forward-looking statements are subject to risks and uncertainties and other important factors, including those discussed in Item 1A, Risk Factors, below and elsewhere in this report. Other risks and uncertainties may be disclosed in Intevac s prior Securities and Exchange Commission (SEC) filings. These and many other factors could affect Intevac s future financial condition and operating results and could cause actual results to differ materially from expectations based on forward-looking statements made in this report or elsewhere by Intevac or on its behalf. Intevac undertakes no obligation to revise or update any forward-looking statements.

The following information should be read in conjunction with the Consolidated Financial Statements and the accompanying Notes to Consolidated Financial Statements included in this report.

#### PART I

#### Item 1. Business

#### Overview

Intevac s business consists of two reportable segments:

*Equipment:* Intevac is a leader in the design, manufacture and marketing of high-productivity magnetic media sputtering equipment to the hard disk drive industry and offers advanced etch technology systems to the semiconductor industry.

*Intevac Photonics:* Intevac is a leader in the development and manufacture of leading edge, high-sensitivity imaging products and vision systems, as well as table-top and portable Raman instruments. Markets addressed include military, law enforcement, industrial, physical science and life science.

Intevac was incorporated in October 1990 in California and completed a leveraged buyout of a number of divisions of Varian Associates in February 1991. Intevac was reincorporated in Delaware in 2007.

## **Equipment Segment**

#### Hard Disk Drive Equipment Market

Intevac designs, manufactures, markets and services complex capital equipment used to deposit thin films of material onto magnetic disks that are used in hard disk drives, and also equipment to lubricate these disks. Disk and disk drive manufacturers produce magnetic disks in a sophisticated manufacturing process involving many steps, including plating, annealing, polishing, texturing, sputtering and lubrication. Intevac believes its systems represent approximately 60% of the installed capacity of disk sputtering systems worldwide. Intevac s systems are used by manufacturers such as Fuji Electric, Hitachi Global Storage Technologies, Seagate Technology and Western Digital.

Hard disk drives are a primary storage medium for digital data and are used in products and applications such as personal computers, enterprise data storage, personal audio and video players and video game platforms. Intevac believes that hard disk drive shipments will continue to grow over time, driven by growth in digital storage, by new and emerging applications, and by the proliferation of personal computers into emerging markets in Asia and Eastern Europe. Continued growth in hard disk drive shipments is a key factor in determining demand for magnetic disks used in hard disk drives.

Demand for Intevac s disk manufacturing products is driven by a number of factors, including unit demand for hard disk drives, market share, the average number of magnetic disks used in each hard drive, utilization and productivity of disk manufacturers installed base of magnetic disk manufacturing equipment and obsolescence of the installed base. The introduction of perpendicular recording technology by disk manufacturers had a significant impact on the equipment market, and increased demand both for new equipment, such as Intevac s 200 Leaff disk sputtering system, and for technology upgrades to the installed base of Intevac s legacy MDP-250 systems. However in 2008, shipments of both new systems and technology upgrades declined relative to 2007 and 2006.

#### Hard Disk Drive Equipment Products

#### Disk Sputtering Systems

In the first quarter of 2008, the first 200 Lean Gen II, Intevac s latest generation disk sputtering system was shipped. It is designed to deliver 25% higher throughput than the original 200 Lean. This increase in throughput enables Intevac customers to manufacture more magnetic disks per square foot of factory floor space, further reducing overall cost per disk.

In late 2003, first generation 200 Lean systems began shipping and by the end of 2008, the installed base totaled more than 120 systems. Intevac believes approximately 90% of these systems are used in production with the balance used for research and development. The 200 Lean was designed to provide enhanced capabilities relative to Intevac s MDP-250 system and lower overall cost of ownership for disk manufacturers. The 200 Lean provides higher disk throughput from a small footprint, which enables manufacturers to produce more disks per square-foot of factory floor space. The 200 Lean s modular architecture allows Intevac s customers to incorporate any number of disk manufacturing process steps required by their evolving technology roadmaps. Most of the 200 Lean systems shipped are capable of performing up to 20 process steps compared to the 12 process step maximum on the original MDP-250. The 200 Lean also allows rapid reconfiguration to accommodate varying process recipes, disk sizes and disk materials.

From 1994 through 2005, Intevac shipped approximately 110 MDP-250 s. As of the end of 2008, Intevac believes that approximately 65% of these systems are still being used for production. The balance of these systems are either being used by customers for research and development, in storage or have been retired from service.

## Disk Lubrication Systems

Disk lubrication is the manufacturing step that follows deposition of thin films. During lubrication, a microscopic layer of lubricant is applied to the disk s surface to improve durability and reduce surface friction between the disk and the read/write head assembly.

The Intevac DLS-100 disk lubrication system provides Intevac s customers with a lubrication process by dipping disks into a lubricant/solvent mixture. Intevac has been manufacturing dip lubrication systems similar to the DLS-100 since 1996.

The Intevac AccuLuber<sup>tm</sup> disk lubrication system lubricates disks by depositing a thin film of lubricant on the disk while it is under vacuum. This eliminates the use of solvents during the lubrication process, which are environmentally hazardous and are expensive to procure, store and dispose.

#### Non-Systems Business

Intevac also provides installation, maintenance and repair services, technology upgrades, spare parts and consumables to Intevac s system customers. An increased level of technology upgrades caused non-systems

business to increase significantly in 2006 and 2007, both in absolute terms and as a percentage of Equipment revenues. Non-system business declined in 2008, but represented nearly 45% of Equipment revenues for the year.

#### Semiconductor Equipment Market

A wide range of manufacturing equipment is used to fabricate semiconductor chips including: atomic layer deposition (ALD), chemical vapor deposition (CVD), physical vapor deposition (PVD), electrochemical plating (ECP), etch, i implantation, rapid thermal processing (RTP), chemical mechanical planarization (CMP), wafer wet cleaning, wafer metrology and inspection, and systems that etch, measure and inspect circuit patterns on masks used in the photolithography process.

Most chips are built on a silicon wafer base and include a variety of circuit components, such as transistors and other devices, that are connected by multiple layers of wiring (interconnects). To build a chip, the transistors, capacitors and other circuit components are first created on the surface of the wafer by performing a series of processes to deposit and selectively remove successive film layers. Similar processes are then used to build the layers of wiring structures on the wafer.

Most chips are currently fabricated using 65 nanometer (nm) and larger linewidth dimensions. Over time, Intevac believes that 45 nm, and then 32 nm, are likely to be the next line width nodes to be implemented as manufacturers work to squeeze more and more components onto each chip. As the density of the circuit components increases to enable greater computing power in the same or smaller area, the complexity of building the chip also increases, necessitating more process steps to form smaller structures and more intricate wiring schemes.

Over time, the semiconductor industry has also migrated to increasingly larger wafers to build chips. The predominant wafer size used for volume production has been 200 millimeter (mm), or eight-inch, wafers, but a substantial number of advanced fabrications now use 300mm, or 12-inch, wafers to gain the economic advantages of a larger surface area. The majority of new fabrication capacity is 300mm. The industry is beginning to close some 200mm fabs for economic reasons.

Intevac is utilizing its expertise in the design, manufacturing, and marketing of complex manufacturing equipment and the prior experience of Intevac s management team in the semiconductor manufacturing equipment business to develop products for the semiconductor manufacturing market, which Intevac believes is substantially larger than the hard disk drive equipment market that Intevac currently serves.

## Semiconductor Manufacturing Products

In 2007, Intevac announced its new dielectric etch semiconductor manufacturing system, the Lean Etch<sup>tm</sup>. The Lean Etch is a 300 mm system designed to address the need for significant productivity improvement and provide enabling etch technology at 45 nanometer nodes and below.

During 2008, Intevac entered into an alliance with TES Co., Ltd. (TES), a Korean equipment company. TES has exclusive rights to market the Lean Etch in Korea and China, and Intevac has exclusive rights to market TES CVD equipment to the rest of the world. In the future, TES will be responsible for final assembly and test of Lean Etch systems for the Korean and Chinese markets.

During 2009, Intevac plans to deliver evaluation systems to customers through our alliance with TES. Intevac does not expect to recognize any revenue from Lean Etch shipments in 2009.

## **Other Markets and Products**

Table of Contents

Intevac s 200 Lean platform may be suitable to certain non-magnetic thin film applications such as, optical coatings, photovoltaic and wear-resistant coatings. Intevac is currently working with a customer on one such application and expects to deliver a system in 2009.

#### **Intevac Photonics Segment**

### Intevac Photonics Market

Intevac develops, manufactures and sells compact, cost-effective, high-sensitivity digital-optical products for the capture and display of low-light images and the optical analysis of materials. Intevac provides sensors, cameras and systems for government applications such as night vision, long-range target identification and simulation training, and for commercial applications in the inspection, medical, scientific and security industries. The majority of Intevac s imaging revenue has been derived from contracts related to the development of electro-optical sensors and cameras, funded by the U.S. Government, its agencies and contractors. However, the percentage of Intevac Photonics revenue derived from product sales grew from 15% in 2006 to 29% in 2007 and 37% in 2008 and is expected to continue to increase in 2009.

#### **Intevac Photonics Products**

*Night Vision Systems* Since 1995, the U.S. military has funded the development of digital night vision sensor technology at Intevac, based on Intevac s patented Electron Bombarded Active Pixel Sensor (EBAPS) design. The EBAPS design utilizes CMOS technology to produce a compact, light-weight, low-light level digital sensor, which provides the U.S. military both size and weight advantages, as well as the advantages of digital imaging, compared to currently deployed analog Generation-III night vision tubes. In 2007, Intevac entered its first pilot production of a digital night vision camera module for use in a rifle sight system by a major NATO defense contractor and has been conducting low-volume manufacturing deliveries of this camera module throughout 2008. At the conclusion of 2008, Intevac received it first U.S. military production order for a digital camera module for an avionics application and began low-rate production deliveries, which will extend throughout 2009. In 2008, Intevac also completed the development of a next-generation, digital night vision sensor, which was funded by multiple branches of the U.S. military. Field tests with the U.S. Army in late 2008 demonstrated that this sensor is successfully meeting the performance requirements of the U.S military. Several U.S. military applications of this next-generation sensor are already in development.

The U.S. military is also funding development of a compact, head-mounted digital imaging system, or Digital Enhanced Night Vision Goggle ( DENVG ). DENVG integrates a visible imager, a thermal imager and a video display. This approach allows low-light level and thermal imagery to be viewed individually, or to be overlaid ( digitally fused ), and also enables connectivity to a wireless network for distribution of the imagery and other information. The U.S. Army plans to begin production of this type of system in 2012. In 2007, Intevac completed joint development, with DRS Technologies, Inc. ( DRS ), of a prototype DENVG night vision goggle for the U.S Army. The prototype used Intevac Photonics digital night vision sensor in combination with a DRS thermal imaging sensor. During 2008, development of an enhanced-performance version of DENVG was conducted, which employed Intevac Photonics new next-generation, digital night vision sensor. Prototype deliveries and U.S. Army field testing of this enhanced DENVG are expected in 2009. In 2008, Intevac also launched development of a digital night vision system product called NightPort<sup>tm</sup>, which combines its digital sensor technology with its near-eye display technology obtained with the acquisition of Creative Display Systems, LLC ( CDS ) in late 2007. NightPorts a compact, monocular system that provides full digital night vision viewing and recording capabilities and is designed as a direct replacement for legacy night vision goggles for both military and commercial applications.

*Cameras for Long-Range Target Identification (LIVAR)* Current long-range military nighttime surveillance systems are based on expensive thermal imaging camera systems. These systems are relatively large, which is a disadvantage for airborne and portable applications. Accordingly, there is a need for a cost-effective, compact, long-range imaging solution that identifies targets at a distance greater than an adversary s detection range capability. Intevac Photonics Laser Illuminated Viewing and Ranging (LIVAR) camera enables the development of such systems which can

identify targets at distances of up to twenty kilometers. Presently, Intevac Photonics LIVAR camera is being incorporated into U.S. military programs that deploy long-range target identification in both of these applications. During 2008, Intevac delivered pre-production LIVAR cameras for both land-based and airborne applications. At the conclusion of 2008, Intevac received an initial low-level production order for the LIVAR

camera for an airborne application. Intevac expects follow-on production orders and the commencement of production deliveries for this application during 2009.

*Intensified Photodiodes* Intevac has developed, under a number of research and development contracts, intensified photodiode technology that enables single photon detection at extremely high data rates, which is designed for use in target identification and other military applications.

*Near-Eye Display Systems* Intevac specializes in high-performance, micro-display products for near-eye, portable viewing of video in military and commercial markets. Intevac s eyeglass-mounted display systems provide high definition and a wide field-of-view in miniaturized light-weight and portable designs.

