

VEECO INSTRUMENTS INC  
Form 10-K  
February 28, 2007

# UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

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## 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, 2006

OR

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

For the transition period from        to        .

Commission file number 0-16244

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## VEECO INSTRUMENTS INC.

(Exact Name of Registrant as Specified in Its Charter)

**Delaware**  
(State or Other Jurisdiction of  
Incorporation or Organization)  
**100 Sunnyside Boulevard, Suite B**  
**Woodbury, New York**  
(Address of Principal Executive Offices)

**11-2989601**  
(I.R.S. Employer  
Identification No.)  
**11797**  
(Zip Code)

Registrant's telephone number, including area code (516) 677-0200

Website: [www.veeco.com](http://www.veeco.com)

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

**Common Stock, par value \$.01 per share**

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. Yes ☒ No ☐

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

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

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

Large accelerated filer ☒ Accelerated filer ☐ Non-accelerated filer ☐

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

The aggregate market value of the voting stock held by non-affiliates of the Registrant, based on the closing price of the common stock on June 30, 2006 as reported on The Nasdaq National Market, was approximately \$724,834,555. Shares of common stock held by each officer and director and by each person who owns 10% or more of the outstanding common stock have been excluded from this computation in that such persons may be deemed to be affiliates. This determination of affiliate status is not necessarily a conclusive determination for other purposes.

At February 20, 2007, the Registrant had 31,147,782 outstanding shares of common stock.

### DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Registrant's Proxy Statement for the Annual Meeting of Stockholders to be held on May 4, 2007 are incorporated by reference into Part III of this Annual Report on Form 10-K.

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## SAFE HARBOR STATEMENT

This Annual Report on Form 10-K (the *Report*) contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Discussions containing such forward-looking statements may be found in Items 1, 3, 7 and 7A hereof, as well as within this Report generally. In addition, when used in this Report, the words *believes*, *anticipates*, *expects*, *estimates*, *plans*, *intends*, and similar expressions are intended to identify forward-looking statements. All forward-looking statements are subject to a number of risks and uncertainties that could cause actual results to differ materially from projected results. These risks and uncertainties include, without limitation, the following:

- The cyclical nature of the microelectronics industries we serve directly affects our business.
- We operate in an industry characterized by rapid technological change.
- We face significant competition.
- We depend on a limited number of customers that operate in highly concentrated industries.
- Our quarterly operating results fluctuate significantly.
- We face securities class action and shareholder derivative lawsuits which could result in substantial costs, diversion of management's attention and resources and negative publicity.
- Our outsourcing strategy could adversely affect our results of operations.
- We rely on a limited number of suppliers.
- Our inability to attract, retain and motivate key employees could have a material adverse effect on our business.
- We are exposed to the risks of operating a global business.
- We are subject to foreign currency exchange risks.
- Our success depends on protection of our intellectual property rights.
- We may be subject to claims of intellectual property infringement by others.
- Our acquisition strategy subjects us to risks associated with evaluating and pursuing these opportunities and integrating these businesses.
- Changes in accounting standards for stock-based compensation may adversely affect our stock price and our ability to attract, motivate and retain key employees.
- The implementation of a new information technology system may disrupt our operations.
- We may not obtain sufficient affordable funds to finance our future needs.
- We are subject to risks of non-compliance with environmental and safety regulations.
- We have adopted certain measures that may have anti-takeover effects which may make an acquisition of our company by another company more difficult.

- The matters set forth in this Report generally, including the risk factors set forth in Item 1A. Risk Factors.

Consequently, such forward-looking statements should be regarded solely as the Company's current plans, estimates and beliefs. The Company does not undertake any obligation to update any forward-looking statements to reflect future events or circumstances after the date of such statements.

**Item 1. Business.**

**The Company**

Veeco Instruments Inc. (together with its consolidated subsidiaries, Veeco, the Company or we) designs, manufactures, markets and services a broad line of equipment primarily used by manufacturers in the data storage, research and industrial, semiconductor, high brightness light emitting diode ( HB-LED ) and wireless industries. These industries help create a wide range of information age products such as computer integrated circuits, personal computers, hard disk drives, network servers, digital cameras, wireless phones, TV set-top boxes, personal music/video players and personal digital assistants. Our broad line of products feature leading edge technology and allow customers to improve time-to-market of their next generation products. Veeco's products are also enabling advancements in the growing fields of nanoscience, nanobiology and other areas of scientific and industrial research.

Veeco's process equipment products precisely deposit or remove (etch) various materials in the manufacturing of advanced thin film magnetic heads ( TFMHs ) for the data storage industry, HB-LED/wireless devices (such as power amplifiers and laser diodes) and semiconductor devices. Veeco's key Process Equipment technologies include ion beam etch, ion beam, physical vapor and atomic layer deposition, and dicing and slicing products sold mostly to manufacturers of hard disk drives and metal organic chemical vapor deposition ( MOCVD ) and molecular beam epitaxy ( MBE ) products sold to manufacturers of HB-LEDs and wireless telecommunications devices.

Veeco's metrology equipment (atomic force microscopes ( AFM s) and optical profilers) is used to provide critical surface measurements on semiconductor devices and TFMHs. This equipment allows customers to monitor their products throughout the manufacturing process in order to improve yields, reduce costs and improve product quality. Veeco's metrology solutions are also used by many universities, scientific laboratories and industrial applications. Veeco sells its broad line of AFMs, scanning probe microscopes ( SPM s), optical interferometers and stylus profilers to thousands of universities, research facilities and scientific centers worldwide.

Demand for many of Veeco's products has been driven by the increasing miniaturization of microelectronic components, the need for manufacturers to meet reduced time-to-market schedules while ensuring the quality of those components, and, in the data storage industry, the introduction of tunneling magnetoresistive ( TMR ) TFMHs and perpendicular recording technology which require additional manufacturing steps, new materials, and the ability to take critical measurements for quality control and yield management during the manufacturing process. The ability of Veeco's products to precisely deposit thin films, and/or etch sub-micron patterns and make critical surface measurements in these components enables manufacturers to improve yields and quality in the fabrication of advanced microelectronic devices.

Veeco was organized as a Delaware corporation in 1989.

**Our Strategy**

Veeco's strategy for growth and improved profitability focuses on the following key activities:

- Increasing our penetration into high-growth end markets such as data storage, HB-LED and scientific research/nanotechnology - which we believe offer diversification and have the potential to outgrow the traditional semiconductor equipment industry;
- Maximizing our broad line of process equipment and metrology solutions to introduce new products which address customers' technology requirements and roadmaps;

- Improving our operational efficiency through better supply chain management, including outsourcing of new products, and development of common hardware and software platforms for certain process equipment and metrology products;
- Capturing leading market share in all core products by delivering differentiated technology solutions; and
- Developing strategic relationships with worldwide technology leaders and offering these customers high-quality service and applications support in order to improve their time-to-market on leading edge devices.

Veeco serves its worldwide customers through our global sales and service organization located throughout the United States, Europe, Japan and Asia Pacific. At December 31, 2006, Veeco had 1,279 employees, with manufacturing, research and development and engineering facilities located in New York, Arizona, California, Colorado, Minnesota and New Jersey.

### **Industry Background**

*General Introduction:* The market for microelectronic components continues to be driven by corporate and consumer use of information age products such as network personal computers ( PCs ), servers and the Internet, among others. While the Company believes that the PC and server markets still remain as the primary drivers of disk drive unit growth, disk drives are also increasingly being used for emerging consumer applications such as video music players, television set-top boxes, video-on-demand systems and electronic devices such as digital cameras, digital printers and personal digital assistants.

Continued demand for smaller, faster and less expensive microelectronic components, particularly in the consumer electronics industry, has led to increasing miniaturization of products. This miniaturization is achieved through an increased number of manufacturing steps involving greater use of precise etching and deposition equipment. In addition, metrology systems are used throughout the manufacturing process in order to monitor process accuracy, product quality, repeatability, and to measure critical dimensions and other physical features such as film thickness, line width, step height, sidewall angle and surface roughness, thereby improving yields. Wireless components, semiconductor and compound semiconductor devices, TFMHs, HB-LEDs and other electronic components often consist of many intricate patterns on circuits or film layers. Depending upon the specific design of any given integrated circuit, a variety of film thicknesses and a number of layers and film types will be used to achieve desired performance characteristics.

*Trends in the Data Storage Industry:* Worldwide storage demand continues to increase significantly, driven by intelligent internet storage, e-commerce, e-mail and new consumer applications now reaching higher volume including TV set-top boxes, personal audio and video recorders, digital cameras, auto navigation and music distribution systems. While much has been written in recent times about the competition hard disk drives face from flash memory, Veeco believes that hard disk drives ( HDDs ) will continue to provide the best value for mass storage and will remain at the forefront of large capacity storage applications for many years to come. In fact, the use of disk drives in many types of consumer applications has resulted in growth in the number of hard drive units shipped, which is expected to continue. According to data storage research firm IDC's 2006 report, consumer electronic applications of HDDs are forecasted to grow at a compound annual growth rate ( CAGR ) of 26% from 2006 to 2010. In addition, Veeco believes that the potential competition from flash will lead HDD manufacturers to continue to pursue advances in areal density (storage) in order to stay ahead on a price/performance basis.

In order to satisfy market demand for devices with greater storage capacity, the data storage industry has developed new head designs by incorporating higher areal densities, which enable storage of more data. The capacity of disk drives is largely determined by the capability of the magnetic recording heads, which read and write signals onto hard disks. The data storage industry continues to fund the development of new high-density thin film head technology, increasing areal density by approximately 30% every year.

Most importantly, the industry has begun to move to perpendicular recording technology in 2006, a technology which allows hard drive manufacturers to put more bits of data on each square inch of disk space because of changes in the magnetic geometry. The industry's transition to perpendicular recording will require thinner films, more layers and more complicated process equipment and metrology solutions from companies such as Veeco. According to Trend Focus, the industry's transition to perpendicular recording is early—approximately 14% of all hard drives shipped in 2006 benefited from perpendicular technology and about 30% of 2007 shipments are currently expected to be perpendicular. The industry is also shrinking the dimensions of its thin film magnetic heads (i.e., sliders) to a technology node known as Femto, which is also early in its adoption.