*Commercial Low-Light Cameras* Intevac Photonics MicroVi<sup>®</sup>tproduct line of commercial low-light CMOS cameras provides high sensitivity in the ultraviolet, visible, or near infrared regions of the spectra by using our proprietary fabrication technology in back-thinning CMOS sensors. MicroVista<sup>®</sup> s compact and light-weight camera design makes it ideally suitable for applications in industrial inspection, bio-medical, and scientific markets. Intevac also provides a high-sensitivity near-infrared MOSIR<sup>®</sup> camera that is well-suited for scientific spectroscopy applications where high signal to-noise is achieved through Intevac s electron-bombarded sensor design.

*Raman Materials Identification Instruments* Raman spectrometer systems are used to identify the chemical composition of solid materials, powders and liquids by illuminating the sample with a laser and measuring the characteristic spectrum of light scattered from the tested sample. Raman spectroscopy is well suited to applications such as hazmat, forensics, homeland security, geology, gemology, medical, pharmaceutical and industrial quality assurance. Intevac offers a line of bench-top and portable Raman spectrometers developed by DeltaNu<sup>®</sup>, a division of Intevac Photonics. These instruments enable real-time, non-destructive identification of liquids and solids in the laboratory as well as in the field. Products include the Advantage<sup>tm</sup> series of low-cost, high-performance bench-top spectrometers, the Inspector<sup>tm</sup> series of handheld field analysis spectrometers, ExamineR<sup>tm</sup>, a unique modular Raman microscopy system for applications that require precise spectral characterization, the ReporteR<sup>tm</sup>, a palm-sized spectrometer for rapid material identification in the field, and near-infrared Raman instruments which incorporate Intevac s core technology.

#### Backlog

Intevac s backlog of orders at December 31, 2008 was \$20.2 million, as compared to \$34.2 million at December 31, 2007. Backlog at December 31, 2008 consisted of \$11.4 million of Equipment backlog and \$8.8 million of Intevac Photonics backlog. Backlog at December 31, 2007 consisted of \$28.4 million of Equipment backlog and \$5.8 million of Intevac Photonics backlog. The decrease in Equipment backlog was primarily the result of decreased orders for 200 Lean disk sputtering systems and upgrades. Backlog at December 31, 2008 includes one 200 Lean system for a non-magnetic media application, as compared to two 200 Lean systems in backlog at December 31, 2007. Backlog includes only customer orders with scheduled delivery dates.

#### **Customer Concentration**

Historically, a significant portion of Intevac s revenue in any particular period has been attributable to sales to a limited number of customers. In 2008 sales to Seagate and Hitachi Global Storage Technologies, each accounted for more than 10% of Intevac s revenues. In 2007 and 2006 sales to Seagate, Matsubo - Intevac s Japanese distributor, Hitachi Global Storage Technologies, and Fuji Electric each accounted for more than 10% of Intevac s revenues. In the aggregate sales to these customers accounted for 80%, 90% and 93% of revenues in 2008, 2007 and 2006, respectively. Intevac expects that sales of Intevac s products to relatively few customers will continue to account for a high percentage of Intevac s revenues in the foreseeable future.

Foreign sales accounted for 69% of revenue in 2008, 82% of revenue in 2007, and 90% of revenue in 2006. The majority of Intevac s foreign sales are to companies in Asia or to U.S. companies for use in their Asian manufacturing or development operations. Intevac anticipates that sales to these international customers will continue to be a significant portion of Intevac s Equipment revenues. Intevac s disk sputtering equipment customers include magnetic disk manufacturers, such as Fuji Electric, and vertically integrated hard disk drive manufacturers,

such as Hitachi Global Storage Technology and Seagate. Intevac s customers manufacturing facilities are primarily located in California, China, Japan, Malaysia and Singapore.

### Competition

The principal competitive factors affecting the markets for Intevac Equipment products include price, product performance and functionality, ease of integration, customer support and service, reputation and reliability. Intevac has historically experienced intense worldwide competition for magnetic disk sputtering equipment from companies that have sold substantial numbers of systems worldwide, including Anelva Corporation. In addition, Intevac is attempting to enter the semiconductor equipment market, and Intevac faces competition from large established competitors including Applied Materials, LAM Research and Tokyo Electron, Ltd. These competitors all have substantially greater financial, technical, marketing, manufacturing and other resources as compared to Intevac. Furthermore, any of Intevac s competitors may develop enhancements to, or future generations of, competitive products that offer superior price or performance features. In addition, new competitors with enhanced products may enter the markets that Intevac currently serves.

The principal competitive factors affecting Intevac Photonics products include price, extreme low light level detection performance, power consumption, resolution, size, ease of integration, reliability, reputation and customer support and service. Intevac faces substantial competition for Intevac Photonics products, many with substantially greater resources and brand recognition. In the military market, ITT Industries, Inc. Corporation is a large and well-established defense contractor and is a primary U.S. manufacturer of image intensifier tubes used in Generation-III night vision devices and their derivative products. Intevac s digital night vision sensors, cameras and systems are intended to displace Generation-III night vision based products. Intevac expects that ITT, BAE and other companies will develop digital night vision products and aggressively promote their sales. Furthermore, Intevac s LIVAR target identification sensors and cameras face competition from CMC Electronics, DRS, FLIR Systems and Raytheon, established companies that manufacture cooled infrared sensors and cameras which are presently used in long-range target identification systems. Within the near-eye display market, Intevac also faces competition from Rockwell-Collins, Vuzix and Oasys, each of which can offer cost-competitive products. In the commercial markets, companies such as Andor, Basler, Dalsa, E2V, Goodrich, Hamamatsu, Texas Instruments and Roper offer competitive sensor and camera products, and companies such as Ahura, B&W Tek, Horiba Jobin Yvon, InPhotonics, Ocean Optics, Renishaw and Smiths Detection offer competitive Raman spectrometer products.

## **Marketing and Sales**

Equipment sales are made through Intevac s direct sales force, with the exception of in Japan and Malaysia, where Intevac sell its products through a distributor, Matsubo. Sales of Intevac s Lean Etch system will be made by TES, Intevac s alliance partner, in Korea and China. The selling process for Intevac s Equipment products is multi-level and long-term, involving individuals from marketing, engineering, operations, customer service and senior management. The process involves making sample disks or wafers for the prospective customer and responding to their needs for moderate levels of machine customization. Customers often require a significant number of product presentations and demonstrations before making a purchasing decision.

Installing and integrating new equipment requires a substantial investment by a customer. Sales of Intevac s 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. After making a decision to select Intevac s equipment, Intevac s customers typically purchase one or more engineering systems to develop and qualify their production process prior to ordering and taking delivery of multiple production systems. Accordingly, Intevac s systems have a lengthy sales cycle, during which Intevac may expend substantial funds and management

time and effort with no assurance that a sale will result.

The production of large complex systems requires Intevac to make significant investments in inventory both to fulfill customer orders and to maintain adequate supplies of spare parts to service previously shipped systems. In some cases Intevac manufactures subsystems and/or complete systems prior to receipt of a customer order to smooth Intevac s production flow and/or reduce lead time.

Intevac maintains inventories of spare parts in California, Singapore and China to support its customers. Intevac often requires its 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 price billed upon shipment, and the balance of the 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, which are released into revenue in accordance with Intevac s revenue recognition policy.

Intevac provides process and applications support, customer training, installation, start-up assistance and emergency service support to Intevac s Equipment customers. Intevac conducts training classes for Intevac s customers process engineers, machine operators and machine service personnel. Additional training is also given to Intevac s customers during equipment installation. Intevac has field offices in Singapore, China, Korea, Malaysia and Japan to support Intevac s customers in Asia. Intevac generally adds additional support centers as necessary to maintain close proximity to Intevac s customers factories as they deploy Intevac s systems.

Warranty for Intevac s Equipment typically ranges between 12 and 24 months from customer acceptance. During this warranty period any necessary non-consumable parts are supplied and installed without charge. Intevac s employees provide field service support in the United States, Singapore, Malaysia, China and Japan. In Japan, field service support is also supplemented by Intevac s distributor, Matsubo.

Sales of Intevac Photonics products for military applications are primarily made to the end user through Intevac s direct sales force. Intevac sells to leading defense contractors such as Boeing, Lockheed Martin Corporation, Northrop Grumman Corporation, Raytheon, DRS Technologies, BAE and Sagem.

Intevac is subject to long sales cycles in the Photonics segment because many of Intevac s products, such as Intevac s night vision systems, typically must be designed into Intevac s customers products, which are often complex and state-of-the-art. These development cycles are often multi-year, and Intevac s sales are contingent on Intevac s customer successfully integrating Intevac s product into its product, completing development of its product and then obtaining production orders for its product. Sales of these products are also often dependent on ongoing funding of defense programs by the U.S. government and its allies. Additionally, sales to international customers are contingent on issuance of export licenses by the U.S. government.

Sales of Intevac Photonics commercial products are made through a combination of direct sales, system integrators, distributors and value added resellers and can also be subject to long sales cycles.

Intevac Photonics 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, Intevac invoices customers using estimated annual rates approved by the Defense Contracts Audit Agency (DCAA).

## **Research and Development and Intellectual Property**

Intevac s long-term growth strategy requires continued development of new products. Intevac works closely with Intevac s global customers to design products that meet their planned technical and production requirements. Product development and engineering organizations are located primarily in the United States and Singapore.

Intevac invested \$35.1 million (31.8% of net revenues) in fiscal 2008, \$40.1 million (18.6% of net revenues) in fiscal 2007, and \$30.0 million (11.6% of net revenues) in fiscal 2006 for product development and engineering programs to create new products and to improve existing technologies and products. Intevac has spent an average of 16.6% of net sales on product development and engineering over the last five years.

Intevac s competitive position significantly depends on Intevac s research, development, engineering, manufacturing and marketing capabilities, and not just on Intevac s patent position. However, protection of Intevac s technological assets by obtaining and enforcing intellectual property rights, including patents, is important. Therefore, Intevac s practice is to file patent applications in the United States and other countries for inventions that Intevac considers important. Intevac has a substantial number of patents in the United States and other countries, and additional applications are pending for new inventions. Although Intevac does not consider Intevac s business materially dependent upon any one patent, the rights of Intevac and the products made and sold under

Intevac s patents along with other intellectual property, including trademarks, know-how, trade secrets and copyrights, taken as a whole, are a significant element of Intevac s business.

Intevac enters into patent and technology licensing agreements with other companies when management determines that it is in Intevac s best interest to do so. Intevac pays royalties under existing patent license agreements for use, in several of Intevac s products, of certain patented technologies. Intevac also receives, from time to time, royalties from licenses granted to third parties. Royalties received from or paid to third parties have not been material to Intevac s consolidated results of operations.

In the normal course of business, Intevac periodically receives and makes inquiries regarding possible patent infringement. In dealing with such inquiries, it may be necessary or useful for us to obtain or grant licenses or other rights. However, there can be no assurance that such licenses or rights will be available to us on commercially reasonable terms, or at all. If Intevac is not able to resolve or settle claims, obtain necessary licenses and/or successfully prosecute or defend Intevac s position, Intevac s business, financial condition and results of operations could be materially and adversely affected.

#### Manufacturing

Intevac manufactures its Equipment products at its facilities in California and Singapore. Intevac s Equipment manufacturing operations include electromechanical assembly, mechanical and vacuum assembly, fabrication of sputter sources, and system assembly, alignment and testing. Intevac makes extensive use of the local supplier infrastructure serving the semiconductor equipment business. Intevac purchases 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. Intevac also has a small fabrication center that supports Intevac s engineering departments and makes some of the machined parts used in Intevac s products.

Intevac Photonics products are manufactured at Intevac s facilities in California and Wyoming. Intevac Photonics manufactures advanced photo-cathodes and sensors, lasers, cameras, integrated camera systems, compact Raman spectrometry instruments and near-eye display systems using advanced manufacturing techniques and equipment. Intevac s operations include vacuum, electromechanical and optical system assembly. Intevac uses the supplier infrastructure serving the semiconductor, camera and optics manufacturing industries. In manufacturing Intevac s sensors, Intevac purchase wafers, components, processing supplies and chemicals. In manufacturing Intevac s camera systems and near-eye displays, Intevac purchases printed circuit boards, electromechanical components and assemblies, mechanical components and enclosures, optical components and computers.

#### **Employees**

At December 31, 2008, Intevac had 394 employees, including 6 contract employees of which 133 were in research and development, 164 in operations, and 97 in administration, customer support and marketing. Of the 394 employees, 247 were in the Equipment segment, 103 were in the Intevac Photonics segment, and 44 were in Corporate.

#### **Compliance with Environmental Regulations**

Intevac is 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. Intevac treats the cost of complying with government regulations and operating a safe workplace as a normal cost of business and allocates the cost of these activities to all functions, except where the cost can be isolated and charged to a specific function. The environmental standards and regulations promulgated by government agencies in California, Wyoming and Singapore are rigorous and set a high standard of compliance. Intevac believes its costs of

compliance with these regulations and standards are comparable to other companies operating similar facilities in these jurisdictions.

#### **Executive Officers of the Registrant**

Certain information about our executive officers as of March 4, 2009 is listed below:

Name	Age	Position
Executive Officers:		
Norman H. Pond	70	Chairman of the Board
Kevin Fairbairn	55	President and Chief Executive Officer
Jeffrey Andreson	47	Vice President, Finance and Administration, Chief
		Financial Officer, Treasurer and Secretary
Michael Russak	62	Executive Vice President of Business Development,
		Equipment Products
Michael Barnes	50	Vice President and Chief Technical Officer
Kimberly Burk	43	Vice President, Human Resources
Joseph Pietras	54	Vice President and General Manager, Intevac Photonics
Other Key Officers:		
Verle Aebi	54	Chief Technology Officer, Intevac Photonics
James Birt	44	Vice President, Customer Support, Equipment Products
Terry Bluck	49	Vice President, Technology, Equipment Products
Jerry Carollo	56	Vice President and General Manager, Intevac Vision
		Systems
Keith Carron	50	Vice President and General Manager, DeltaNu
Timothy Justyn	46	Vice President of Operations, Intevac Photonics
Dave Kelly	46	Vice President, Engineering, Intevac Photonics
Ralph Kerns	62	Vice President, Business Development, Equipment
		Products

*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. Andreson* joined Intevac in June 2007 and has served as Vice President, Finance and Administration, Chief Financial Officer, Treasurer and Secretary since August 2007. Before joining Intevac Mr. Andreson served as managing director and controller of Applied Materials, Inc. s Global Services product group. Since joining Applied Materials in 1995, Mr. Andreson held a number of senior financial positions, including managing director, Global Financial Planning and Analysis; Controller, Metron subsidiary; controller, North American Sales and Service; and Controller, Volume Manufacturing. From 1989 through 1995, Mr. Andreson held various roles at Measurex Corporation. Mr. Andreson holds an MBA from Santa Clara University and a BS in Finance from San Jose State University.

*Dr. Russak* joined Intevac in July 2008 as Executive Vice President of Business Development, Equipment Products. Before joining Intevac Dr. Russak served as President and Chief Technical Officer of Komag from 2000 to 2007. From 1993 to 2000, Dr. Russak served as Vice President of Research and Development at HMT Technology. Previously, Dr. Russak held management positions in the Research Division of IBM Corporation. Prior to IBM,

Dr. Russak worked for Grumman Aerospace Corporation as a contributing scientist. Dr. Russak holds a BS in Ceramic Engineering and a PhD in Materials Science from Rutgers University.

*Dr. Barnes* joined Intevac as Vice President and Chief Technical Officer in February 2006. Before joining Intevac, Dr. Barnes was General Manager of the High Density Plasma Chemical Vapor Deposition Business Unit at Novellus Systems from March 2004 to February 2006. From January 2004 to March 2004, he was Vice President, Technology at Nanosys, and from August 2003 to January 2004, he was Vice President, Engineering at OnWafer Technologies. Dr. Barnes was employed by Applied Materials from April 1998 to August 2003, first as a Managing Director and subsequently as Vice President, Etch Engineering and Technology. Dr. Barnes holds a BS, MS and PhD in electrical engineering from the University of Michigan.

*Ms. Burk* was promoted to Vice President of Human Resources in 2008. Previously she served as Human Resource Director since May 2000. Prior to joining Intevac, Ms. Burk served as Human Resources Manager of Moen, Inc. from 1999 to 2000 and as Human Resources Manager of Lawson Mardon from 1994 to 1999. Ms. Burk holds a BS in sociology from Northern Illinois University.

*Dr. Pietras* joined Intevac as Vice President and General Manager of the Intevac Photonics Business in August 2006. Before joining Intevac, Dr. Pietras was employed by the Sarnoff Corporation from March 2005 to July 2006 as General Manager of Sarnoff Imaging Systems. From September 1998 to March 2005, he was employed by Roper Scientific as Vice President, Operations. Dr. Pietras holds a BS in Physics from the Stevens Institute of Technology and a MA and PhD in Physics from Columbia University.

*Mr. Aebi* has served as Chief Technology Officer of our Intevac Photonics business since August 2006. Previously, Mr. Aebi served as President of the Photonics Division from July 2000 to July 2006 and as General Manager of the Photonics Division since May 1995. Mr. Aebi was elected as a Vice President of the Company in September 1995. From 1988 through 1994, Mr. Aebi was the Engineering Manager of the night vision business Intevac acquired from Varian Associates in 1991, 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. Birt* joined Intevac as Vice President, Customer Support of the Equipment Products Division in September 2004. Before joining Intevac, Mr. Birt was employed by Applied Materials from July 1992 to September 2004, most recently as Director, Field Operations/Quality North America. Mr. Birt holds a BS in electrical engineering from Texas A&M University.

*Mr. Bluck* rejoined Intevac as Vice President, Technology of the Equipment Products Division in August 2004. Mr. Bluck had previously worked at Intevac from December 1996 to November 2002 in various engineering positions. The business unit Mr. Bluck worked for was sold to Photon Dynamics in November 2002, and he was employed there as Vice President, Rapid Thermal Process Product Engineering until August 2004. Mr. Bluck holds a BS in physics from San Jose State University.

*Mr. Carollo* joined Intevac in November 2007 as Vice President and General Manager of Intevac s Creative Display Systems subsidiary. Prior to joining Intevac, Mr. Carollo was founder, president and CEO of Creative Display Systems. Prior to founding Creative Display Systems Mr. Carollo worked for Rockwell-Collins Optronics Electro-Optics from 1993 to 2006 where his most recent position was General Manager. Mr. Corollo holds numerous patents in the area of optics, display systems and optical communications, a MS in Optics from the University of Rochester and a BS in Physics from the State University of New York.

*Dr. Carron* joined Intevac in January 2007 as Managing Director and General Manager of Intevac s DeltaNu, Inc. subsidiary. In 2008, Dr. Carron was promoted to Vice President. Prior to joining Intevac, Dr. Carron was the CEO of DeltaNu, LLC from March 2002 until January 2007. Dr. Carron was also a professor of Chemistry at the University of Wyoming from 1988 to 2006. Dr. Carron holds a BA in Chemistry from Washington University and a PhD in Chemistry from Northwestern University.

*Mr. Justyn* has served as Vice President of Operations, Intevac Photonics from October 2008. Mr. Justyn served as Vice President, Equipment Manufacturing from April 1997 to October 2008. 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. Kelly* joined Intevac in December 2006 as Vice President, Engineering of the Intevac Photonics business. Before joining Intevac, Mr. Kelly was employed by Redlake MASD LLC, a division of Roper Industries from January 2004 to December 2006, most recently as Vice President, Engineering and Custom Service. From November 2000 to December 2003, he was employed by Fast Technology AG as Vice President, Engineering. Mr. Kelly holds a BS and a MS in mechanical engineering from the University of Michigan.

*Dr. Kerns* joined Intevac as Vice President, Business Development of the Equipment Products Division in August 2003. Before joining Intevac, Dr. Kerns was employed by Applied Materials from April 1997 to November 2002, most recently as Managing Director for Business Development for the Process Modules Group. Previously, Dr. Kerns was General Manager of Applied Materials Metal Etch Division from 2000 to 2002. From 1998 to 2000, Dr. Kerns was Senior Director for Applied Materials North America Multinational Accounts, and from 1997 to 1998, he was General Manager of Applied Materials Dielectric Etch Division. Dr. Kerns holds a BS in chemistry from the University of Idaho and a PhD in theoretical chemistry from Princeton University.

## **Available Information**

Intevac s website is *http://www.intevac.com*. Intevac makes available free of charge, on or through its website, its annual, quarterly and current reports, and any amendments to those reports, as soon as reasonably practicable after electronically filing such reports with, or furnishing them to, the SEC. This website address is intended to be an inactive textual reference only and none of the information contained on Intevac s website is part of this report or is incorporated by reference herein.

#### **Trade Marks**

200 Leaft , AccuLuber, Examinet R, Lean Etch, LIVAR, MicroVista, NightVista, MOSIR and Night Port<sup>tm</sup>, among others, are our trademarks.

#### Item 1A. Risk Factors

The following factors could materially affect Intevac s business, financial condition or results of operations and should be carefully considered in evaluating the Company and its business, in addition to other information presented elsewhere in this report.

#### The industries we serve are cyclical, volatile and unpredictable.

The majority of our revenue is derived from the sale of equipment used to manufacture commodity products such as disk drives. This subjects us to business cycles, the timing, length and volatility of which can be difficult to predict. When demand for commodity products exceeds production capacity, then demand for new capital equipment such as ours tends to be amplified. Conversely, when supply of commodity products exceeds demand, then demand for new capital equipment such as ours tends to be depressed. For example, sales of systems for magnetic disk production were severely depressed from mid-1998 until mid-2003 and grew rapidly from 2004 through 2006. The number of new systems delivered in the second half of 2007 was significantly lower than the number of systems delivered in the first half of the year, and fiscal 2008 new system shipments were significantly lower than 2007. We cannot predict with any certainty when these cycles will begin or end, although we believe we entered into a downturn in the cycle in late 2007 which we expect to continue through 2009

Our equipment represents only a portion of the capital expenditure that our customers incur when they upgrade or add production capacity. Accordingly, our customers generally commit to make large capital expenditures, far in excess of the cost of our systems alone, when they decide to purchase our systems. The magnitude of these capital expenditures requires our customers to have access to large amounts of capital. The magnetic disk and semiconductor manufacturing industries have made significant additions to their production capacity in the last few years. Our customers are unlikely to be willing or able to continue this level of capital investment during the recent

downturn in the overall economy, or during a downturn in the hard disk drive industry, or the semiconductor industry.

We must effectively manage our resources and production capacity to meet rapidly changing demand. Our business experiences rapid growth and contraction, which stresses our infrastructure, internal systems and managerial resources. During periods of increasing demand for our products, we must have sufficient manufacturing capacity and inventory to meet customer demand; attract, retain and motivate a sufficient number of qualified individuals; and effectively manage our supply chain. During periods of decreasing demand for our products, we must be able to align our cost structure with prevailing market conditions; motivate and retain key employees and effectively manage our supply chain. For example, in the fourth quarter of 2008, we engaged in significant cost reduction measures, as a result of which we expect to reduce expenses by approximately \$10 million on an annual basis.

## Sales of our equipment are primarily dependent on our customers upgrade and capacity expansion plans and whether our customers select our equipment.

We have no control over our customers upgrade and capacity expansion plans, and we cannot be sure they will select, or continue to select, our equipment when they upgrade or expand their capacity. The sales cycle for our equipment systems can be a year or longer, involving individuals from many different areas of Intevac and numerous product presentations and demonstrations for our prospective customers. Our sales process also commonly includes production of samples, customization of our product and installation of evaluation systems in the factories of our prospective customers. We do not enter into long-term contracts with our customers, and until an order is actually submitted by a customer there is no binding commitment to purchase our systems. Intevac Photonics business is also subject to long sales cycles because many of its products, such as our military imaging products, often must be designed into the customers — end products, which are often complex state-of-the-art products. These development cycles are often multi-year, and our sales are contingent on our customers successfully integrating our product into their product, completing development of their product and then obtaining production orders for their product from the U.S. government or its allies.

Sales of new manufacturing systems are also dependent on obsolescence and replacement of the installed base of our customers existing equipment with newer, more capable equipment. If upgrades are developed that extend the useful life of the installed base of legacy systems, then we tend to sell more upgrade products for the legacy systems and fewer new systems, which can significantly reduce total revenue. For example, during 2007 and 2008 some of our 200 Lean customers decided to use legacy systems for the production of first generations of perpendicular media, which delayed the replacement of such legacy systems with new 200 Lean systems.

Our 200 Lean customers also experience competition from companies that produce alternative storage technologies like flash memory, which offer smaller size, lower power consumption and more rugged designs. If alternative technologies, such as flash memory, replace hard disk drives as a significant method of digital storage, then demand for our hard disk manufacturing products would decrease.

#### We are exposed to risks associated with a highly concentrated customer base.

Historically, a significant portion of our revenue in any particular period has been attributable to sales of our disk sputtering systems to a limited number of customers. In 2008, two of our customers accounted for 69% of total revenues, and four customers in aggregate accounted for 80% of total revenues. The same four customers, in aggregate, accounted for 56% of our net accounts receivable at December 31, 2008. This concentration of customers can lead to extreme variability in revenue and financial results from period to period. For example, over the last eight quarters, our revenues per quarter have fluctuated between \$16.4 million and \$76.4 million.

Industry consolidation can limit the number of potential customers for our products. For example, Seagate acquired Maxtor in 2006 and Western Digital acquired Komag in 2007. The concentration of our customer base may enable our customers to demand pricing and other terms unfavorable to Intevac, and makes us more vulnerable to changes in demand by a given customer. Orders from a relatively limited number of manufacturers have accounted for, and will likely continue to account for, a substantial portion of our revenues. The loss of one of these large customers, or delays in purchasing by them, could have a material and adverse effect on our revenues.