In August 2006, Peripheral Research, a data storage research organization, forecasted that thin film head production will grow approximately 12% from 2005 through 2009. Disk drive manufacturers are now increasing production of new 80 GB platters and funding development of 120 GB and beyond technology. Veeco believes that the data storage technology roadmap is more aggressive than the semiconductor industry's requirements for critical dimensions, film thickness, interface control and material selections.

Next generation HDDs will require new magnetic materials, smaller dimensional tolerances and increased automation in manufacturing. The Company believes that despite capital spending constraints within the data storage industry, substantial investment continues to be made in TMR and perpendicular recording technology. Furthermore, consolidation in the disk drive industry has led to fewer manufacturers that have greater financial stability. Veeco has and will continue to introduce important new process equipment products (including its NEXUS® Ion Beam Etch, Physical Vapor Deposition and Atomic Layer Deposition, Optium Lapping and Dicing products) to respond to the data storage industry's continued technology advances. In 2006, Veeco made a small investment in a technology company called Fluens Corporation (Fluens) that is developing alumina deposition technology. Veeco anticipates that its data storage customers will need to upgrade their alumina tools over the next two years. Additionally, the Company's creation of Slider Process Equipment enables Veeco to produce more components of the TFMH manufacturing process including back-end lapping, and dicing products, than ever before. This expanded product footprint makes Veeco well positioned to continue to capitalize on growth opportunities in the HDD industry.

Another trend in the hard drive industry which has the potential to impact Veeco is the increasing percentage of industry revenues being required for capital investment. According to research firm Coughlin Associates, the hard drive industry's percentage of sales spent on capital expenditures is increasing from approximately 8% in 2005 to over 10% by 2010.

While the data storage industry remains volatile on a quarterly basis due to its limited visibility, small customer base and customer management of quarterly capital expenditures, Veeco remains confident that these long-term technology changes and industry fundamentals offer the Company continued year-over-year growth opportunities.

*Trends in the Semiconductor Industry:* Current semiconductor industry technology trends include smaller feature sizes (sub-0.10 micron line widths), larger substrates (i.e., 300 mm wafers) and the increased use of metrology in the manufacturing process. According to VLSI, a semiconductor research organization, the percentage of capital expenditures devoted to metrology tools by semiconductor manufacturers is among the fastest growing part of the equipment business. Semiconductor manufacturers use metrology tools in their wafer fabrication facilities to detect process deviations as early in the manufacturing process as possible. These tools are critical for yield enhancement resulting in cost reduction in this increasingly competitive environment.

Veeco has sold over 450 automated AFM systems used in-line by manufacturers of semiconductor chips in their fabrication facilities. Veeco's AFMs are used by all of the top 10 integrated device manufacturers worldwide. Veeco's family of non-destructive AFM products includes our Vx Series

Atomic Force Profilers, which combine AFM resolution with long-scan capability and are well suited for chemical-mechanical polishing ( CMP ) and etch depth measurements; our X3D AFM for advanced lithography and photomask applications; and our Dimension ® X AFM for advanced etch measurements. In 2006, semiconductor manufacturers continued to place Veeco AFMs in-line for critical process measurements and used our instruments as critical reference metrology tools.

*Trends in the HB-LED/Wireless Industries:* In 2003, the International Technology Roadmap for Semiconductors voted to include non-silicon, wireless components (gallium arsenide and indium phosphide) on its roadmap. Veeco believes that compound semiconductor and traditional silicon materials ultimately will be used to create tomorrow's systems on a chip devices. The Company believes that future growth in this industry will be tied to the trend toward convergence and integration of semiconductor, compound semiconductor and wireless devices to produce cheaper and faster integrated components.

Veeco intends to position itself as a leading supplier of process equipment and metrology solutions to be used to create a broad range of compound semiconductor based devices such as mobile cell phones, wireless local area networks, and high-brightness blue/green/red/orange/yellow LEDs for applications such as general illumination and backlighting. Veeco is the only supplier of both MOCVD and MBE systems, the two key epitaxial deposition technologies used for wireless and HB-LED applications. MOCVD and MBE technologies are used to grow compound semiconductor materials (such as GaAs (gallium arsenide), GaN (gallium nitride), As/P (arsenic phosphide) and InP (indium phosphide)) at the atomic scale. Epitaxy is the critical first step in compound semiconductor wafer fabrication and is considered to be the highest value added process, ultimately determining device functionality and performance. The combination of MOCVD and MBE increases Veeco's customer base and total available market, and provides us with unique market positioning opportunities. Strategies Unlimited, an LED industry research organization, forecasts that the market for HB-LEDs will grow from \$12.5 billion in 2004 to \$25 billion in 2010. LEDs are becoming increasingly more prevalent in automotive applications, flat panel displays and other backlighting applications.

The HB-LED market is in its infancy, and as such Veeco expects the business to remain cyclical for the foreseeable future with some unpredictability in customers' buying patterns. However, the Company believes that this market represents a high-growth opportunity for the company due to the expanding applications for HB-LEDs, such as backlighting for large screen flat panel TVs (laser crystal diodes - LCDs), automotive applications and general illumination. In fact, the HB-LED/wireless portion of Veeco's business experienced the fastest revenue growth rate in 2006. According to Strategies Unlimited, in 2006 and beyond, growth rates (for LEDs) are forecast to increase as several emerging high-growth applications, such as LCD display backlighting and automotive forward lighting, begin to impact overall market growth. The research firm went on to forecast that while only 2% of today's LCD displays are currently backlit with HB-LEDs, this number would grow to 13% by 2009, particularly in small-screen applications (i.e. laptop computers) and large screen (i.e. TVs).

In order to gain market share in light of this growth opportunity, Veeco has introduced several generations of MOCVD tools, most recently its TurboDisc K-Series MOCVD systems in late 2006. By introducing new systems, Veeco is focused on delivering better uniformity and repeatability, helping its customers make higher-brightness HB-LEDs. Veeco also intends to continue to invest heavily in research and development and engineering in order to continue to deliver more advanced MOCVD solutions to its customers. The Company remains optimistic about the growth opportunity resulting from providing enabling equipment to the HB-LED industry.

*Trends in the Research Industry:* Veeco's broad based research business has historically tracked the growth of the economy and Gross Domestic Product, as our equipment and instruments are used in a wide range of industrial applications. A meaningful trend in the research industry is the growth in nanotechnology investment occurring at the scientific and university level. Nanotechnology is the ability to design and control the structure of an object at all lengths from the atom up to the macro scale.



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Nanotechnology may lead to molecular level assembly allowing for the ability to build structures from the molecular level up, potentially eliminating waste, creating new compositions and materials, and enhancing the properties of materials. These innovations may lead to the creation of computer chips and other devices that are thousands of times smaller than current technologies permit.

Nanoscience and nanotechnology have received significant funding from the U.S. government and other countries, and are beginning to impact many industries, including life sciences, data storage, semiconductor, telecommunications and materials sciences. According to Lux Research Inc., global nanotechnology spending reached approximately \$12 billion in 2006, consisting of a combination of government, industry and venture capital funding. Veeco's metrology instruments are used by nanotechnology researchers, and Veeco currently sells to most major scientific and research organizations engaged in the field of nanotechnology. Veeco continues to introduce new AFMs and SPMs to respond to the growing need for specialized scientific research metrology tools.

In 2004, Veeco and The Dow Chemical Company (NYSE: DOW) announced that the U.S. Commerce Department's National Institute of Standards and Technology Advanced Technology Program awarded them \$6.6 million in funding for a three-year project to develop a quantitative nano-mechanical measurement instrument. Veeco and Dow's proposal was one of 32 selected for award funding from a total of 870 proposals following a rigorous peer-review selection process. Veeco and Dow proposed to jointly develop and validate the world's first platform for high speed, high bandwidth, quantitative nano-mechanical measurements ( QNM ) on length scales smaller than 50nm, on a wide range of materials. Successful completion of this proposal would lead to the creation of a new measurement platform enabling the development of nanomaterials. The QNM is being developed at Veeco. The platform will be based on recently demonstrated advancements in atomic force microscopy. Veeco currently anticipates that new instruments created as a result of this project will begin to emerge from research and development in the 2007 time frame.

In 2005, Veeco announced a strategy to focus on growth opportunities in its scientific research business aligned to specific applications for nanotechnology that the Company has identified and may have higher growth than traditionally seen in this business. Under new management leadership and marketing direction, in 2005 Veeco identified the nanomaterials and nanobiotechnology marketplaces as key potential areas for future growth. It is Veeco's intention to continue to develop and introduce specific new products aligned to these market opportunities. In 2006, Veeco began to introduce new products to enable the Company to expand this market, including the BioScope II for life science applications and its next generation V Series SPMs. Veeco is also focused on expanding its served available market for atomic force microscopy, by introducing tools at new price-points, such as its Caliber® low cost/high value SPM as well as introducing new ease-of-use and fast scan features in 2007 and beyond.

### Veeco's Products

Veeco has two business segments, Process Equipment and Metrology. Net sales for these business segments is shown below for the years indicated:

	Year ended December 31,		
	2006	2005	2004
	(Dollars in millions)		
<b>Process Equipment</b>	\$ 268.9	\$ 227.9	\$ 227.6
% of net sales	61.0	% 55.5	% 58.3
<b>Metrology</b>	\$ 172.1	\$ 182.3	\$ 162.8
% of net sales	39.0	% 44.5	% 41.7
<b>Total net sales</b>	\$ 441.0	\$ 410.2	\$ 390.4

See Note 8 to the Consolidated Financial Statements of the Company for additional information regarding the Company's reportable segments and sales by geographic location.

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Below is a matrix indicating the industries to which Veeco's product families are primarily sold. This chart shows that Veeco's core technologies are applicable to multiple market opportunities:

	Data Storage			Semiconductor			HB-LED/Wireless			Scientific Research/ Industrial		
<b>Process Equipment</b>												
Ion Beam Deposition		X			X			X			X	
Ion Beam Etch		X			X			X				
Physical Vapor Deposition		X			X			X			X	
Atomic Layer Deposition		X										
Diamond Like Carbon Deposition		X										
Precision Lapping, Slicing, Dicing		X										
Metal Organic Chemical Vapor Deposition								X			X	
Molecular Beam Epitaxy		X			X			X			X	
<b>Metrology</b>												
Atomic Force Microscopes (automated)		X			X							
Research AFMs and SPMs		X			X			X			X	
Stylus Profilers		X			X						X	
Optical Interferometers		X			X						X	

### *Process Equipment*

Veeco produces and sells several types of process equipment products capable of precisely depositing or etching thin film products, primarily used in the manufacture of data storage components such as TFMHs and compound semiconductor/wireless devices. Veeco's process equipment product line includes:

***Ion Beam Deposition ( IBD ) Systems:*** Veeco's NEXUS IBD systems utilize ion beam technology to deposit precise layers of thin films and may be included on Veeco's cluster system platform to allow either parallel or sequential etch/deposition processes. Ion beam deposition systems deposit high purity thin film layers and provide maximum uniformity and repeatability. In addition to IBD systems, Veeco provides a broad array of ion beam sources.