#### 13

#### Our growth depends on development of technically advanced new products and processes.

We have invested heavily, and continue to invest, in the development of new products, especially our new Lean Etch system. Our success in developing and selling new products depends upon a variety of factors, including our ability to: predict future customer requirements, make technological advances, achieve a low total cost of ownership for our products, introduce new products on schedule, manufacture products cost-effectively including transitioning production to volume manufacturing; commercialize and attain customer acceptance of our products; and achieve acceptable and reliable performance of our new products in the field. Our new product decisions and development commitments must anticipate continuously evolving industry requirements significantly in advance of sales. In addition, we are attempting to expand into new or related markets, including the semiconductor market for our Lean Etch system. Failure to correctly assess the size of the markets, to successfully develop cost effective products to address the markets, or to establish effective sales and support of the new products would have a material adverse effect on future revenues and profits.

Rapid technological change in our served markets requires us to rapidly develop new technically advanced products. Our future success depends in part on our ability to develop and offer new products with improved capabilities and to continue to enhance our existing products. If new products have reliability or quality problems, our performance may be impacted by reduced orders, higher manufacturing costs, delays in acceptance and payment for new products and additional service and warranty expenses.

## Our operating results fluctuate significantly from quarter to quarter, which can lead to volatility in the price of our common stock.

Over the last eight quarters, our quarterly revenues have fluctuated between \$16.4 million and \$76.4 million and our operating income (loss) as a percentage of revenues has fluctuated between approximately (120.2%) and 18.5% of revenues. Over the same period, the price of our common stock has fluctuated between \$3.93 and \$30.57 per share.

We anticipate that our revenues, operating margins and common stock price will continue to fluctuate for a variety of reasons, including: (1) changes in the demand, due to seasonality, cyclicality and other factors in the markets for computer systems, storage subsystems and consumer electronics containing disks our customers produce with our systems; (2) delays or problems in the introduction and acceptance of our new products, or delivery of existing products; (3) timing of orders, acceptance of new systems by our customers or cancellation of those orders; (4) new products, services or technological innovations by our competitors or us; (5) changes in our manufacturing costs and operating expense; (6) changes in general economic, political, stock market and industry conditions; and (7) any failure of our operating results to meet the expectations of investment research analysts or investors.

Any of these, or other factors, could lead to volatility and/or a rapid change in the trading price of our common shares. 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 Intevac, could result in substantial costs and diversion of management.

# The liquidity of our auction rate securities is impaired, which could impact our ability to meet cash requirements and require additional debt financing.

At December 31, 2008, we held \$74.4 million of auction rate securities. The market for these securities had historically been highly liquid, even though the auction rate securities that we hold have underlying maturities ranging from 23 to 39 years. The liquidity was achieved through auctions, which occurred every 7 or 28 days depending on the security, in which the interest paid on each security was reset to current market rates. We never intended to hold these securities to maturity, but rather to use the auction feature to sell the securities as needed to provide liquidity.

Since February 2008, all of these auction rate securities have failed auction. The auction rate securities will continue to be illiquid until a successful auction process is reinstated, they are restructured into a more liquid security, or a buyer is found outside of the auction process. We do not know when, or if, this will occur. All of the auction rate securities held by us are student loan structured issues, originated under the U.S. Department of Education s Federal Family Education Loan Program with principal and interest 97% 98% reinsured by the

U.S. Department of Education. All of the auction rate securities continue to be rated AAA, but there is no assurance that AAA ratings will continue in the future. We have reclassified all of these securities from short-term to long-term investments and recorded a temporary impairment charge of \$8.1 million. If: (1) the issuers of the auction rate securities are unable to successfully resume auctions; or (2) the issuers do not redeem the auction rate securities; or (3) a liquid market for the auction rate securities does not develop; or (4) the U.S. Department of Education fails to support its guaranty of the obligations; or (5) these or any other valuation metrics or processes change, then Intevac may be required to further adjust the carrying value of the auction rate securities and/or record an other-than-temporary impairment charge. In addition, we may incur legal or other costs in connection with attempts to exit our investment, including incurring litigation costs if we decide to pursue legal action. If we decide to pursue litigation, we could incur significant legal costs and there can be no guarantee our efforts would be successful.

In order to increase our liquidity we entered into a line of credit with Citigroup Global Markets Inc., secured by \$57 million of our auction rate securities. At December 31, 2008, approximately \$20 million of credit is available pursuant to the loan facility. This loan facility may be terminated at the discretion of Citi and amounts outstanding are payable on demand. If we are unable to maintain the line of credit, or if the interest rate of the line of credit is prohibitive or the amount of the line of credit is insufficient, we could experience difficulties in meeting our cash requirements until the market for the auction rate securities becomes liquid again and we could have to seek additional debt funding to finance our operations.

## The volatility and disruption of the capital and credit markets and adverse changes in the global economy may negatively impact our revenues and our ability to access financing.

While we intend to finance operations with existing cash, cash flow from operations and, if necessary, borrowing under our existing credit facility, we may require additional financing to support our continued growth. However, due to the existing uncertainty in the capital and credit markets, our access to capital may not be available on terms acceptable to us or at all. Further, if adverse regional and national economic conditions persist or worsen, we could experience decreased revenues from our operations attributable to decreases in consumer spending levels and could fail to satisfy the financial terms to which we are subject under our existing credit agreement.

## We may be subject to additional impairment charges due to potential declines in the fair value of our assets.

As a result of our acquisitions, we have significant goodwill and intangible assets on our balance sheet. We test goodwill and intangible assets for impairment on a periodic basis as required, and whenever events or changes in circumstances indicate that the carrying value may not be recoverable. The events or changes that could require us to test our goodwill and intangible assets for impairment include: a reduction in our stock price, and as a result market capitalization, changes in our estimated future cash flows, as well as changes in rates of growth in our industry or in any of our reporting units. In the fourth quarter of 2008, we recorded an impairment charge of \$10.5 million for goodwill due to a decline in the our market capitalization and certain purchased technology intangible assets due to lower revenue expectations in light of current operating performance and future operating expectations. We will continue to evaluate the carrying value of our remaining goodwill and intangible assets and if we determine in the future that there is a potential further impairment in any of our reporting units, we may be required to record additional charges to earnings which could materially adversely affect our financial results and could also materially adversely affect our business. See Note 6. Goodwill and Purchased Intangible Assets in the Notes to the Consolidated Financial Statements for additional information related to impairment of goodwill and intangible assets.

#### 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 Canon, which has sold substantial numbers of systems worldwide. In the market for

semiconductor equipment, we are attempting to enter a market dominated by competitors such as Applied Materials, LAM Research and Tokyo Electron, Ltd. In the market for our military imaging products, we experience competition from companies such as ITT Industries, Inc. and BAE. In the markets for our commercial

imaging products, we compete with companies such as Andor, Basler, Dalsa, E2V, Hamamatsu, Texas Instruments and Roper Industries for sensor and camera products, and with companies such as Ahura, B&W Tek, Horiba Jobin Yvon, InPhotonics, Ocean Optics, Renishaw, and Smiths Detection for Raman spectrometer products. Our competitors have substantially greater financial, technical, marketing, manufacturing and other resources than we do, especially in the semiconductor equipment market where we have not previously offered a product. We cannot ensure that our competitors will not develop enhancements to, or future generations of, competitors will not enter our markets and develop such enhanced products. Moreover, 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.

## We may not be able to obtain export licenses from the U.S. government permitting delivery of our products to international customers.

Many of our products, and especially Intevac Photonics products, require export licenses from U.S. Government agencies under the Export Administration Act, the Trading with the Enemy Act of 1917, the Arms Export Act of 1976 or the International Traffic in Arms Regulations. These regulations limit the potential market for some of our products. We can give no assurance that we will be successful in obtaining all the licenses necessary to export our products. Heightened government scrutiny of export licenses for defense related products has resulted in lengthened review periods for our license applications. Exports to countries that are not considered by the U.S. Government to be allies are likely to be prohibited, and even sales to U.S. allies may be limited. Failure to obtain export licenses or delays in obtaining licenses, or revocation of previously issued licenses would prevent us from selling the affected products outside the United States and could negatively impact our results of operations.

## The Intevac Photonics business is dependent on U.S. government contracts, which are subject to fixed pricing, immediate termination and a number of procurement rules and regulations.

We sell many of our imaging products and services directly to the U.S. government, as well as to prime contractors for various U.S. government programs. Our revenues from government contracts totaled \$14.8 million, \$14.1 million, and \$10.2 million in 2008, 2007, and 2006, respectively. Funding of multi-year government programs is subject to congressional appropriations, and there is no guarantee that the U.S. government will make further appropriations, particularly given the U.S. government s recent focus on spending in other areas. Sales to the U.S. government and its prime contractors may also be affected by changes in procurement policies, budget considerations and political developments in the United States or abroad. For example, if the U.S. government is less focused on defense spending or there is a decrease in hostilities, demand for our products could decrease. The loss of funding for a government program would result in a loss of future revenues attributable to that program. The influence of any of these factors, which are beyond our control, could negatively impact our results of operations.

A significant portion of our U.S. government revenue is derived from fixed-price development and production contracts. Under fixed-price contracts, unexpected increases in the cost to develop or manufacture a product, whether due to inaccurate estimates in the bidding process, unanticipated increases in material costs, reduced production volumes, inefficiencies or other factors, are borne by us. We have experienced cost overruns in the past that have resulted in losses on certain contracts, and may experience additional cost overruns in the future. We are required to recognize the total estimated impact of cost overruns in the period in which they are first identified. Such cost overruns could have a material adverse effect on our results of operations.

Generally, government contracts 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 ensure 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 ensure 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 ensure that we, or our customers, will continue to remain in good standing as federal contractors.

As a U.S. government contractor we must comply with specific government rules and regulations and are subject to routine audits and investigations by U.S. government agencies. If we fail to comply with these rules and regulations, the results could include: (1) reductions in the value of our contracts; (2) reductions in amounts previously billed and recognized as revenue; (3) contract modifications or termination; (4) the assessment of penalties and fines; and (5) suspension or debarment from government contracting or subcontracting for a period of time or permanently.

#### Changes to our effective tax rate affect our results of operations.

As a global company, we are subject to taxation in the United States and various other countries. Significant judgment is required to determine and estimate worldwide tax liabilities. Our future effective tax rate could be affected by: (1) changes in tax laws; (2) the allocation of earnings to countries with differing tax rates; (3) changes in worldwide projected annual earnings in current and future years: (4) accounting pronouncements; or (5) changes in the valuation of our deferred tax assets and liabilities. Although we believe our tax estimates are reasonable, there can be no assurance that any final determination will not be different from the treatment reflected in our historical income tax provisions and accruals, which could result in additional payments by Intevac.

We booked a significant tax benefit in 2008 based on management s belief that we could both carry-back losses to years Intevac paid income taxes and carry-forward tax credits to future years where we would generate taxable income. If our expectations of future income are incorrect, we could be required to establish a valuation allowance against some or all of the deferred tax assets. This could result in Intevac recording income tax expense in a year with a net operating loss.

#### Our success depends on international sales and the management of global operations.

In 2008, approximately 69% of our revenues came from regions outside the United States. Most of our international sales are to customers in Asia, which includes products shipped to overseas operations of U.S. companies. We currently have manufacturing facilities in California, Wyoming and Singapore and international customer support offices in Singapore, China, Malaysia, Korea and Japan. We expect that international sales will continue to account for a significant portion of our total revenue in future years. Certain of our suppliers are also located outside the United States.

Managing our global operations presents challenges including, but not limited to, those arising from: (1) global trade issues; (2) variations in protection of intellectual property and other legal rights in different countries; (3) concerns of U.S. governmental agencies regarding possible national commercial and/or security issues posed by growing manufacturing business in Asia; (4) fluctuation of interest rates, raw material costs, labor and operating costs, and exchange rates, including the weakening relative position of the U.S. dollar; (5) variations in the ability to develop relationships with suppliers and other local businesses; (6) changes in the laws and regulations of the United States, including export restrictions, and other countries, as well as their interpretation and application; (7) the need to provide technical and spares support in different locations; (8) political and economic instability; (9) cultural differences; (10) varying government incentives to promote development; (11) shipping costs and delays; (12) adverse conditions in credit markets; (13) variations in tariffs, quotas, tax codes and other market barriers; and (14) barriers to movement of cash.

We must regularly assess the size, capability and location of our global infrastructure and make appropriate changes to address these issues.

## Our success is dependent on recruiting and retaining a highly talented work force.

Our employees are vital to our success, and our key management, engineering and other employees are difficult to replace. We generally do not have employment contracts with our key employees. Further, we do not maintain key person life insurance on any of our employees. The expansion of high technology companies worldwide has increased demand and competition for qualified personnel, and has made companies increasingly protective of prior employees. It may be difficult for us to locate employees who are not subject to non-competition agreements and other restrictions.

The majority of our U.S. operations are located in California where the cost of living and of recruiting employees is high. Additionally, our operating results depend, in large part, upon our ability to retain and attract qualified management, engineering, marketing, manufacturing, customer support, sales and administrative personnel. Furthermore, we compete with industries, such as the hard disk drive and semiconductor industries, for skilled employees. Failure to retain key personnel, or to attract, assimilate or retain additional highly qualified employees to meet our needs in the future, could have a material and adverse effect our business, financial condition and results of operations.

#### We are dependent on certain suppliers for parts used in our products.

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, increased costs to expedite deliveries or develop alternative suppliers, or require redesign of our products to accommodate alternative suppliers. Some of our suppliers are thinly capitalized and may be vulnerable to failure given recent economic conditions.

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

The success of our business depends upon the integrity of our intellectual property rights, and we cannot ensure that: (1) any of our pending or future patent applications will be allowed or that any of the allowed applications will be issued as patents or will issue with claims of the scope we sought; (2) any of our patents will not be invalidated, deemed unenforceable, circumvented or challenged; (3) the rights granted under our patents will provide competitive advantages to us; (4) other parties will not develop similar products, duplicate our products or design around our patents; or (5) our patent rights, intellectual property laws or our agreements will adequately protect our intellectual property or competitive position.

From time to time, we have received claims that we are infringing third parties intellectual property rights or seeking to invalidate our rights. We cannot ensure 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, if required, may not be available on terms acceptable to us.

#### We could be involved in litigation.

From time to time we may be involved in litigation of various types, including litigation alleging infringement of intellectual property rights and other claims. For example, in July 2006, Intevac filed a patent infringement lawsuit against Unaxis USA, Inc. and its affiliates Unaxis Balzers AG and Unaxis Balzers, Ltd. alleging infringement by Unaxis of a patent relating to our 200 Lean system. This lawsuit was dismissed in July 2008. Litigation is expensive, subjects us to the risk of significant damages and requires significant management time and attention and could have a material and adverse effect on our business, financial condition and results of operations.

# Difficulties in integrating past or future acquisitions could adversely affect our business.

We have completed a number of acquisitions during our operating history. For example, in 2007, we acquired certain assets of DeltaNu, LLC and certain assets of Creative Display Systems, LLC and in 2008 we acquired certain assets of OC Oerlikon Balzers Ltd. We have spent and may continue to spend significant resources identifying and pursuing

future acquisition opportunities. Acquisitions involve numerous risks including: (1) difficulties in integrating the operations, technologies and products of the acquired companies; (2) the diversion of our management s attention from other business concerns; and (3) the potential loss of key employees of the acquired companies. Failure to achieve the anticipated benefits of the prior and any future acquisitions or to successfully integrate the operations of the companies we acquire could have a material and adverse effect on our business, financial condition and results of operations. Any future acquisitions could also result in potentially dilutive issuance of equity securities, acquisition- or divestiture-related write-offs or the assumption of debt and contingent liabilities.

#### 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.

# Business interruptions could adversely affect our operations.

Our operations are vulnerable to interruption by fire, earthquake or other natural disaster, quarantines or other disruptions associated with infectious diseases, national catastrophe, terrorist activities, war, disruptions in our computing and communications infrastructure due to power loss, telecommunications failure, human error, physical or electronic security breaches and computer viruses, and other events beyond our control. We do not have a detailed disaster recovery plan. Despite our implementation of network security measures, our tools and servers are vulnerable to computer viruses, break-ins and similar disruptions from unauthorized tampering with our computer systems and tools located at customer sites. Political instability could cause us to incur increased costs in transportation, make such transportation unreliable, increase our insurance costs and cause international currency markets to fluctuate. This same instability could have the same effects on our suppliers and their ability to timely deliver their products. In addition, we do not carry sufficient business interruption insurance to compensate us for all losses that may occur, and any losses or damages incurred by us could have a material adverse effect on our business and results of operations. For example, we self-insure earthquake risks because we believe this is the prudent financial decision based on the high cost of the limited coverage available in the earthquake insurance market. An earthquake could significantly disrupt our operations, most of which are conducted in California. It could also significantly delay our research and engineering effort on new products, most of which is also conducted in California. We take steps to minimize the damage that would be caused by business interruptions, but there is no certainty that our efforts will prove successful.

# We are required to evaluate our internal control over financial reporting under Section 404 of the Sarbanes-Oxley Act of 2002, and any adverse results from such evaluation could result in a loss of investor confidence in our financial reports and have an adverse effect on our stock price.

Pursuant to Section 404 of the Sarbanes-Oxley Act of 2002, our management must perform evaluations of our internal control over financial reporting. Beginning in 2004, our Form 10-K has included a report by management of their assessment of the adequacy of such internal control. Additionally, our independent registered public accounting firm must publicly attest to the effectiveness of our internal control.

We have completed the evaluation of our internal controls over financial reporting as required by Section 404 of the Sarbanes-Oxley Act. Although our assessment, testing, and evaluation resulted in our conclusion that as of December 31, 2008, our internal controls over financial reporting were effective, we cannot predict the outcome of our testing in future periods. Ongoing compliance with this requirement is complex, costly and time-consuming. If: (1) Intevac fails to maintain effective internal control over financial reporting; (2) our management does not timely assess the adequacy of such internal control; or (3) our independent registered public accounting firm does not deliver an unqualified opinion as to the effectiveness of our controls, then we could be subject to: (1) restatement of previously reported financial results, (2) regulatory sanctions and (3) a decline in the public s perception of Intevac, which could have a material and adverse effect on our business, financial condition and results of operations

# Item 1B. Unresolved Staff Comments

None.

# Item 2. Properties

Intevac maintains its corporate headquarters in Santa Clara, California. The location, approximate size and type of facility of the principal properties are listed below. Intevac leases all of its properties and does not own any real estate.

Location	Square Footage	Principal Use
Santa Clara, CA	169,583	Corporate Headquarters; Equipment and Intevac Photonics Marketing, Manufacturing, Engineering and Customer Support
Fremont, CA	9,505	Intevac Photonics Sensor Fabrication
Laramie, WY	12,000	Intevac Photonics Raman Spectrometer Manufacturing
Carlsbad, CA	10,360	Intevac Photonics Micro Display Product Manufacturing
Singapore	31,947	Equipment Manufacturing and Customer Support
Korea	1,558	Equipment Customer Support
Malaysia	1,291	Equipment Customer Support
Japan	1,507	Equipment Customer Support
Shenzhen, China	2,568	Equipment Customer Support

Intevac considers these properties adequate to meet its current and future requirements. Intevac regularly assesses the size, capability and location of its global infrastructure and periodically makes adjustments based on these assessments.

# Item 3. Legal Proceedings

From time to time, Intevac is involved in claims and legal proceedings that arise in the ordinary course of business. Intevac expects that the number and significance of these matters will increase as Intevac s business expands. Any claims or proceedings against us, whether meritorious or not, could be time consuming, result in costly litigation, require significant amounts of management time, result in the diversion of significant operational resources, or require us to enter into royalty or licensing agreements which, if required, may not be available on terms favorable to us or at all. Intevac is not presently party to any lawsuit or proceeding that, in Intevac s opinion, is likely to seriously harm Intevac s business.

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

None.

# PART II

# Item 5. Market for Registrant s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities

#### **Price Range of Common Stock**

Intevac common stock is traded on The Nasdaq National Market (NASDAQ Global Select) under the symbol IVAC. As of February 26, 2009, there were 129 holders of record. In fiscal years 2008 and 2007 Intevac did not declare or pay cash dividends to its stockholders. Intevac currently has no plans to declare or pay cash dividends.

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.

	High	Low
Fiscal 2007:		
First Quarter	\$ 30.57	\$ 22.00
Second Quarter	26.77	18.92
Third Quarter	22.37	13.23
Fourth Quarter	18.12	14.01
Fiscal 2008:		
First Quarter	\$ 14.28	\$ 10.14
Second Quarter	17.46	11.16
Third Quarter	13.32	9.50
Fourth Quarter	10.64	3.93

#### **Recent Sales of Unregistered Securities**

None.

#### Purchases of Equity Securities by the Issuer and Affiliated Purchasers

None.

#### **Performance Graph**

The following graph compares the cumulative total stockholder return on Intevac s Common Stock with that of the NASDAQ Stock Market Total Return Index, a broad market index published by the Center for Research in Security Prices (CRSP), and the NASDAQ Computer Manufacturers Stock Total Return Index compiled by CRSP. The comparison for each of the periods assumes that \$100 was invested on December 31, 2003 in Intevac s Common Stock, the stocks included in the NASDAQ Stock Market Total Return Index and the stocks included in the NASDAQ Computer Manufacturers, which reflect formulas for dividend reinvestment and weighting of individual stocks, do not necessarily reflect returns that could be achieved by individual investors.

# COMPARISON OF CUMULATIVE TOTAL RETURN SINCE DECEMBER 31, 2003 AMONG INTEVAC, NASDAQ STOCK MARKET TOTAL RETURN INDEX AND NASDAQ COMPUTER MANUFACTURERS TOTAL RETURN INDEX

	12/31/03	12/31/04	12/30/05	12/29/06	12/31/07	12/31/08
Intevac, Inc.	\$ 100	\$ 54	\$ 94	\$ 184	\$ 103	\$ 36
Nasdaq Stock Market Total Return Index	100	109	111	122	132	64
Nasdaq Computer Manufacturers Total Return						
Index	100	130	133	136	199	84
Index	100		155	150	177	04

#### Item 6. Selected Consolidated Financial Data

The following selected financial information has been derived from Intevac s historical audited consolidated financial statements and should be read in conjunction with the consolidated financial statements, the accompanying notes and Management s Discussion and Analysis of Financial Condition and Results of Operations for the corresponding fiscal years .

	Year Ended December 31,				
	2008	2007	2006	2005	2004
		(In thousan	ds, except per s	hare data)	
Net revenues	\$ 110,307	\$ 215,834	\$ 259,875	\$ 137,229	\$ 69,615
Gross profit	\$ 43,339	\$ 96,043	\$ 100,959	\$ 43,578	\$ 15,856
Operating income (loss)	\$ (30,471)	\$ 27,436	\$ 47,999	\$ 14,717	\$ (5,249)
Net income (loss)	\$ (15,345)	\$ 27,345	\$ 46,698	\$ 16,151	\$ (4,344)
Earnings (loss) per share:					
Basic	\$ (0.71)	\$ 1.28	\$ 2.22	\$ 0.79	\$ (0.22)
Diluted	\$ (0.71)	\$ 1.23	\$ 2.13	\$ 0.76	\$ (0.22)
At year end:					
Total assets	\$ 189,169	\$ 215,413	\$ 206,003	\$ 130,444	\$ 79,622
Long-term debt	\$	\$ 1,898	\$	\$	\$
		23			

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

Management s Discussion and Analysis (MD&A) is intended to facilitate an understanding of Intevac s business and results of operations. This MD&A should be read in conjunction with Intevac s Consolidated Financial Statements and the accompanying Notes to Consolidated Financial Statements included elsewhere in this Form 10-K. The following discussion contains forward-looking statements and should also be read in conjunction with the cautionary statement set forth at the beginning of this Form 10-K. MD&A includes the following sections:

Overview: a summary of Intevac s business, measurements and opportunities.

Results of Operations: a discussion of operating results.

*Liquidity and Capital Resources:* an analysis of cash flows, sources and uses of cash, contractual obligations and financial position.

*Critical Accounting Policies:* a discussion of critical accounting policies that require the exercise of judgments and estimates.

#### Overview

Intevac provides manufacturing equipment and solutions to the hard disk drive industry and offers advanced etch technology systems to the semiconductor industry. Intevac s 200 Lean platform may be suitable to certain non-magnetic thin film applications such as optical coatings, photovoltaic and wear-resistant coatings although to date Intevac has not received revenues from such applications. Intevac also provides sensitive electro-optical devices used in high-performance digital cameras for military and commercial applications. Intevac s customers and potential customers include manufacturers of hard disk drives, semiconductor chips and wafers, as well as medical, scientific and security companies, law enforcement and the U.S. government and its contractors. Intevac reports two segments: Equipment and Intevac Photonics. Effective in the second quarter of 2008, Intevac renamed the Imaging Instrumentation segment to Intevac Photonics. During the third quarter of 2008, Intevac completed the acquisition of certain assets and liabilities of the magnetic media equipment business of OC Oerlikon Balzers Ltd. (Oerlikon).

Product development and manufacturing activities occur in North America and Asia. Intevac s equipment and service products are highly technical and, with the exception of Japan, are sold primarily through a direct sales force. During the third quarter of 2008, Intevac entered into an alliance with a Korean equipment manufacturer and distributor, TES Co., Ltd. (TES). Under the agreement TES has the rights to manufacture and sell Intevac s Lean Etch system for the Korean and Chinese markets, and Intevac has the rights to manufacture and sell TES chemical vapor deposition equipment for customers throughout the rest of the world. To date no sales have been made pursuant to this contract.