***Ion Beam Etch ( IBE ) Systems:*** Veeco develops and produces NEXUS IBE systems, which etch precise, complex features for use primarily by data storage and telecommunications device manufacturers in the fabrication of discrete and integrated microelectronic devices.

***Physical Vapor Deposition ( PVD ) Systems:*** Veeco's NEXUS PVD systems deposit more than 20 types of materials, offering manufacturers a highly flexible platform for developing next-generation data storage and compound semiconductor applications. Veeco's PVD provides multiple targets, speeding the transition from development to high-volume production.

***Atomic Layer Deposition ( ALD ) Systems:*** Veeco's NEXUS ALD systems deposit advanced dielectric and metal films found in current and emerging applications in the data storage and semiconductor markets. Designed with multiple source capability, each module can be configured to produce a range of films in both development and production modes. Part of the NEXUS platform family, Veeco's ALD module can be integrated with complementary modules (IBD, IBE and PVD) which share common hardware and software protocols.

***Diamond-Like Carbon ( DLC ) Deposition Systems:*** Veeco's DLC deposition systems deposit protective coatings on advanced TFMHs. The system consists of a single cassette vacuum loadlock and a high vacuum processing chamber with two ion beam sources.



*Precision Lapping, Slicing, and Dicing Systems:* Veeco's Optium Slider process equipment products generally are used in back-end applications in a data storage fab where TFMHs or sliders are fabricated. This equipment includes lapping tools which enable precise material removal within three nanometers which is necessary for next generation TFMHs. Veeco also manufactures instruments that slice and dice wafers into rowbars and TFMHs.

*Metal Organic Chemical Vapor Deposition Systems:* Veeco's TurboDisc MOCVD products are a recognized industry leader in MOCVD production systems. MOCVD reactors are used in the growth of III-V compounds for numerous compound semiconductor applications, including data and telecommunications modules, cellular telephones and solar cells. Our MOCVD production systems are the recognized leader in growing gallium nitride-based devices, (green, and blue HB-LEDs) and arsenic phosphide based devices (red, orange and yellow HB-LEDs), which are used today in large area signage, mobile device backlighting and specialty illumination.

*Molecular Beam Epitaxy Systems:* MBE is the process of precisely depositing epitaxially aligned atomically thin crystal layers, or epilayers, of elemental materials onto a substrate in an ultra-high vacuum environment. For many compound semiconductors, MBE is the critical first step of the fabrication process, ultimately determining device functionality and performance. The performance characteristics of compound semiconductors are dependent on the crystalline structure, chemical composition, number and precise thickness of the epilayers. As a result, MBE is considered to be one of the highest value added steps in the production of compound semiconductors. Veeco provides a broad array of MBE components and systems for research and production applications.

#### *Metrology*

Veeco's surface metrology product line includes atomic force/scanning probe microscopes, optical metrology tools and stylus profilers. These products offer a broad range of solutions to customers in the data storage and semiconductor industries, as well as versatile tools for use by research and development centers and universities.

*Atomic Force/Scanning Probe Microscopes:* Veeco produces a broad range of AFM/SPM products designed for data storage, semiconductor and research and other industrial applications. Veeco's family of automated, non-destructive AFM products include our Vx Series Atomic Force Profilers which combine AFM resolution with long-scan capability for CMP applications; our X3D AFM for advanced lithography and photomask applications; and our Dimension X AFM for etch measurements. Veeco also has the world's broadest line of research AFMs and SPMs. Our Nanoscope products are widely used by leading nanotechnology research centers worldwide. Veeco was a pioneer of AFM technology and continues to develop new products for production and research applications.

The atomic force microscope feels the sample surface directly using a probe consisting of a very sharp tip or probe mounted on a microscopic spring arm (a cantilever). The interaction of the probe with the surface is detected by measuring deflections of the cantilever with an optical beam system. AFMs, which permit non-destructive measurements and resolution at the molecular level, can directly measure both lateral and vertical shapes with nanometer resolution and with direct 3D capability. In contrast, light-based metrology instruments, including confocal microscopes, have limited lateral resolution for measurements of less than half the wavelength of light, or less than about 250 nanometers. In addition to topography, AFMs can also directly measure the magnetic field (such as magnetic bits on a hard disk); electric field; hardness (such as thin film integrity); electric charge density (such as dopant concentrations in semiconductors); temperature (such as temperature distribution in disk drive recording head elements); and various chemical properties (such as the difference in binding preference among biological molecules). AFMs make these measurements on almost any surface; in air, vacuum or under fluids; and with minimal sample preparation.

*Stylus Profilers:* Stylus profilers are used to produce cross-sectional representations and/or quantitative measurements, which are displayed on a video monitor. Veeco's stylus profiler systems utilize a precision translation stage which creates relative motion between the sample and a diamond tipped stylus. As the sample moves under the stylus, surface variations cause vertical translation of the stylus, which is tracked and measured. Stylus profilers are widely used for height, width, pitch and roughness measurements of features on semiconductor devices, magnetic and optical storage media (such as hard drives), flat panel displays and hybrid circuits. Stylus profilers are often used for direct contact measurements and to measure larger feature sizes than Veeco's AFMs. Veeco believes that its stylus profiler products are recognized for their accuracy, repeatability, ease of use and technology features, and are designed to meet a range of industry specifications and customer requirements.

*Optical Metrology (Interferometry) Products:* Substantially all of Veeco's optical metrology instruments are designed to make non-contact surface measurements using interferometry technology. This process involves the use of either white light or laser sources to measure surface roughness and shape by creating interference patterns from the optical path difference between the test surface and a reference surface. Using a combination of phase shifting interferometry and vertical scanning interferometry, these instruments are designed to rapidly and precisely measure and characterize a range of surface sizes and shapes. Veeco's major optical products include the *NT* family and *SP3000* and the *HD-Series* optical profilers. The *NT* family product line measures surface roughness, heights and shapes. The *HD-Series* instruments are a line of microstructure measurement equipment used by manufacturers of mass memory components including manufacturers of TFMHs, disks, drives and suspensions. *HD-Series* instruments are used for research and development, production control, process improvement, incoming parts inspection, final parts inspection and field failure analysis.

#### **Service and Sales**

Veeco sells its products and services worldwide through various strategically located sales and service facilities located in the U.S., Europe, Asia Pacific and Japan, and believes that its customer service organization is a significant factor in the Company's success. The Company provides service and support on a warranty, service contract or an individual service-call basis. Veeco also offers enhanced warranty coverage and services, including preventative maintenance plans, on-call and on-site service plans and other comprehensive service arrangements, product and application training, consultation services and a 24-hour hotline service for certain products. The Company believes that offering 24 hour, 7 day per week worldwide support creates stronger relationships with customers and provides it with a significant competitive advantage. Revenues from sales of parts, service and support represented approximately 20%, 19% and 17% of Veeco's net sales for the years ended December 31, 2006, 2005 and 2004, respectively. Parts sales represented approximately 17%, 15% and 14% of Veeco's net sales for those periods, respectively, and service and support sales were 3%, 4% and 3%, respectively.

#### **Customers**

Veeco sells its products to many of the world's major data storage, semiconductor and HB-LED/wireless component manufacturers, and to customers in other industries, research centers and universities. For the year ended December 31, 2006, 42% of Veeco's sales were to data storage customers, 20% to HB-LED/wireless customers, 13% to semiconductor customers, and 25% to scientific research and industrial customers. We rely on certain principal customers for a significant portion of our sales including Seagate Technology, Inc., and Hitachi, Ltd. which have been two of our largest customers during the last three years. Sales to Seagate accounted for 18%, 15% and 10% of Veeco's total net sales in 2006, 2005 and 2004, respectively. Sales to Hitachi accounted for 10%, 9% and 6% of Veeco's total net sales in 2006, 2005 and 2004, respectively. If any principal customer discontinues its relationship with us or suffers economic difficulties, our business, prospects, financial condition and operating results could be materially and adversely affected.

## Research and Development

Veeco believes that continued and timely development of new products and enhancements to existing products are necessary to maintain its competitive position. Veeco works collaboratively with its customers to help ensure its technology and product roadmaps are aligned with customer requirements. Veeco's research and development programs are organized by product line and new or improved products have been introduced into each of Veeco's product lines in each of the past three years.

Veeco's research and development expenses were approximately \$61.9 million, \$60.4 million and \$58.3 million, or approximately 14.0%, 14.7% and 14.9% of net sales for the years ended December 31, 2006, 2005 and 2004, respectively. These expenses consisted primarily of salaries, project material and other product development and enhancement costs.

## Manufacturing

The Company's principal manufacturing activities, which consist principally of design, assembly, integration and test operations, are organized by product and take place at our facilities in Plainview, New York; Santa Barbara and Camarillo, California; Tucson, Arizona; Ft. Collins, Colorado; Somerset, New Jersey; and St. Paul, Minnesota.

The Company's sales, marketing, manufacturing and research and development functions are organized by product families. The Company believes that this organizational structure allows each product family manager to more closely monitor the products for which he is responsible, resulting in more efficient sales, marketing, manufacturing and research and development. The Company emphasizes customer responsiveness, customer service, high quality products and an interactive management style. By implementing these management philosophies, the Company believes that it has increased its competitiveness and positioned itself for future growth.

Certain of the Company's products are fully outsourced to one or more suppliers. In addition, certain of the components and sub-assemblies included in the Company's products are obtained from a single source or a limited group of suppliers. Although the Company does not believe it is dependent upon any of these suppliers as a sole source or limited source for any critical components, the inability of the Company to develop alternative sources, if necessary, a prolonged interruption in supply or a significant increase in the price of one or more components could adversely affect the Company's operating results and Consolidated Statements of Operations.