Intevac s results are driven primarily by worldwide demand for hard disk drives, which in turn depends on end-user demand for personal computers, enterprise data storage, personal audio and video players and video game platforms. Intevac s business is subject to cyclical industry conditions, as demand for manufacturing equipment and services can change depending on supply and demand for hard disk drives, chips, and other electronic devices, as well as other factors, such as global economic conditions and technological advances in fabrication processes.

Fiscal Year	2008	2007	2006	2008 vs. 2007	2007 vs. 2006
	(In thou	sands, except per	rcentages and	l per share amou	nts)

% Change

% Change

Net revenues	\$ 110,307	\$ 215,834	\$ 259,875	(48.9)%	(16.9)%
Gross profit	43,339	96,043	100,959	(54.9)%	(4.9)%
Gross margin percent	39.3%	44.5%	38.8%	(5.2)%	5.7%
Net income (loss)	(15,345)	27,345	46,698	(156.1)%	(41.4)%
Earnings (loss) per diluted					
share	\$ (0.71)	\$ 1.23	\$ 2.13	(157.7)%	(42.3)%

During fiscal 2006 Intevac reported record revenues as increasing end-user demand for hard drives in the desktop PC market and in the non-desktop market, including mobile, and consumer electronic products drove

increased customer investments in hard disk drive manufacturing equipment as did the technology transition to perpendicular magnetic recording.

Fiscal 2007 financial results reflected continued good conditions in the hard disk drive industry. Revenues and net income were lower than 2006 levels and declined in the second half of 2007. During this period Intevac expanded its photonics product portfolio with the acquisitions of DeltaNu, LLC, ( Delta Nu ) and Creative Display Systems, LLC ( CDS ).

Fiscal 2008 financial results reflected a difficult environment as Intevac s customers reduced or delayed capital expenditures as a result of industry consolidation, price erosion and reduced demand as a result of global economic conditions. In this period, Intevac focused on lowering costs, improving efficiencies, and bringing new products to market. In 2008, Intevac acquired certain assets and liabilities of OC Oerlikon Balzers Ltd. (Oerlikon) s magnetic media equipment business. In the fourth quarter of fiscal 2008, in response to the deteriorating economic conditions, Intevac announced and executed a global cost reduction plan that reduced its cost structure and its cash burn, while still enabling Intevac to invest in products that will drive future growth. Also during the fourth quarter of fiscal 2008, Intevac s market capitalization and financial outlook were adversely impacted by the current macroeconomic business environment. This triggered Intevac s performing interim impairment tests on its goodwill and intangible assets; and as a result Intevac recorded non-cash goodwill and intangible impairment charges of \$10.5 million.

Intevac expects the difficult environment to continue into fiscal 2009. The global economic climate and constrained financing environment have caused a broad slowdown in capital equipment purchases by our customers, with uncertainty as to the depth and duration of the downturn. While the uncertainty of end market demand continues to dampen expectations for the hard drive market, Intevac expects that in 2009 demand for some equipment will occur due to the retirement of some legacy systems. In addition, Intevac believes that research and development activities, including patterned media, will require new equipment. Intevac does not expect any of its hard drive customers to add new systems for capacity in 2009. Intevac expects that in 2009, Intevac Photonics business will grow, driven by government spending plus incorporation of Intevac products into development, pre-production and some early stage production programs.

#### **Results of Operations**

#### Net revenues

	Ye	Years Ended December 31,			% Change			
	2008	2007	2006	2008 vs. 2007	2007 vs. 2006			
		(In thousands, except percentages)						
Equipment	\$ 87,4	, ,	\$ 248,482	(55.5)%	(20.8)%			
Intevac Photonics	22,8	38 19,148	11,393	19.3%	68.1%			
Total net revenues	\$ 110,3	07 \$ 215,834	\$ 259,875	(48.9)%	(16.9)%			

Net revenues consist primarily of sales of equipment used to develop and manufacture thin-film disks, and, to a lesser extent, related equipment and system components; flat panel equipment technology license fees; contract research and development related to the development of sensors, cameras and systems; low-light imaging products and Raman spectrometers.

The decrease in Equipment revenues in 2008 was due primarily to a reduction in the number of 200 Lean systems delivered. In 2008 Intevac delivered eleven 200 Lean systems compared to twenty-nine 200 Lean systems in 2007 and forty-six 200 Lean systems in 2006. Equipment revenue in 2008 also included eleven disk lubrication systems compared to four disk lubrication systems in 2007 and thirteen disk lubrication in 2006. Revenues from disk equipment technology upgrades and spare part decreased significantly in 2008 versus 2007 and 2006. During 2007, Intevac sold a D-Star<sup>®</sup> flat panel technology license for \$1.3 million.

Fiscal 2008 was a slow year for new system capacity additions in the hard disk drive market due to the upgrade and reuse of approximately twenty legacy tools previously in storage. This substantially met the incremental capacity requirements of one of our largest customers. Equipment revenues in 2009 are not expected to exceed 2008 levels, given the uncertainty in the market.

Intevac Photonics revenues increased by 19.3% to \$22.8 million in 2008, which consisted of \$8.5 million of product revenue and \$14.3 million of contract research and development revenue. Intevac Photonics 2007 revenue of \$19.1 million consisted of \$5.2 million of product revenue and \$13.9 million of contract research and development revenue. Intevac Photonics 2006 revenue of \$11.4 million consisted of \$1.7 million of product revenue and \$9.7 million of contract research and development revenue. The increase in product revenues resulted from higher sales of low-light detection sensors and cameras used in military night vision surveillance and commercial applications as well as table-top and portable Raman instruments and Near-Eye Display products. The increase in contract research and development revenue was the result of a higher volume of contracts and incremental revenue generated from contract close-outs. In 2009, Intevac Photonics revenue is expected to grow, due primarily to increased product sales. During 2009, Intevac expects over 50% of Intevac s revenue to come from product sales. Substantial growth in future Intevac Photonics revenues is dependent on the proliferation of Intevac s technology into major military programs, continued defense spending, the ability to obtain export licenses for foreign customers, obtaining production subcontracts for these programs, and development and sale of commercial products.

Intevac s backlog of orders at December 31, 2008 was \$20.2 million, as compared to \$34.2 million at December 31, 2007 and \$125.0 million at December 31, 2006. Equipment backlog at December 31, 2008 was \$11.4 million compared to \$28.4 at December 31, 2007 and \$119.4 million at December 31, 2006. Intevac Photonics backlog at December 31, 2008 was \$8.8 million compared to \$5.8 million at December 31, 2007 and \$5.6 million at December 31, 2008. Equipment backlog at December 31, 2007 and \$5.6 million at December 31, 2008. Equipment backlog at December 31, 2008 includes one 200 Lean system for a non-magnetic media application, as compared to two 200 Lean systems at December 31, 2007, and twenty-four 200 Lean systems at December 31, 2006.

Significant portions of Intevac s revenues in any particular period have been attributable to sales to a limited number of customers. In 2008 sales to Seagate and Hitachi Global Storage Technologies each accounted for more than 10% of Intevac s revenues and in the aggregate sales to these customers accounted for 69% of revenues. In 2007 and 2006 sales to Seagate, Matsubo - Intevac s Japanese distributor, Hitachi Global Storage Technologies, and Fuji Electric each accounted for more than 10% of Intevac s revenues. In the aggregate sales to these customers accounted for 90% and 93% of revenues in 2007 and 2006, respectively. The magnetic disk manufacturing industry consists of a small number of large manufacturers. In 2006 Seagate acquired Maxtor, and in 2007, Western Digital acquired Komag, both of which further concentrated Intevac s customer base.

International sales totaled \$76.5 million, \$177.0 million, and \$233.4 million in 2008, 2007, and 2006, respectively, accounting for 69%, 82%, and 90% of net revenues. The decreases in international sales in 2008 and 2007 was primarily due to decreases in net revenues from disk sputtering systems. Substantially all of Intevac s international sales are to customers in Asia, which includes products shipped to overseas operations of U.S. companies.

Gross margin

	Years Ended December 31,			% Change	% Change		
	2008	2007	2006	2008 vs. 2007	2007 vs. 2006		
	(In thousands, except percentages)						
Equipment gross profit	\$ 35,797 40.9%	\$ 87,885	\$ 97,161	(59.3)%	(9.5)%		
% of Equipment net revenues Intevac Photonics gross profit	40.9% \$ 7,542	44.7% \$ 8,158	39.1% \$ 3,798	(7.6)%	114.8%		
% of Intevac Photonics net revenues	33.0%	42.6%	33.3%				
Total gross profit	\$ 43,339	\$ 96,043	\$ 100,959	(54.9)%	(4.9)%		

% of net revenues 39.3% 44.5% 38.8%

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. Cost of net revenues for

2008, 2007 and 2006 included \$781,000, \$638,000 and \$428,000 of equity-based compensation expense, respectively.

Equipment gross margin was 40.9% in 2008 compared to 44.7% in 2007 and 39.1% in 2006. Lower volume, product mix, unabsorbed factory utilization and costs from acquired businesses, which were offset in part by cost reduction programs contributed to the lower gross margin for 2008. Higher gross margin in 2007 resulted from changes in product mix, higher average selling prices and cost reduction programs. Intevac expects the gross margin for the Equipment business in 2009 to be essentially the same as 2008 at similar revenue levels, and lower than 2008 at reduced revenue levels. Gross margins in the Equipment business will vary depending on a number of additional factors, including product mix, product cost, system configuration and pricing, factory utilization, and provisions for excess and obsolete inventory.

Intevac Photonics gross margin was 33.0% in 2008 compared 42.6% in 2007 and 33.3% in 2006. The decrease in gross margin in 2008 resulted primarily from increased provisions for inventory and warranty and increased costs from acquired businesses. Higher gross margin in 2007 resulted primarily from higher-margin development contracts, favorable adjustments from contract closeouts and increased product sales. Intevac expects the gross margin for the Intevac Photonics business in 2009 to improve over 2008, primarily as a result of the projected increase in product sales, which typically carry higher gross margins.

#### Research and development

	Years Ended December 31,			% Change	% Change 2007 vs.			
	2008	2007	2006	2008 vs. 2007	2006			
	(In thousands, except percentages)							
Research and development								
expense	\$ 35,083	\$ 40,137	\$ 30,036	(12.6)%	33.6%			
% of net revenues	31.8%	18.6%	11.6%					

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 sputtering equipment, semiconductor equipment and Intevac Photonics products. Research and development costs for 2008, 2007 and 2006 included \$2.0 million, \$2.1 million and \$1.4 million of equity-based compensation expense, respectively.

Research and development spending decreased for Equipment during 2008 as compared to 2007 and increased in 2007 as compared to 2006. The decrease in Equipment spending during 2008 was due primarily to lower spending on the development of Intevac s Lean EtchTM product line, and to a lesser extent, reductions in incentive compensation expense. Increased Equipment spending in 2007 was due primarily to Lean Etch development and, to a lesser extent development of disk sputtering products. Intevac Photonics increased research and development spending levels in 2008 for sensor yield improvements, sensor development and digital night vision goggle development.

Intevac expects that research and development spending will decrease in 2009 primarily as a result of the lower level of spending on Intevac s Lean Etch product line. Engineering headcount grew from 129 at the end of 2006, to 141 at the end of 2007 and declined to 133 at the end of 2008.

Research and development expenses do not include costs of \$8.5 million, \$7.4 million, and \$6.1 million, in 2008, 2007, and 2006, respectively, which are related to customer-funded contract research and development programs and included in cost of net revenues.

# Selling, general and administrative

	Years Ended December 31,			% Change 2008 vs.	% Change 2007 vs.		
	2008	2007	2006	2008 vs. 2007	2007 Vs.		
	(In thousands, except percentages)						
Selling, general and administrative	<b>•</b> • • • • • •		<b>† •</b> • • • • •				
expense	\$ 28,229	\$ 28,470	\$ 22,924	(0.9)%	24.2%		
% of net revenues	25.6%	13.2%	8.8%				
		27					

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. All domestic sales and international sales of disk sputtering products in Asia, with the exception of Japan, are typically made by Intevac s direct sales force, whereas sales in Japan of disk sputtering products and other products are typically made by Intevac s Japanese distributor, Matsubo, who provides services such as sales, installation, warranty and customer support. Intevac also has subsidiaries in Singapore and in Hong Kong, along with field offices in Japan, Malaysia, Korea and Shenzhen, China to support Intevac s equipment customers in Asia. Selling, general and administrative costs for 2008, 2007 and 2006 included \$3.8 million, \$3.5 million and \$1.5 million of equity-based compensation expense, respectively.

Selling, general and administrative spending in 2008 was flat to 2007 levels as a result of cost reduction activities, and lower provisions for employee profit sharing and bonus plans, partially offset by increased costs related to business development, customer service and support in both the Equipment and Intevac Photonics businesses and higher equity-based compensation expense. Intevac s selling, general and administrative headcount increased from 77 at the end of 2006, to 111 at the end of 2007 and then decreased to 97 at the end of 2008. Intevac expects that selling, general and administrative expenses will decrease in 2009 over the amount spent in 2008 due primarily to a projected decrease in costs related to customer service and support for the Equipment business offset by the addition of key business development personnel in the Intevac Photonics business.

#### Global cost reduction plan

During the fourth quarter of fiscal 2008, Intevac announced a global cost reduction plan ( the Plan ) to reduce the global workforce by fifteen percent. Implementation of the Plan was completed in the fourth quarter. The total cost of implementing the Plan was \$386,000 and was reported under cost of products sold and operating expenses. Substantially all cash outlays in connection with the Plan occurred in the fourth quarter of fiscal 2008. Implementation of the Plan is expected to reduce expenses by approximately \$10 million on an annual basis.

# Impairment of goodwill and intangibles

In September 2008, Intevac performed its annual assessment of impairment for goodwill which did not result in an impairment of goodwill. In the fourth quarter of fiscal 2008, Intevac experienced a significant decline in its stock price and Intevac s market capitalization fell below the recorded value of its consolidated net assets. This required Intevac to perform an interim test of its goodwill and intangible assets for impairment. As a result of the goodwill impairment test, Intevac concluded that the carrying amount of the goodwill in the Equipment reporting unit exceeded its implied fair value and recorded an impairment charge of \$9.7 million. The goodwill associated with the Intevac Photonics segment was not impaired. As a result of the intangible assets impairment test, Intevac recorded an \$808,000 impairment charge related to the write-down to fair value of the net carrying value of certain purchased technology intangible assets in the Equipment and Intevac Photonics segments due to lower revenue expectations and future operating expectations.

Intevac will continue to evaluate the carrying value of goodwill and intangible assets and if it is determined that there is a potential impairment, Intevac may record additional charges to earnings which would adversely affect its financial results. For further details, see Note 6 of Notes to Consolidated Financial Statements.

Interest income and other, net.

Years Ended December 31,		% Change	% Change	
2008	2007	2006	2008 vs. 2007	2007 vs. 2006

#### (In thousands, except percentages)

Interest income and other, net	\$ 3,932	\$ 8,142	\$ 3,778	(51.7)%	115.5%
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Interest income and other, net in 2008 included \$4.0 million of interest income on investments, and \$84,000 in net other income, partially offset by \$120,000 in interest expense. Interest income and other, net in 2007 included a \$1.5 million gain on the redemption of Intevac s preferred interest in 601 California Avenue LLC, \$6.5 million of interest income on investments and \$129,000 in net other income. The decrease in interest income in 2008 was driven by lower interest rates on Intevac s investments and lower average invested balances. Interest income and

other, net in 2006 consisted of \$390,000 of dividends from 601 California Avenue LLC, \$3.5 million of interest income on investments and \$113,000 in net other expense. Intevac expects interest income and other, net to decrease in 2009 due to a reduction in interest income due primarily to a reduction in interest rates and lower average invested balances.

#### Provision for (benefit from) income taxes

	Years Ended December 31,			% Change	% Change			
	2008	2007	2006	2008 vs. 2007	2007 vs. 2006			
	(In thousands, except percentages)							
Provision for (benefit from) income								
taxes	\$ (11,194)	\$ 8,233	\$ 5,079	(236.0)%	62.1%			

Intevac s effective income tax provision rate was 42.2% for fiscal 2008, 23.1% for fiscal 2007, and 9.8% for fiscal 2006. Intevac s tax rate differs from the applicable statutory rates due primarily to the utilization of deferred and current credits and the effect of permanent differences and adjustments of prior permanent differences. Intevac s future effective income tax rate depends on various factors including, the level of Intevac s projected earnings, the geographic composition of worldwide earnings, tax regulations governing each region, net operating loss carry-forwards, availability of tax credits and the effective income tax rate accordingly. Management carefully monitors these factors and timely adjusts the effective income tax rate accordingly. Management believes that the valuation allowances for Intevac s deferred tax assets are adequate based on several factors including: (1) degree to which Intevac s 2008 loss was attributable to unusual items or charges; (2) long duration of Intevac s deferred tax assets; and (3) expectation of improved earnings in the long term.

#### **Business Combinations**

On July 14, 2008, Intevac acquired certain assets and liabilities of OC Oerlikon Balzers Ltd. (Oerlikon) s magnetic media equipment business for a purchase price of \$15.1 million in cash, net of cash acquired. In addition Intevac agreed to pay contingent consideration to Oerlikon in the form of a royalty on Intevac s net revenue from commercial sales of certain products. This agreement terminates on July 13, 2011. Intevac has made no payments to Oerlikon under this agreement through December 31, 2008. As part of the acquisition, Intevac also entered into a settlement agreement with Oerlikon related to a patent infringement lawsuit filed by Intevac against Unaxis USA, Inc., a wholly owned subsidiary of Oerlikon, and all claims in the litigation were dismissed.

On November 9, 2007, Intevac acquired the assets and certain liabilities of Creative Display Systems, LLC ( CDS ) for a purchase price of \$6.0 million in cash, net of cash acquired. The acquired business is a supplier of high-performance micro-display products for near-eye and portable applications in defense and commercial markets.

On January 31, 2007, Intevac acquired the assets and certain liabilities of DeltaNu, LLC ( DeltaNu ) for a purchase price of \$5.8 million of which \$2 million was paid in cash at the close of the acquisition, \$2 million was paid on January 31, 2008 and \$2 million was paid on January 31, 2009, which is in the form of a non interest-bearing note. Interest is imputed, and the related note payable is recorded at a discount in the accompanying Consolidated Balance Sheets. The acquired business is a supplier of small footprint and handheld Raman spectrometry instruments.

For further details, see Note 7 of Notes to Consolidated Financial Statements.

#### **Recent Accounting Pronouncements**

Table of Contents

In May 2008, the Financial Accounting Standard Board (FASB) issued Statement on Financial Accounting Standards (SFAS) No. 162, The Hierarchy of Generally Accepted Accounting Principles (SFAS 162), which identifies the sources of accounting principles and the framework for selecting the principles to be used in the preparation of financial statements of non-governmental entities that are presented in conformity with generally accepted accounting principles (GAAP) in the United States. SFAS 162 is effective sixty days following the SEC s approval of The Public Company Accounting Oversight Board s related amendments to remove the GAAP hierarchy from auditing standards. Intevac currently adheres to the hierarchy of GAAP as presented in SFAS 162,

and implementation is not expected to have a material impact on Intevac s financial position and results of operations.

In April 2008, the FASB issued FASB Staff Position (FSP) 142-3, Determination of the Useful Life of Intangible Assets (FSP 142-3). The FSP amends the factors that an entity should consider in determining the useful life of a recognized intangible asset under SFAS 142, Goodwill and Other Intangible Assets, to include the entity s historical experience in renewing or extending similar arrangements, whether or not the arrangements have explicit renewal or extension provisions. Previously an entity was precluded from using its own assumptions about renewal or extension of an arrangement where there was likely to be substantial cost or modifications. Entities without their own historical experience should consider the assumptions market participants would use about renewal or extension. The amendment may result in the useful life of an entity s intangible asset differing from the period of expected cash flows that was used to measure the fair value of the underlying asset using the market participant s perceived value. The FSP is effective for financial statements issued for fiscal years beginning after December 15, 2008, and for interim periods within those fiscal years. Early adoption is prohibited. The requirements for determining the useful life of intangible assets apply to intangible assets recognized as of, and subsequent to, the effective date. Intevac does not expect that the implementation of FSP 142-3 will have a material impact on Intevac s financial position and results of operations.

In March 2008, the FASB issued SFAS No. 161, Disclosures about Derivative Instruments and Hedging Activities An Amendment of FASB Statement No. 133 (SFAS 161). SFAS 161 enhances required disclosures regarding derivatives and hedging activities. SFAS 161 is effective for fiscal years and interim periods beginning after November 15, 2008. Intevac does not expect that the implementation of SFAS 161 will have a material impact on Intevac s financial position and results of operations.

In December 2007 the FASB issued SFAS No. 141(R), Business Combinations (SFAS 141R). SFAS 141R retains the fundamental acquisition method of accounting established in Statement 141; however, among other things, SFAS 141R requires recognition of assets and liabilities of non-controlling interests acquired, fair value measurement of consideration and contingent consideration, expense recognition for transaction costs and certain integration costs, recognition of the fair value of contingencies, and adjustments to income tax expense for changes in an acquirer s existing valuation allowances or uncertain tax positions that result from the business combination. SFAS 141R will have an impact on Intevac s financial position and results of operations, but the nature and magnitude of the specific effects will depend upon the nature, terms and size of the acquisitions Intevac consummates after the effective date of January 1, 2009.

In December 2007, the FASB issued SFAS No. 160, Noncontrolling Interests in Consolidated Financial Statements, an Amendment of Accounting Research Bulletin No 51 (SFAS 160). SFAS 160 establishes accounting and reporting standards for ownership interests in subsidiaries held by parties other than the parent, changes in a parent s ownership of a noncontrolling interest, calculation and disclosure of the consolidated net income attributable to the parent and the noncontrolling interest, changes in a parent s ownership interest while the parent retains its controlling financial interest and fair value measurement of any retained noncontrolling equity investment. SFAS 160 is effective for financial statements issued for fiscal years beginning after December 15, 2008, and interim periods within those fiscal years. Early implementation is prohibited. Intevac must implement these new requirements in its first quarter of fiscal 2009. Intevac does not expect that the implementation of SFAS 160 will have a material impact on Intevac s financial position and results of operations.

In February 2008, the FASB issued FSP 157-1, Application of FASB Statement No. 157 to FASB Statement No. 13 and Other Accounting Pronouncements That Address Fair Value Measurements for Purposes of Lease Classification or Measurement under Statement 13 (FSP 157-1) and FSP 157-2, Effective Date of FASB Statement No. 157

(FSP 157-2). FSP 157-1 amends SFAS No. 157 to remove certain leasing transactions from its scope. FSP 157-2 delays the effective date of SFAS No. 157 for all non-financial assets and non-financial liabilities, except for items that are recognized or disclosed at fair value in the financial statements on a recurring basis (at least annually), until fiscal years beginning after November 15, 2008. Intevac does not expect that the

implementation of FSP 157-1 and FSP 157-2 will have a material impact on Intevac s financial position and results of operations.

In October 2008, the FASB issued FSP 157-3, Determining the Fair Value of a Financial Asset in a Market That Is Not Active (FSP 157-3), which clarifies the application of SFAS 157 when the market for a financial asset is inactive. Specifically, FSP 157-3 clarifies how (1) management s internal assumptions should be considered in measuring fair value when observable data are not present, (2) observable market information from an inactive market should be taken into account, and (3) the use of broker quotes or pricing services should be considered in assessing the relevance of observable and unobservable data to measure fair value. The guidance in FSP 157-3 is effective immediately. Intevac considered the guidance provided by FSP 157-3 in its determination of estimated fair values as of December 31, 2008, and the impact was not material.

#### Liquidity and Capital Resources

At December 31, 2008, Intevac had \$105.5 million in cash, cash equivalents, and investments compared to \$140.7 million at December 31, 2007. During fiscal 2008, cash, cash equivalents and investments decreased by \$35.1 million due primarily to cash used by operating activities, the purchase of certain assets of Oerlikon, purchases of fixed assets and a scheduled payment to the owners of DeltaNu, LLC, partially offset by cash received from the sale of Intevac common stock to employees through employee benefit plans.

Cash, cash equivalents and investments consist of the following:

	Dec	December 31, 2008		December 31, 2007	
		(In thousands)			
Cash and cash equivalents Short-term investments	\$	39,201	\$	27,673 110,985	
Long-term investments		66,328		2,009	
Total cash, cash-equivalents and investments	\$	105,529	\$	140,667	

Cash used by operating activities totaled \$8.2 million in 2008 compared to \$40.6 million generated by operating activities in 2007 and \$55.2 million generated by operating activities in 2006. Lower operating cash flow was a result of a net loss adjusted to exclude the effect of non-cash charges including impairment of goodwill and intangibles, depreciation, amortization and equity-based compensation. This decrease in operating cash provided by operating activities was also affected by changes in working capital. Intevac continues to carefully manage working capital. The number of days outstanding for Intevac s accounts receivable were 45 at December 31, 2008, compared to 46 at December 31, 2007 and 58 at December 31, 2006. Intevac s inventory turns were slightly less in 2008 versus 2007 as Intevac reacted responsively to the declining market conditions. It is anticipated that market conditions may continue to weaken in the next few quarters, but Intevac anticipates that its efforts to reduce costs through its global cost reduction plan and headcount restructuring activity implemented in the fourth quarter will reduce its cash loss from operations to a level sustainable until market conditions and Intevac s business improves.