## Backlog

Veeco's backlog increased from \$114.1 million at December 31, 2005 to \$140.8 million at December 31, 2006. Backlog adjustments of \$26.0 million during 2006 included order cancellations primarily in the HB-LED/wireless industry for MOCVD products, as well as cancellations for AFM products. The Company's backlog generally consists of product orders for which a purchase order has been received and which are scheduled for shipment within twelve months. Veeco schedules production of its systems based on order backlog and customer commitments. Because certain of the Company's orders require products to be shipped in the same quarter in which the order is received, and because changes in delivery schedules, cancellations of orders and delays in shipment are possible, the Company does not believe that the level of backlog at any point in time is an accurate indicator of the Company's future performance. Due to changing business conditions and customer requirements, the Company may continue to experience cancellation and/or rescheduling of orders.

## Competition

In each of the markets that it serves, Veeco faces substantial competition from established competitors, some of which have greater financial, engineering, manufacturing and marketing resources

than Veeco as well as from smaller competitors. In addition, many of Veeco's products face competition from alternative technologies, some of which are more established than those used in Veeco's products. Significant factors for customer selection of metrology and process equipment tools include system performance, accuracy, repeatability, ease of use, reliability, cost of ownership and technical service and support. Veeco believes that it is competitive based on the customer selection factors in each market Veeco serves. None of Veeco's competitors compete with Veeco across all of Veeco's product lines.

Veeco competes with process equipment manufacturers such as Anelva, Unaxis, Hitachi, Riber, Aixtron and Oxford. Veeco competes with metrology product manufacturers such as KLA-Tencor, Seiko, Hitachi, Zygo, Agilent, and a variety of small manufacturers.

### **Intellectual Property**

Veeco's success depends in part on its proprietary technology. Although Veeco attempts to protect its intellectual property rights through patents, copyrights, trade secrets and other measures, there can be no assurance that Veeco will be able to protect its technology adequately or that competitors will not be able to develop similar technology independently.

Veeco has patents and exclusive and non-exclusive licenses to patents owned by others covering certain of its products, which Veeco believes provide it with a competitive advantage. Veeco has a policy of seeking patents on inventions concerning new products and improvements as part of its ongoing research, development and manufacturing activities. Veeco believes that there is no single patent which is critical to its operations, and that the success of its business depends primarily on the technical expertise, innovation and experience of its employees.

Veeco also relies upon trade secret protection for its confidential and propriety information. There can be no assurance that others will not independently develop substantially equivalent proprietary information and techniques or otherwise gain access to Veeco's trade secrets or that Veeco can meaningfully protect its trade secrets. In addition, the Company cannot be certain that it will not be sued by third parties alleging that the Company has infringed their patents or other intellectual property rights. If any third party sues Veeco, the Company's business, results of operations or financial condition could be materially adversely affected. Veeco has brought a patent infringement lawsuit against Asylum Research. See Legal Proceedings Non-Environmental.

### **Employees**

At December 31, 2006, the Company had 1,279 employees, of which there were 367 in manufacturing and test, 197 in sales and marketing, 176 in service, 50 in product support, 333 in engineering, research and development, and 156 in information technology, general administration and finance. The success of the Company's future operations depends in large part on the Company's ability to recruit and retain engineers, technicians and other highly-skilled professionals who are in considerable demand. There can be no assurance that the Company will be successful in recruiting or retaining key personnel. The Company believes that its relations with its employees are good.

### **Available Information**

We file annual, quarterly and current reports, information statements and other information with the Securities and Exchange Commission (the SEC). The public may read and copy any materials we file with the SEC at the SEC's Public Reference Room at 100 F Street, NE, Washington, D.C. 20549. The public may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. The SEC also maintains an Internet site that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC. The address of that site is <http://www.sec.gov>.

**Internet Address**

We maintain a website where additional information concerning our business and various upcoming events can be found. The address of our website is [www.veeco.com](http://www.veeco.com). We provide a link on our website, under Investors Financial Info SEC Filings, through which investors can access our filings with the SEC, including our annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and all amendments to those reports. These filings are posted to our website, as soon as reasonably practicable after we electronically file such material with the SEC.

**Item 1A. Risk Factors****Risk Factors That May Impact Future Results**

In addition to the other information set forth herein, the following risk factors should be carefully considered by shareholders of and potential investors in the Company.

**The cyclicity of the microelectronics industries we serve directly affects our business.**

Veeco's business depends in large part upon the capital expenditures of data storage, HB-LED/wireless and semiconductor manufacturers, as well as research and industrial customers, which accounted for the following percentages of our net sales for the periods indicated:

	Sales by Market					
	(% Revenue)					
	Year ended December 31,					
	2006		2005		2004	
Data Storage	42	%	41	%	32	%
HB-LED/wireless	20	%	15	%	25	%
Semiconductor	13	%	17	%	14	%
Scientific Research and Industrial	25	%	27	%	29	%

Veeco is subject to the business cycles of these industries, the timing, length and volatility of which are difficult to predict. These industries have historically been highly cyclical and have experienced significant economic downturns in the last decade. As a capital equipment provider, our revenues depend in large part on the spending patterns of these customers, who often delay expenditures or cancel or reschedule orders in reaction to variations in their businesses or general economic conditions. In downturns, we must be able to quickly and effectively align our costs with prevailing market conditions, as well as motivate and retain key employees. However, because a high proportion of our costs are fixed, our ability to reduce expenses quickly in response to revenue shortfalls is limited. A downturn in one or more of these industries could have a material adverse effect on our business, financial condition and operating results. During periods of rapid growth, we must be able to acquire and/or develop sufficient manufacturing capacity to meet customer demand, and attract, hire, assimilate and retain a sufficient number of qualified people. We cannot give assurances that our net sales and operating results will not be adversely affected if our customers experience economic downturns or slowdowns in their businesses.

**We operate in an industry characterized by rapid technological change.**

The data storage, HB-LED/wireless, semiconductor and scientific research and industrial industries are subject to rapid technological change. Our ability to remain competitive depends on our ability to enhance existing products and develop and manufacture new products in a timely and cost effective manner and to accurately predict technology transitions. Because new product development commitments must be made well in advance of sales, we must anticipate the future demand for products in selecting which development programs to fund and pursue. Our financial results for 2007 will depend to a great extent on the successful introduction of several new products, many of which require achieving increasingly



stringent technical specifications. We cannot be certain that we will be successful in selecting, developing, manufacturing and marketing new products or in enhancing existing products.

**We face significant competition.**

We face significant competition throughout the world in each of our reportable segments. Many of our competitors have greater financial, engineering, manufacturing and marketing resources than us. In addition, we face competition from smaller emerging equipment companies whose strategy is to provide a portion of the products and services we offer, using innovative technology to sell products into specialized markets. New product introductions or enhancements by our competitors could cause a decline in sales or loss of market acceptance of our existing products. Increased competitive pressure could also lead to intensified price competition resulting in lower margins. Our failure to compete successfully with these other companies would seriously harm our business.

**We depend on a limited number of customers that operate in highly concentrated industries.**

Our customer base is and has been highly concentrated. Orders from a relatively limited number of customers have accounted for, and likely will continue to account for, a substantial portion of our net sales, which may lead customers to demand pricing and other terms less favorable to us. Based on net sales, Seagate Technology, Inc. is our largest customer, with 18%, 15% and 10% of total net sales in 2006, 2005 and 2004, respectively. Our next largest customer is Hitachi Ltd., with 10%, 9% and 6% of total net sales in 2006, 2005 and 2004, respectively (our only customers with sales greater than 10% in any of the past three years).

If a principal customer discontinues its relationship with us or suffers economic setbacks, our business, financial condition and operating results could be materially and adversely affected. Our ability to increase sales in the future will depend in part upon our ability to obtain orders from new customers. We cannot be certain that we will be able to do so. In addition, because a relatively small number of large manufacturers, many of whom are our customers, dominate the industries in which they operate, it may be especially difficult for us to replace these customers if we lose their business. A substantial portion of orders in our backlog are orders from our principal customers.

In addition, a substantial investment is required by customers to install and integrate capital equipment into a production line. As a result, once a manufacturer has selected a particular vendor's capital equipment, we believe that the manufacturer generally relies upon that equipment for the specific production line application and frequently will attempt to consolidate its other capital equipment requirements with the same vendor. Accordingly, if a customer selects a competitor's product over ours for technical superiority or other reasons, we could experience difficulty selling to that customer for a significant period of time.

Furthermore, we do not have long-term contracts with our customers. As a result, our agreements with our customers do not provide any assurance of future sales and we are exposed to competitive price pressure on each new order we attempt to obtain. Our failure to obtain new sales orders from new or existing customers, would have a negative impact on our results of operations.

**The timing of our orders, shipments and revenue recognition may cause our quarterly operating results to fluctuate significantly.**

We derive a substantial portion of our net sales in any fiscal period from the sale of a relatively small number of high-priced systems. As a result, the timing of recognition of revenue for a single transaction could have a material effect on our sales and operating results for a particular fiscal period. As is typical in our industry, orders, shipments and customer acceptances often occur during the last few weeks of a quarter. As a result, delay of only a week or two can often shift the related booking or net sales into the next quarter, which could adversely affect our reported results for the prior quarter. Our quarterly results

have fluctuated significantly in the past and we expect this trend to continue. If our orders, shipments, net sales or operating results in a particular quarter do not meet expectations, our stock price may be adversely affected.

**Changes in our product mix may cause our quarterly operating results to fluctuate significantly.**

Certain of our business segments have historically had lower gross margins than other segments. We expect this trend to continue. If a greater portion of our overall business in the future comes from business segments operating at lower gross margins, then our overall gross margins will decline. This could have an adverse effect on our stock price.

**Our customers may cancel or reschedule their orders with us.**

Customer purchase orders are subject to cancellation or rescheduling by the customer, generally with limited or no penalties. Often, we have incurred expenses prior to such cancellation without adequate monetary compensation. Backlog adjustments during the year ended December 31, 2006, including order cancellations, were \$26.0 million.

**Our sales cycle is long and unpredictable.**

Historically, we have experienced long and unpredictable sales cycles (the period between our initial contact with a potential customer and the time when we recognize revenue from that customer). Our sales cycle can range up to twelve months. The timing of an order often depends on the capital expenditure budget cycle of our customers, which is completely out of our control. In addition, the time it takes us to build a product to customer specifications (the build cycle) typically ranges from one to six months, followed in certain cases by a period of customer acceptance during which the customer evaluates the performance of the system and may potentially reject the system. As a result of the build cycle and evaluation periods, the period between a customer's initial purchase decision and revenue recognition on an order often varies widely, and variations in length of this period can cause further fluctuations in our operating results. As a result of our lengthy sales cycle, we may incur significant research and development expenses, and selling and general and administrative expenses before we generate the related revenues for these products. We may never generate the anticipated revenues if a customer cancels or changes plans. Variations in the length of our sales cycle could also cause our net sales and therefore our cash flow and net income to fluctuate widely from period to period.

**We face securities class action and shareholder derivative lawsuits which could result in substantial costs, diversion of management's attention and resources and negative publicity.**

Veeco and certain of its officers have been named as defendants in a consolidated securities class action lawsuit pending in federal court in the Southern District of New York (the Court). The lawsuit arises out of the restatement in March 2005 of Veeco's financial statements for the quarterly periods and nine months ended September 30, 2004 as a result of the Company's discovery of certain improper accounting transactions at its TurboDisc business unit. The plaintiffs in the lawsuit seek unspecified damages and assert claims against all defendants for violations of Section 10(b) of the Securities Exchange Act of 1934 (the Exchange Act) and claims against the individual defendants for violations of Section 20(b) of the Exchange Act. The Court has certified a plaintiff class for the lawsuit consisting of all persons who acquired the Company's securities during the period from April 26, 2004 through February 10, 2005. The parties are currently involved in the discovery process. Although the Company believes this lawsuit is without merit and intends to defend vigorously against the claims, the lawsuit could result in substantial costs, divert management's attention and resources from our operations and negatively affect our public image and reputation.

In addition, three shareholder derivative lawsuits have been consolidated and are also pending before the Court. The plaintiffs in the consolidated derivative action assert that the Company's directors and certain of its officers breached fiduciary duties in connection with the improper accounting transactions at the TurboDisc business unit. The plaintiffs in the consolidated derivative action seek unspecified damages allegedly sustained by the Company and the return of all bonuses, restricted stock, stock options and other incentive compensation. The parties are currently involved in the discovery process on this action. An unfavorable outcome or prolonged litigation in these matters could materially harm the Company's business.

**Our outsourcing strategy could adversely affect our results of operations.**

To better align our costs with market conditions and to increase productivity and operational efficiency, we have outsourced, and plan to increase the outsourcing of, certain functions to third parties. While outsourcing may reduce our cost of operations, it also reduces our direct control over the services rendered. Although we attempt to select reputable providers, it is possible that one or more of these providers could fail to perform as we expect. In addition, the expanded role of third party providers has required and will continue to require us to implement changes to our existing operations and adopt new procedures and processes for retaining and managing these providers. If we do not timely and effectively develop and implement our outsourcing strategy or if third party providers do not perform as anticipated, we may not realize gross margin or productivity improvements and we may experience operational difficulties, increased costs, or even manufacturing delays, which could materially and adversely affect our business, financial condition and results of operations.

**We rely on a limited number of suppliers.**

Failure of the suppliers of critical parts, components and manufacturing equipment to deliver sufficient quantities in a timely and cost-effective manner could adversely affect our business. We generally do not have guaranteed supply or pricing arrangements with our suppliers. As a result, we risk increased cost of materials and difficulty in procuring the parts we need to fill customer orders. We currently use numerous suppliers, however, some key parts may be obtained only from a single supplier or a limited group of suppliers. Failure of any of these suppliers to perform in a timely or quality manner could negatively impact our revenues and results of operations.

**Our inability to attract, retain and motivate key employees could have a material adverse effect on our business.**

Our success depends upon our ability to attract, retain and motivate key employees, including those in executive, managerial, engineering, marketing and other roles. Our growth is dependent on our ability to attract, retain and motivate highly skilled and qualified technical personnel, in addition to personnel that can implement and monitor our financial and managerial controls and reporting systems. Attracting, retaining and motivating qualified personnel may be difficult due to challenging industry conditions, competition for such personnel by other technology companies, consolidations and relocations of operations and workforce reductions. Our inability to attract, retain and motivate key personnel could have a material adverse effect on our business, financial condition or operating results. On November 15, 2006, Edward H. Braun announced his intention to transition during 2007 from his current role as Veeco's Chairman and Chief Executive Officer to the position of Chairman. Mr. Braun will continue to serve as Chief Executive Officer until a successor has been appointed. A succession committee of the Board of Directors has been formed to search for a new Chief Executive Officer and the committee has been actively conducting a search. There can be no assurance that a suitable replacement for Mr. Braun in his role as Chief Executive Officer will be found in a timely manner or upon terms and conditions that are acceptable.

**We are exposed to the risks of operating a global business.**

Approximately 67% of our 2006 and 2005 net sales were generated from sales outside the United States. We expect sales from non-U.S. markets to continue to represent a significant, and possibly increasing, portion of our sales in the future. Our non-U.S. sales and operations are subject to risks inherent in conducting business abroad, many of which are outside our control, including:

- difficulties in managing a global enterprise, including staffing, managing distributors and representatives and repatriation of earnings,
- difficulties in obtaining U.S. export licenses in connection with sales of products to customers in certain geographic regions, including China and Asia Pacific, a particular disadvantage relative to our non-U.S. competitors who are not required to comply with U.S. export controls,
- periodic regional economic downturns and unstable political environments,
- longer sales cycles and difficulty in collecting accounts receivable,
- multiple, conflicting and changing governmental laws and regulations, including import/export controls and other trade barriers, and
- different customs and ways of doing business.

Many of these challenges are present in China, a large potential market for the Company's products and an area that we anticipate will present a significant opportunity for growth. Instability in China and other foreign economies may continue and recur again in the future, which could have a material adverse effect on our business. In addition, political instability, terrorism, acts of war or epidemics in regions where we operate may adversely affect our business and results of operations.

**We are subject to foreign currency exchange risks.**

We are exposed to foreign currency exchange rate risks that are inherent in our anticipated sales, sales commitments and assets and liabilities that are denominated in currencies other than the United States dollar. Although we attempt to mitigate our exposure to fluctuations in currency exchange rates, these hedging activities may not always be available or adequate to eliminate, or even mitigate, the impact of our exchange rate exposure. Failure to sufficiently hedge or otherwise manage foreign currency risks properly could materially and adversely affect our revenues and gross margins.

**Our success depends on protection of our intellectual property rights.**

Our success depends in part upon the protection of our intellectual property rights. We own various United States and international patents and have additional pending patent applications relating to certain of our products and technologies. The process of seeking patent protection is lengthy and expensive, and we cannot be certain that pending or future applications will actually result in issued patents or that issued patents will be of sufficient scope or strength to provide meaningful protection or commercial advantage. In addition, our intellectual property rights may be circumvented, invalidated or rendered obsolete by the rapid pace of technological change. Furthermore, the laws of other countries may less effectively protect our proprietary rights than U.S. laws. Infringement of our rights by a third party could result in uncompensated lost market and revenue opportunities.

On September 17, 2003, we commenced a lawsuit against Asylum Research Inc. ( Asylum ), a privately-held company founded by former Veeco employees. The lawsuit alleges infringement of five patents relating to our AFM technologies. We are seeking monetary damages and a permanent injunction to stop infringement. Asylum has asserted that the patents we are suing on are invalid and unenforceable and has filed a counterclaim for infringement of a patent licensed by Asylum and payment of royalties it believes it is owed. Cross motions for summary judgment related to the issues of infringement and/or validity of the patents in the suit are pending. The court has held hearings on the summary judgment motions and has referred many of the issues to a Special Master. We believe Asylum's claims are without merit and intend to vigorously pursue our claims. Nonetheless, the costs of pursuing this matter are significant and there can be no assurance that we will be successful in this matter. Costs to defend the patents are being capitalized by the Company. If the Company is not successful in defending the patents, these costs may be required to be written down under U.S. generally accepted accounting policies.

**We may be subject to claims of intellectual property infringement by others.**

From time to time we have received communications from other parties asserting the existence of patent or other rights which they believe cover certain of our products. We also periodically receive notice from customers who believe that we are required to indemnify them for damages they may incur related to infringement claims made against these customers by third parties. Our customary practice is to evaluate such assertions and to consider the available alternatives, including whether to seek a license, if appropriate. However, we cannot ensure that licenses can be obtained or, if obtained, will be on acceptable terms or that costly litigation or other administrative proceedings will not occur. If we are not able to resolve a claim, negotiate a settlement of the matter, obtain necessary licenses on commercially reasonable terms, and/or successfully prosecute or defend our position, our business, financial condition and results of operations could be materially and adversely affected.

**Our acquisition strategy subjects us to risks associated with evaluating and pursuing these opportunities and integrating these businesses.**

We have considered numerous acquisition opportunities and completed several significant acquisitions in the past. We may consider acquisitions of, or investments in, other businesses in the future. Acquisitions involve numerous risks, many of which are unpredictable and beyond our control, including:

- difficulties and increased costs in integrating the personnel, operations, technologies and products of acquired companies,
- diversion of management's attention while evaluating, pursuing and integrating the business to be acquired,
- potential loss of key employees of acquired companies, especially if a relocation or change in responsibilities is involved,
- difficulties in managing geographically dispersed operations in a cost-effective manner,
- lack of synergy or inability to realize expected synergies,
- increased amortization expense relating to intangible assets, and
- possible write-down of acquired intangible assets as a result of technological advancements or worse-than-expected performance by the acquired company.

Our inability to effectively manage these risks could materially and adversely affect our business, financial condition and operating results.

In addition, if we issue equity securities to pay for an acquisition, the ownership percentage of our then-existing shareholders would be reduced and the value of the shares held by these shareholders could

be diluted, which could adversely affect the price of our stock and convertible subordinated notes. If we use cash to pay for an acquisition, the payment could significantly reduce the cash that would be available to fund our operations or other purposes, including making payments on the convertible subordinated notes. There can be no assurance that financing for future acquisitions will be available on favorable terms or at all.