Accounts receivable totaled \$15.0 million at December 31, 2008 compared to \$14.1 million at December 31, 2007. The increase in the receivable balance was due primarily to having a 200 Lean system recognized as revenue in the fourth quarter. Net inventories decreased by \$4.5 million during 2008 due primarily to decreases in both raw materials

and work-in-progress. Accounts payable totaled \$4.2 million at December 31, 2008 compared to \$7.7 million at December 31, 2007. The decrease of \$3.5 million relates to the decrease in inventory purchases and a slowdown in Intevac s business. Accrued payroll and related liabilities decreased by \$5.2 million during 2008 due to a decrease in accruals for bonuses and employee profit-sharing. Other accrued liabilities decreased from \$4.2 million at December 31, 2007 to \$3.2 million at December 31, 2008, primarily due to reductions in accruals for Intevac s warranty obligations. Customer advances decreased from \$5.6 million at December 31, 2007 to \$2.8 million at December 31, 2008 due to the decrease in backlog at December 31, 2008.

Investing activities in 2008 generated cash of \$19.6 million as compared to cash used of \$59.4 million in 2007 and cash used of \$37.3 million in 2006. In 2008 proceeds from maturities of investments, net of purchases, totaled \$38.9 million. Purchases of investments, net of proceeds from sales and maturities, totaled \$49.2 million in 2007

and \$28.9 million in 2006. During 2008, Intevac invested \$15.1 million in the acquisition of certain assets from Oerlikon. During 2007, Intevac invested \$6.9 million in the acquisitions of DeltaNu and CDS, and Intevac sold Intevac s investment in 601 California Avenue LLC. Capital expenditures totaled \$4.2 million in 2008, compared to \$5.7 million in 2007 and \$8.4 million in 2006.

Financing activities generated cash of \$165,000 in 2008, \$6.9 million in 2007, and \$6.2 million in 2006. The sale of Intevac common stock to Intevac s employees through Intevac s employee benefit plans provided \$1.8 million in 2008, \$3.9 million in 2007, and \$3.5 million in 2006. Intevac realized tax benefits from equity-based compensation of \$3.0 million in 2007 and \$2.7 million in 2006. In 2008, Intevac made a scheduled payment of \$2.0 million to the former owners of DeltaNu.

As of December 31, 2008, Intevac s available-for-sale securities represented \$74.4 million par value of auction rate securities (ARS), less a temporary valuation adjustment of \$8.1 million to reflect their current lack of liquidity. This adjustment was recorded in other comprehensive income and did not affect Intevac s earnings in fiscal 2008. Management continues to monitor the ARS situation and if conditions worsen, will re-evaluate the temporary nature of the valuation adjustment. Due to current market conditions, these investments have experienced failed auctions beginning in mid-February 2008. These failed auctions result in a lack of liquidity in the securities, but do not affect the underlying collateral of the securities. Intevac believes that given their high credit quality, it will ultimately recover at par all amounts invested in these securities. Intevac does not anticipate that any potential lack of liquidity in these ARS will affect its ability to finance its operations and planned capital expenditures. Intevac continues to monitor efforts by the financial markets to find alternative means for restoring the liquidity of these investments. During fiscal 2008, a net \$7.1 million of ARS were sold or redeemed at par. These investments are classified as non-current assets until Intevac has better visibility as to when their liquidity will be restored. The classification and valuation of these securities will continue to be reviewed quarterly.

As described in Note 8 of Notes to Consolidated Financial Statements, at December 31, 2008, the fair value of the ARS was estimated at \$66.3 million based on a valuation by Houlihan Smith & Company, Inc., using discounted cash flow models. The estimates of future cash flows are based on certain key assumptions, such as discount rates appropriate for the type of asset and risk, which are significant unobservable inputs. As of December 31, 2008, there was insufficient observable market information for the ARS held by Intevac to determine the fair value. Therefore Level 3 fair values were estimated for these securities by incorporating assumptions that market participants would use in their estimates of fair value. Some of these assumptions included credit quality, collateralization, final stated maturity, estimates of the probability of being called or becoming liquid prior to final maturity, redemptions of similar ARS, previous market activity for the same investment security, impact due to extended periods of maximum auction rates and valuation models.

Intevac has entered into a line of credit with Citigroup Global Markets Inc. under which approximately \$20 million is available. Intevac intends to use this line to help secure its ability to fund cash requirements until Intevac is able to liquidate its ARS holdings. For additional information on this borrowing facility, see Note 10 of Notes to Consolidated Financial Statements.

Intevac believes that Intevac s existing cash, cash equivalents and investments will be sufficient to meet Intevac s cash requirements for the foreseeable future. Intevac intends to undertake approximately \$5 million in capital expenditures during the next 12 months.

#### **Contractual Obligations**

The following table summarizes Intevac s contractual obligations as of December 31, 2008:

	<b>Payments Due by Period</b>							
		Total	<	1 Year		8 Years ousands)	Years	> 5 Years
Operating lease obligations Purchase obligations and commitments <sup>1</sup> Long term debt obligations <sup>2</sup> Other long term liabilities <sup>3</sup>	\$	8,187 5,502 2,000 509	\$	2,623 5,502 2,000 509	\$	5,460	\$ 104	\$
Total <sup>4</sup>	\$	16,198	\$	10,634	\$	5,460	\$ 104	\$

- <sup>1</sup> Purchase obligations include agreements to purchase goods or services that are enforceable and legally binding on Intevac and that specify all significant terms, including fixed or minimum quantities to be purchased; fixed, minimum or variable price provisions; and the approximate timing of the transaction. Purchase obligations exclude agreements that are cancelable without penalty. These purchase obligations are related principally to inventory and other items.
- <sup>2</sup> Amounts represent total anticipated cash payments, including anticipated interest payments that are not recorded on the consolidated balance sheets and the short-term portion of the obligation.
- <sup>3</sup> Intevac is unable to reliably estimate the timing of future payments related to uncertain tax positions; therefore, \$540,000 of income taxes payable has been excluded from the table above.
- <sup>4</sup> Total excludes contractual obligations already recorded on the consolidated balance sheet as current liabilities (except for the short-term portion of the long-term debt and other long-term liabilities) and certain purchase obligations.

#### **Off-Balance Sheet Arrangements**

As of December 31, 2008, Intevac did not have any material off-balance sheet arrangements (as defined in Item 303(a)(4)(ii) of Regulation S-K).

#### **Critical Accounting Policies**

The preparation of consolidated financial statements and related disclosures in conformity with accounting principles generally accepted in the United States of America requires management to make judgments, assumptions and estimates that affect the amounts reported. Note 1 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.

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

Estimates and assumptions about future events and their effects cannot be determined with certainty. Intevac bases its 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 Intevac s operating environment changes. These changes have historically been minor and have been included in the consolidated financial statements as soon as they became 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 section above entitled Risk Factors. Based on a critical assessment of its accounting policies and the underlying judgments and uncertainties affecting the

application of those policies, management believes that Intevac s consolidated financial statements are fairly stated in accordance with accounting principles generally accepted in the United States of America, and provide a meaningful presentation of Intevac s financial condition and results of operations.

Management believes that the following are critical accounting policies:

### **Revenue Recognition**

Intevac recognizes revenue when persuasive evidence of an arrangement exists, delivery has occurred and title and risk of loss have passed to Intevac s customer or services have been rendered, the price is fixed or determinable, and collectibility is reasonably assured. Intevac s shipping terms are customarily FOB shipping point or equivalent terms. Intevac s revenue recognition policy generally results in revenue recognizes revenue upon shipment for all transactions where legal title passes to the customer upon shipment, Intevac recognizes revenue upon shipment for all products that have been demonstrated to meet product specifications prior to shipment; the portion of revenue associated with certain installation-related tasks is deferred based on the estimated fair value, and that revenue is recognized upon completion of the installation-related tasks; (2) for products that have not been demonstrated to meet product specifications at customer acceptance; and (3) for arrangements containing multiple elements, the revenue relating to the undelivered elements is deferred at estimated fair value until delivery of the deferred elements. Revenue related to sales of spare parts is generally recognized upon shipment. Revenue related to services is generally recognized upon completion of the services.

Intevac performs research and development work under various government-sponsored research contracts. Revenue on cost-plus-fee contracts is recognized to the extent of costs actually incurred plus a proportionate amount of the fee earned. Intevac considers fixed fees under cost-plus-fee contracts to be earned in proportion to the allowable costs actually incurred in performance of the contract. Revenue on fixed-price contracts is recognized using the percentage-of-completion method of contract accounting. Intevac determines the percentage completed based on the percentage of costs incurred to date in relation to total estimated costs expected upon completion of the contract. When estimates of total costs to be incurred on a contract exceed total estimates of revenue to be earned, a provision for the entire loss on the contract is recorded in the period the loss is determined.

#### Inventories

Inventories are priced using average actual costs and are stated at the lower of cost or market. The carrying value of inventory is reduced for estimated obsolescence by the difference between its cost and the estimated market value based upon assumptions about future demand. Intevac evaluates 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 for excess or obsolete inventory might be required, which could have a material adverse effect on Intevac s business, financial condition and results of operations.

# Warranty

Intevac estimates the costs that may be incurred under the warranty we provide and record a liability in the amount of such costs at the time the related revenue is recognized. Estimated warranty costs are determined by analyzing specific product and historical configuration statistics and regional warranty support costs. Intevac s warranty obligation is affected by product failure rates, material usage, and labor costs incurred in correcting product failures during the warranty period. As Intevac s customer engineers and process support engineers are highly trained and deployed globally, labor availability is a significant factor in determining labor costs. The quantity and availability of critical

replacement parts is another significant factor in estimating warranty costs. Unforeseen component failures or exceptional component performance can also result in changes to warranty costs. If actual warranty costs differ substantially from our estimates, revisions to the estimated warranty liability would be required.

### Income Taxes

Intevac accounts for income taxes by recognizing deferred tax assets and liabilities using statutory tax rates for the effect of temporary differences between the book and tax bases of recorded assets and liabilities, net operating losses and tax credit carryforwards. Deferred tax assets are also reduced by a valuation allowance if it is more likely than not that a portion of the deferred tax asset will not be realized. Management has determined that it is more likely than not that its future taxable income will be sufficient to realize its deferred tax assets.

The effective tax rate is highly dependent upon the geographic composition of worldwide earnings, tax regulations governing each region, non-tax deductible expenses and availability of tax credits. Management carefully monitors the changes in many factors and adjusts the effective income tax rate as required. If actual results differ from these estimates, Intevac could be required to record a valuation allowance on deferred tax assets or adjust its effective income tax rate, which could have a material adverse effect on Intevac s business, financial condition and results of operations.

The calculation of tax liabilities involves significant judgment in estimating the impact of uncertainties in the application of complex tax laws. Resolution of these uncertainties in a manner inconsistent with Intevac s expectations could have a material impact on Intevac s results of operations and financial condition.

#### Goodwill and Purchased Intangible Assets

Intevac reviews goodwill and intangible assets for impairment whenever events or changes in circumstances indicate that the carrying amount of these assets may not be recoverable, and also reviews goodwill and intangibles with indefinite lives annually for impairment. Intangible assets, such as purchased technology, are generally recorded in connection with a business acquisition. The value assigned to intangible assets is usually based on estimates and judgments regarding expectations for the success and life cycle of products and technology acquired. If actual product acceptance differs significantly from the estimates, Intevac may be required to record an impairment charge to write down the asset to its realizable value. Estimates of fair value are primarily determined using discounted cash flows and a market multiples approach. These approaches use significant estimates and assumptions including projected future cash flows, discount rate reflecting the inherent risk in future cash flows, perpetual growth rate and determination of appropriate market comparables. In the fourth quarter of 2008, Intevac recorded an impairment charge of \$10.5 million for goodwill and purchased technology intangible assets due to a decline in market value and lower revenue expectations in light of current operating performance and future operating expectations.

# Equity-Based Compensation

Intevac records compensation expense for equity-based awards under SFAS 123(R) using the Black-Scholes option pricing model. This model requires Intevac to estimate the expected volatility of the price of Intevac s common stock and the expected life of the equity-based awards. SFAS 123(R) also requires forfeiture estimates of equity-based awards. Estimating volatility, expected life and forfeitures requires significant judgment and an analysis of historical data. Intevac may have to increase compensation expense for equity-based awards if actual results differ from Intevac s estimates significantly.

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

*Interest rate risk.* Intevac s exposure to market risk for changes in interest rates relates primarily to Intevac s investment portfolio. Intevac does not use derivative financial instruments in Intevac s investment portfolio. Intevac places investments with high quality credit issuers and, by policy, limits the amount of credit exposure to any one issuer. Investments typically consist of auction rate securities and debt instruments issued by the U.S. government and its agencies.

The table below presents principal amounts and related weighted-average interest rates by year of maturity for Intevac s investment portfolio at December 31, 2008.

	2009	2010 2011 Beyond (In thousands, except p	Total ercentages)	Fair Value
Cash equivalents				
Fixed rate amounts	\$ 15,000		\$ 15,000	\$ 15,000
Weighted-average rate	0.28%			
Variable rate amounts	\$ 6,786		\$ 6,786	\$ 6,786
Weighted-average rate	0.95%			
Long-term investments				
Fixed rate amounts				