**Changes in accounting standards for stock-based compensation may adversely affect our stock price and our ability to attract, motivate and retain key employees.**

We have historically used broad based stock option programs and other forms of equity-related incentives as a key component of our employee compensation packages. Pursuant to Statement of Financial Accounting Standards ( SFAS ) No. 123(R) Share Based Payment , beginning in our first fiscal quarter of 2006, we were required to recognize compensation expense in our statement of operations for the fair value of unvested employee stock options outstanding on the date of adoption and new stock options granted to our employees after the adoption date over the related vesting periods of the stock options. The change in accounting treatment has resulted in and will in the future result in our reporting increased expenses, which has decreased and will decrease our net earnings, and could also adversely affect the market price of our common stock. The requirement to expense stock options granted to employees reduces the attractiveness of granting stock options. However, stock options remain an important employee retention tool, and we may not be able to attract and retain key personnel if we reduce the scope of our employee stock option program.

**The implementation of a new information technology system may disrupt our operations.**

Our ability to design, manufacture, market and service our products is dependent on information technology systems that encompass all of our major business functions. We are in the process of implementing a comprehensive enterprise resource planning ( ERP ) software system. This new ERP system will cover many areas of our business. System failure or malfunctioning may result in disruption of operations and the inability to process transactions and could adversely affect our financial results. If we encounter unforeseen delays or difficulties or significant increased costs in implementing our system, we could be adversely affected.

**We may not obtain sufficient affordable funds to finance our future needs.**

We may need to make significant capital expenditures to continue our operations and to enhance our manufacturing capability to keep pace with rapidly changing technologies. Also, our industry is characterized by the need for continued investment in research and development. If we fail to invest sufficiently in research and development, our products could become less attractive to potential customers. As a result of our emphasis on research and development and technological innovation, our operating costs may increase in the future. In addition, our 4.125% convertible subordinated notes come due in December 2008. As of February 15, 2007, we had \$154 million of these notes outstanding. If cash flow from our operations is not sufficient to repay these notes, we may have to borrow funds to do so. During the past few years, the markets for equity and debt securities have fluctuated significantly, especially with respect to technology-related companies, and during some periods offerings of those securities have been extremely difficult to complete. As a result, in the future we may not be able to obtain the additional funds required to fund our operations, invest sufficiently in research and development and repay or refinance our convertible subordinated notes on reasonable terms, or at all. Such a lack of funds could have a material adverse effect on our business, financial condition and operating results.

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

We are subject to environmental and safety regulations in connection with our business operations, including but not limited to regulations related to the development, manufacture and use of our products.

Failure or inability to comply with existing or future environmental and safety regulations could result in significant remediation liabilities, the imposition of fines and/or the suspension or termination of development, manufacture or use of certain of our products, each of which could have a material adverse effect on our business, financial condition and results of operations.

**We have adopted certain measures that may have anti-takeover effects which may make an acquisition of our company by another company more difficult.**

We have adopted, and may in the future adopt, certain measures that may have the effect of delaying, deferring or preventing a takeover or other change in control of Veeco that a holder of our common stock might not consider in its best interest. These measures include:

- blank check preferred stock,
- classified board of directors,
- shareholder rights plan or poison pill, and
- certain certificate of incorporation and bylaws provisions.

Our board of directors has the authority to issue up to 500,000 shares of preferred stock and to fix the rights (including voting rights), preferences and privileges of these shares ( blank check preferred). Such preferred stock may have rights, including economic rights, senior to our common stock. As a result, the issuance of the preferred stock could have a material adverse effect on the price of our common stock and could make it more difficult for a third party to acquire a majority of our outstanding common stock.

Our board of directors is divided into three classes with each class serving a staggered three-year term. The existence of a classified board will make it more difficult for our shareholders to change the composition (and therefore the policies) of our board of directors in a relatively short period of time.

We have adopted a shareholder rights plan, under which we have granted to our shareholders rights to purchase shares of junior participating preferred stock. This plan or poison pill could discourage a takeover that is not approved by our board of directors but which a shareholder might consider in its best interest, thereby adversely affecting our stock price.

We have adopted certain certificate of incorporation and bylaws provisions which may have anti-takeover effects. These include: (a) requiring certain actions to be taken at a meeting of shareholders rather than by written consent, (b) requiring a super-majority of shareholders to call a special meeting of shareholders or to approve certain amendments to our bylaws, (c) limiting the maximum number of directors, and (d) providing that directors may be removed only for cause. These measures and those described above may have the effect of delaying, deferring or preventing a takeover or other change in control of Veeco that a holder of our common stock might consider in its best interest.

In addition, we are subject to the provisions of Section 203 of the General Corporation Law of the State of Delaware, which prohibits a Delaware corporation from engaging in any business combination, including mergers and asset sales, with an interested stockholder (generally, a 15% or greater stockholder) for a period of three years after the date of the transaction in which the person became an interested stockholder, unless the business combination is approved in a prescribed manner. The operation of Section 203 may have anti-takeover effects, which could delay, defer or prevent a takeover attempt that a holder of our common stock might consider in its best interest.

**Item 1B. Unresolved Staff Comments.**

None.

**Item 2. Properties.**

The Company's headquarters office and its principal manufacturing, research and development and sales and service facilities, as well as the approximate size and the segments which utilize such facilities, are:

Owned Facilities Location	Approximate Size (sq. ft.)	Mortgaged	Use
Plainview, NY	80,000	No	Process Equipment
Santa Barbara, CA	100,000	Yes	Metrology
St. Paul, MN(1)	125,000	Yes	Process Equipment
Tucson, AZ(2)	110,000	No	Metrology
Somerset, NJ	80,000	No	Process Equipment

Leased Facilities Location	Approximate Size (sq. ft.)	Lease Expires	Use
Fort Collins, CO(3)	47,000	2009	Process Equipment
Fremont, CA	14,000	2007	Process Equipment
Camarillo, CA	48,000	2007	Process Equipment
Camarillo, CA	26,000	2012	Process Equipment
Camarillo, CA	19,000	2010	Metrology
Santa Barbara, CA	24,000	2009	Metrology
Ventura, CA(4)	125,000	2009	Held for sublease
Woodbury, NY	32,000	2011	Headquarters

(1) The Company's Process Equipment business utilizes approximately 95,000 square feet of this facility. The balance is available for expansion.

(2) The Company's Metrology business utilizes approximately 75,000 square feet of this facility. The balance is available for expansion.

(3) The lease on a 13,000 square foot section of this property expires in 2007, while the lease on the remaining 34,000 square feet expires in 2009.

(4) This facility is leased from the former owner of Manufacturing Technology, Inc. ( MTI ). The Company has subleased a portion of this building and is marketing the remaining portion of this facility for sublease.

The Santa Barbara, California and St. Paul, Minnesota facilities are subject to mortgages, which at December 31, 2006, had outstanding balances of \$5.4 million and \$3.6 million, respectively. The Company also leases small offices in Chadds Ford, Pennsylvania and Edina, Minnesota, for sales and service. The Company's foreign subsidiaries lease space for use as sales and service centers in England, France, Germany, Netherlands, Japan, Korea, Malaysia, Singapore, Thailand, China and Taiwan. The Company believes its facilities are adequate to meet its current needs.



**Item 3. Legal Proceedings.**

**Environmental**

The Company may, under certain circumstances, be obligated to pay up to \$250,000 in connection with the implementation of a comprehensive plan of environmental remediation at its Plainview, New York facility. The Company has been indemnified for any liabilities it may incur in excess of \$250,000 with respect to any such remediation. No comprehensive plan has been required to date. Even without consideration of such indemnification, the Company does not believe that any material loss or expense is probable in connection with any remediation plan that may be proposed.

The Company is aware that petroleum hydrocarbon contamination has been detected in the soil at the site of a facility formerly leased by the Company in Santa Barbara, California. The Company has been indemnified for any liabilities it may incur which arise from environmental contamination at the site. Even without consideration of such indemnification, the Company does not believe that any material loss or expense is probable in connection with any such liabilities.

The former owner of the land and building in which the Company's Santa Barbara, California Metrology operations are located has disclosed that there are hazardous substances present in the ground under the building. Management believes that the comprehensive indemnification clause that is part of the purchase contract relating to the purchase of such land provides adequate protection against any environmental issues that may arise.

**Non-Environmental**

On September 17, 2003, the Company filed a lawsuit in the United States District Court for the Central District of California against Asylum Research Inc., a privately-held company founded by former Veeco employees. The lawsuit alleges that the manufacture, use and sale of Asylum's MFP-3D AFM constitutes willful infringement of five patents owned by the Company, as well as other claims. The Company is suing for unspecified monetary damages and a permanent injunction to stop infringement. Asylum has asserted that the patents the Company is suing on are invalid and unenforceable, and has filed a counterclaim for infringement of a patent licensed by Asylum, and payment of royalties it believes it is owed. Cross motions for summary judgment related to the issues of infringement and/or validity of the patents in the suit are pending. The Court has held hearings on the summary judgment motions and has referred many of the issues to a Special Master. The Company believes that Asylum's claims are without merit and intends to vigorously pursue its claims. Costs to defend the patents are being capitalized by the Company. If the Company is not successful in defending the patents, these costs may need to be written down.

Veeco and certain of its officers have been named as defendants in a securities class action lawsuit consolidated in August 2005 that is pending in federal court in the Southern District of New York (the "Court"). The lawsuit arises out of the restatement in March 2005 of Veeco's financial statements for the quarterly periods and nine months ended September 30, 2004 as a result of the Company's discovery of certain improper accounting transactions at its TurboDisc business unit. The plaintiffs in the lawsuit seek unspecified damages and assert claims against all defendants for violations of Section 10(b) of the Securities Exchange Act of 1934 (the "Exchange Act") and claims against the individual defendants for violations of Section 20(b) of the Exchange Act. The Court has certified a plaintiff class for the lawsuit consisting of all persons who acquired the Company's securities during the period from April 26, 2004 through February 10, 2005. The parties are currently involved in the discovery process. Although the Company believes this lawsuit is without merit and intends to defend vigorously against the claims, the lawsuit could result in substantial costs, divert management's attention and resources from our operations and negatively affect our public image and reputation.

In addition, three shareholder derivative lawsuits filed in March and April of 2005 have been consolidated and are also pending before the Court. The plaintiffs in the consolidated derivative action

assert that the Company's directors and certain of its officers breached fiduciary duties in connection with the improper accounting transactions at the TurboDisc business unit. The plaintiffs in the consolidated derivative action seek unspecified damages allegedly sustained by the Company and the return of all bonuses, restricted stock, stock options and other incentive compensation. The parties are currently involved in the discovery process on this action. An unfavorable outcome or prolonged litigation in these matters could materially harm the Company's business.

The Company is involved in various other legal proceedings arising in the normal course of its business. The Company does not believe that the ultimate resolution of these matters will have a material adverse effect on the Company's consolidated financial position, results of operations or cash flows.

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

None.

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**PART II****Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities.**

The Company's common stock is quoted on The NASDAQ National Market under the symbol VECO. The 2006 and 2005 high and low closing bid prices are as follows:

	<b>2006 High</b>	<b>Low</b>	<b>2005 High</b>	<b>Low</b>
First Quarter	\$ 23.35	\$ 17.83	\$ 20.50	\$ 13.98
Second Quarter	27.20	21.71	16.90	13.05
Third Quarter	24.67	20.13	21.37	15.77
Fourth Quarter	19.98	18.24	18.55	15.59

On February 20, 2007, the closing bid price for the Company's common stock on the NASDAQ National Market was \$20.39. As of February 20, 2007, the Company had approximately 340 shareholders of record.

In December 2001 and January 2002, the Company issued \$220.0 million of 4.125% convertible subordinated notes in a private placement.

During the first quarter of 2006, the Company repurchased \$20.0 million of these notes, reducing the amount outstanding from \$220.0 million to \$200.0 million. During the first quarter of 2007, the Company repurchased an additional \$46.0 million of these notes, reducing the amount outstanding from \$200.0 million to \$154.0 million. The notes are convertible, at the option of the holder, at any time on or prior to maturity into shares of common stock at a conversion price of \$38.51 per share. The Company pays interest on these notes on June 21 and December 21 of each year. The notes will mature on December 21, 2008. The \$154.0 million of convertible subordinated notes are convertible into approximately 3,998,961 shares of Veeco common stock, which number is subject to adjustment in the event of stock splits and certain other transactions.

The Company has not paid dividends on its common stock. The Company intends to retain future earnings for the development of its business and, therefore, does not anticipate that the Board of Directors will declare or pay any dividends on the common stock in the foreseeable future. In addition, certain provisions of the Company's credit facility limit the Company's ability to pay dividends. The Board of Directors will determine future dividend policy based on the Company's consolidated results of operations, financial condition, capital requirements and other circumstances.

**Stock Performance Graph**

**COMPARISON OF 5 YEAR CUMULATIVE TOTAL RETURN**

**Among Veeco Instruments Inc., The Philadelphia Semiconductor Index, Peer Group,  
and The S&P Smallcap 600 Index**

**ASSUMES \$100 INVESTED ON DEC. 31, 2001  
ASSUMES DIVIDENDS REINVESTED  
FISCAL YEAR ENDING DEC. 31**

	<b>Cumulative Total Return as of December 31,</b>					
	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>
Veeco Instruments Inc.	100.0	32.07	78.11	58.45	48.07	51.96
Philadelphia Semiconductor Index (SOXX)	100.0	51.06	96.09	77.85	88.50	82.07
Peer Group Index	100.0	49.55	88.46	71.57	69.60	90.17
S&P Smallcap 600 Index	100.0	85.37	118.48	145.32	156.48	180.14

Information is presented assuming \$100 invested on December 31, 2001 and the reinvestment of dividends, if any. The Peer Group Index consists of the following companies: ASM International N.V., Axcelis Technologies Inc., FEI Company, FSI International Inc., Mattson Technology Inc., Rudolph Technologies Inc., Semitool Inc., Therma-Wave Inc., Varian Semiconductor Equipment Associates Inc. and Zygo Corp.

**Item 6. Selected Consolidated Financial Data.**

The financial data set forth below should be read in conjunction with Management's Discussion and Analysis of Financial Condition and Results of Operations and with the Company's Consolidated Financial Statements and notes thereto included elsewhere in this Form 10-K.

	Years ended December 31,					
	2006	2005	2004	2003	2002	
	(In thousands, except per share data)					
Statement of Operations Data:						
Net sales	\$ 441,034	\$ 410,190	\$ 390,443	\$ 279,321	\$ 298,885	
Cost of sales	246,910	236,090	238,686	152,307	183,042	(8)
Gross profit	194,124	174,100	151,757	127,014	115,843	
Costs and expenses	170,508	161,869	158,337	129,436	142,827	
Merger, restructuring and other expenses		1,165	(4)	3,562	(5)	5,403
Asset impairment charges			816	(5)		99,663
Write-off of purchased in-process technology	1,160	(1)	600	(5)	1,500	(7)
Operating income (loss)	22,456	11,066	(11,558)	(9,325)	(137,895)	( )
Interest expense, net	4,268	7,568	8,470	7,811	6,002	
Gain on extinguishment of debt	(330)	(2)				
Income (loss) from continuing operations before income taxes and noncontrolling interest	18,518	3,498	(20,028)	(17,136)	(143,897)	( )
Income tax provision (benefit) from continuing operations	4,959	4,395	42,527	(6)	(7,389)	( )
Noncontrolling interest	(1,358)	(3)				
Income (loss) from continuing operations	14,917	(897)	(62,555)	(9,747)	(123,384)	( )
Discontinued operations:						
Loss on disposal, net of taxes					(346)	( )
Loss from discontinued operations, net of taxes					(346)	( )
Net income (loss)	\$ 14,917	\$ (897)	\$ (62,555)	\$ (9,747)	\$ (123,730)	( )
Income (loss) per common share:						
Income (loss) per common share from continuing operations	\$ 0.49	\$ (0.03)	\$ (2.11)	\$ (0.33)	\$ (4.24)	( )
Loss from discontinued operations					(0.01)	( )
Net income (loss) per common share	\$ 0.49	\$ (0.03)	\$ (2.11)	\$ (0.33)	\$ (4.25)	( )
Diluted income (loss) per common share from continuing operations	\$ 0.48	\$ (0.03)	\$ (2.11)	\$ (0.33)	\$ (4.24)	( )
Loss from discontinued operations					(0.01)	( )
Diluted net income (loss) per common share	\$ 0.48	\$ (0.03)	\$ (2.11)	\$ (0.33)	\$ (4.25)	( )
Weighted average shares outstanding	30,492	29,921	29,650	29,263	29,096	
Diluted weighted average shares outstanding	31,059	29,921	29,650	29,263	29,096	

	Years ended December 31,				
	2006	2005	2004	2003	2002
	(In thousands)				
Balance Sheet Data:					
Cash and cash equivalents	\$ 147,046	\$ 124,499	\$ 100,276	\$ 106,830	\$ 214,295
Goodwill	100,898	99,622	94,645	72,989	30,658
Working capital	248,060	229,650	216,802	257,466	351,106
Total assets	589,600	567,860	576,913	596,464	605,387
Long-term debt (including current installments)	209,204	229,580	229,935	230,268	230,585
Shareholders' equity	281,751	248,587	252,352	306,329	307,573

- (1) As part of the acquisition of 19.9% of the stock of Fluens, Veeco acquired \$1.2 million of in-process research and development projects, which were written-off during the third quarter of 2006. See Note 2 to the Consolidated Financial Statements.
- (2) During the first quarter of 2006, the Company repurchased \$20.0 million aggregate principal amount of its 4.125% convertible subordinated notes. As a result of this repurchase, the amount of convertible subordinated notes outstanding was reduced to \$200.0 million, and the Company recorded a net gain from the early extinguishment of debt in the amount of \$0.3 million. See Note 4 to the Consolidated Financial Statements.
- (3) Veeco accounts for Fluens by consolidating the results of Fluens' operations from the acquisition date and attributing the 80.1% portion that is not owned by Veeco to noncontrolling interest in Veeco's consolidated financial statements. See Note 2 to the Consolidated Financial Statements.
- (4) Veeco incurred restructuring expenses of \$1.2 million during the year ended December 31, 2005 for personnel severance costs. See Note 7 to the Consolidated Financial Statements.
- (5) Veeco incurred merger, restructuring and other expenses of \$3.6 million during the year ended December 31, 2004. Of these charges, \$2.8 million was for personnel severance costs and \$0.8 million was accrued for costs related to the internal investigation of improper accounting transactions at its TurboDisc business unit. Asset impairment charges of \$0.8 million related to the consolidation of the Advanced Imaging, Inc. (Aii) and MTI business were recorded relating to certain long-lived assets that were classified as held for sale as of December 31, 2004. Veeco also recorded a charge of \$0.6 million related to the write-off of purchased in-process technology in connection with the MTI acquisition. See Notes 2 and 7 to the Consolidated Financial Statements.
- (6) For the year ended December 31, 2004, the Company recorded a charge of approximately \$54.0 million to establish a valuation allowance against substantially all of its domestic net deferred tax assets. See Note 6 to the Consolidated Financial Statements.
- (7) Veeco incurred merger, restructuring and purchased in-process technology charges of \$6.9 million during the year ended December 31, 2003. Of these charges, \$5.4 million related to merger and restructuring charges (\$4.8 million for personnel severance and business relocation costs, and \$0.6 million for other merger and related expenses), and \$1.5 million for the write-off of purchased in-process technology (\$1.0 million write-off from the Aii acquisition and a \$0.5 million write-off from the TurboDisc acquisition).
- (8) Veeco incurred merger, restructuring and asset impairment charges of \$126.0 million during the year ended December 31, 2002. Of these charges, \$99.7 million related to asset impairment charges (\$94.4 million for goodwill impairment, \$3.5 million for impairment of land and buildings and \$1.8 million for impairment of other fixed assets), \$15.0 million was associated with the write-off of inventory (included in cost of sales), \$6.4 million was due to the

write-off of costs associated with the termination of the FEI Company merger agreement, \$5.4 million for personnel severance and business relocation costs and \$0.3 million related to a prepayment penalty for the early extinguishment of debt. The merger and restructuring charges are offset in part by approximately \$0.8 million of income related to the settlement of a post-retirement benefit plan for employees in the Process Equipment segment.

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

**Executive Summary**

Veeco designs, manufactures, markets and services a broad line of equipment primarily used by manufacturers in the data storage, scientific and industrial research, semiconductor, HB-LED (high-brightness light emitting diode) and wireless industries. These industries help create a wide range of information age products such as computer integrated circuits, personal computers, hard disk drives, network servers, digital cameras, wireless phones, TV set-top boxes, personal music/video players and personal digital assistants. Our broad line of products features leading edge technology and allows customers to improve time-to-market of their next generation products. Veeco's products are also enabling advancements in the growing fields of nanoscience, nanobiology and other areas of scientific and industrial research.

Veeco's process equipment products precisely deposit or remove (etch) various materials in the manufacturing of TFMHs for the data storage industry, HB-LED/wireless devices (such as power amplifiers and laser diodes) and semiconductor mask reticles. Veeco's metrology equipment is used to provide critical surface measurements on semiconductor devices and TFMHs. This equipment allows customers to monitor their products throughout the manufacturing process in order to improve yields, reduce costs and improve product quality. Veeco's metrology solutions are also used by many universities, scientific laboratories and industrial applications. Veeco sells its broad line of AFMs, optical interferometers and stylus profilers to thousands of universities, research facilities and scientific centers worldwide.

We currently maintain facilities in Arizona, California, Colorado, Minnesota, New Jersey and New York, with sales and service locations around the world. Each of our products is currently manufactured in only one location, since we believe that the technological know-how and precision needed to make each of our products requires specialized expertise.

**Highlights of 2006**

- Revenue increased 7.5% to \$441.0 million from \$410.2 million in 2005. Veeco experienced strong growth in the HB-LED/wireless market, representing a 41.6% increase from 2005. This growth was somewhat offset by a 16.7% decline in sales to the semiconductor industry;
- Veeco's 2006 sales by segment were \$268.9 million from Process Equipment and \$172.1 million from Metrology, up 18.0% and down 5.6%, respectively, from 2005;
- 2006 sales by region were 33% North America, 16% Europe, 13% Japan and 38% Asia Pacific;
- Orders were \$493.8 million in 2006, up from \$404.8 million in 2005;
- Veeco improved its gross margin in 2006 through an increase in sales volume as well as continued cost reductions and improved supply chain management, which included outsourcing;
- Veeco's continued focus on operational improvements and cost control resulted in a \$11.4 million increase in operating income from the prior year;
- Net income was \$14.9 million in 2006 compared to a net loss of (\$0.9) million in 2005;
- Diluted net income per share was \$0.48 compared to a loss of (\$0.03) in 2005; and
- Veeco generated \$22.5 million of cash during 2006, after the effect of an early debt repurchase of \$19.5 million.



## Outlook/Opportunities

In 2007, Veeco will continue its strategy for growth focused on:

- Offering a broad line of well differentiated Process Equipment and Metrology technologies;
- Establishing strategic relationships with technology leaders worldwide;
- Capturing leading market share in our core products;
- Leveraging our exposure to high-growth end markets, including data storage, HB-LED/wireless, semiconductor and scientific research;
- Fueling our growth through internal development of new products; and
- Continuing to improve our operations with the goal of remaining profitable through industry cycles.

As Veeco enters 2007, the Company sees positive market conditions across several of our core markets, in particular the HB-LED/wireless and scientific research sectors. Veeco's data storage order rate has slowed at the end of 2006 and early 2007 as customers absorb the significant amount of capital purchased from Veeco through the first nine months of 2006. Based upon early indications of high capacity utilization at our key customers and other factors, our current expectation is for Veeco's data storage order rate to improve beginning in the second quarter of 2007. This, coupled with significant new product introductions in Process Equipment and Metrology and continued investments in technology by our customers across our end markets, leads us to currently predict revenue growth in 2007. In addition, consumer spending on many types of electronics has increased and various worldwide economies, such as those in the Asia Pacific region, are experiencing growth. The Company reviews a number of indicators to predict the strength of our markets going forward. These include plant utilization trends, capacity requirements and capital spending trends. At the beginning of 2007, many of these trends appear to be overall positive.

Technology changes are continuing in all of Veeco's markets: the continued increase of 80 GB hard drives and investment in 120 GB hard drives and the transition to perpendicular recording in data storage; the increased usage of mini drives in consumer electronic applications; the increased use of Veeco's automated AFMs as critical reference tools for sub 90 nanometer semiconductor applications; the opportunity for Veeco's MOCVD and MBE to further penetrate the emerging wireless and HB-LED market. Veeco believes that these trends, together with the continued healthy funding of nanoscience research, will prompt our customers to seek our next-generation solutions to address their manufacturing and technology challenges.

Veeco will continue its focus on increasing shareholder value through operational excellence and cash generation. The Company's goal is to increase gross margins again in 2007, with improvements in both Process Equipment and Metrology, specifically in the latter half of 2007 as revenues are forecasted to increase. Veeco anticipates that progress in this area will continue to come from activities such as better supply chain management, including outsourcing of new products, differentiated, value-added new product introductions which focus on achieving better gross margins and development of common hardware and software platforms.

**Results of Operations****Years Ended December 31, 2006 and 2005**

The following tables show selected items of Veeco's Consolidated Statements of Operations, percentages of sales, and comparisons between 2006 and 2005 and the analysis of sales and orders for the same periods between our segments, industries and regions (in \$000s):

	Year ended December 31, 2006			2005			Dollar and Percentage Change Year to Year		
Net sales	\$441,034	100.0	%	\$410,190	100.0	%	\$30,844	7.5	%
Cost of sales	246,910	56.0		236,090	57.6		10,820	4.6	
Gross profit	194,124	44.0		174,100	42.4		20,024	11.5	
Operating expenses:									
Selling, general and administrative expense	93,110	21.1		84,667	20.6		8,443	10.0	
Research and development expense	61,925	14.0		60,382	14.7		1,543	2.6	
Amortization expense	16,045	3.6		16,583	4.0		(538)	(3.2)	
Other (income) expense, net	(572)	(0.1)		237	0.1		(809)	(341.4)	
Merger, restructuring and other expenses		0.0		1,165	0.3		(1,165)	(100.0)	
Write-off of purchased in-process technology	1,160	0.3			0.0		1,160	100.0	
Total operating expenses	171,668	38.9		163,034	39.7		8,634	5.3	
Operating income	22,456	5.1		11,066	2.7		11,390	102.9	
Interest expense	9,194	2.1		10,203	2.5		(1,009)	(9.9)	
Interest income	(4,926)	(1.1)		(2,635)	(0.7)		(2,291)	86.9	
Gain on extinguishment of debt	(330)	(0.1)			0.0		(330)	100.0	
Income before income taxes and noncontrolling interest	18,518	4.2		3,498	0.9		15,020	429.4	
Income tax provision	4,959	1.1		4,395	1.1		564	12.8	
Noncontrolling interest	(1,358)	(0.3)			0.0		(1,358)	100.0	
Net income (loss)	\$14,917	3.4	%	\$(897)	(0.2)	%	\$15,814	1,763.0	%

	Sales		Dollar and		Orders		Dollar and		Book to	
	Year ended		Percentage		Year ended		Percentage		Bill Ratio	
	December 31, 2006	2005	Change Year to Year		December 31, 2006	2005	Change Year to Year		2006	2005
<b>Segment Analysis</b>										
Process Equipment	\$268,878	\$227,861	\$41,017	18.0 %	\$314,725	\$228,725	\$86,000	37.6 %	1.17	1.00
Metrology	172,156	182,329	(10,173 )	(5.6 )	179,077	176,055	3,022	1.7	1.04	.97
Total	\$441,034	\$410,190	\$30,844	7.5 %	\$493,802	\$404,780	\$89,022	22.0 %	1.12	.99
<b>Industry Analysis</b>										
Data Storage	\$183,877	\$167,420	\$16,457	9.8 %	\$208,597	\$166,000	\$42,597	25.7 %	1.13	.99
HB-LED/wireless	88,563	62,566	25,997	41.6	111,273	62,390	48,883	78.4	1.26	1.00
Semiconductor	57,628	69,207	(11,579 )	(16.7 )	64,153	66,413	(2,260 )	(3.4 )	1.11	.96
Research and Industrial	110,966	110,997	(31 )	(0.0 )	109,779	109,977	(198 )	(0.2 )	.99	.99
Total	\$441,034	\$410,190	\$30,844	7.5 %	\$493,802	\$404,780	\$89,022	22.0 %	1.12	.99
<b>Regional Analysis</b>										
US	\$145,635	\$136,489	\$9,146	6.7 %	\$162,015	\$132,971	\$29,044	21.8 %	1.11	.97
Europe	69,310	81,476	(12,166 )	(14.9 )	65,988	72,937	(6,949 )	(9.5 )	.95	.90
Japan	57,241	66,500	(9,259 )	(13.9 )	60,523	64,797	(4,274 )	(6.6 )	1.06	.97
Asia Pacific	168,848	125,725	43,123	34.3	205,276	134,075	71,201	53.1	1.22	1.07
Total	\$441,034	\$410,190	\$30,844	7.5 %	\$493,802	\$404,780	\$89,022	22.0 %	1.12	.99

Net sales of \$441.0 million for 2006 were up 7.5% from \$410.2 million in 2005. In 2006, Process Equipment sales were up \$41.0 million, or 18.0%, primarily due to sales to HB-LED/wireless and data storage customers. The increases in these areas were driven by the increased use of hard drives in consumer electronics and improved conditions within the HB-LED/wireless market. Metrology sales decreased by 5.6% to \$172.1 million in 2006, from \$182.3 million in 2005, primarily due to a decrease in AFM sales to customers in the semiconductor industry. In 2006, we continued to experience an increase in sales to Asia Pacific, which increased \$43.1 million compared to 2005, and to the U.S., which increased \$9.2 million compared to 2005. These increases were partially offset by a \$12.2 million decrease in sales to Europe and a \$9.3 million decline in sales to Japan. The Company believes that there will continue to be period-to-period variations in the geographic distribution of sales.

Orders of \$493.8 million in 2006 were up 22.0% compared to 2005. By segment, Process Equipment orders increased by 37.6%, due to improved data storage industry conditions resulting from the expanded use of hard drives in consumer electronics and improved conditions within the HB-LED/wireless market. Metrology orders remained relatively flat compared to 2005. By industry, orders from data storage customers increased 25.7%, resulting from technology changes requiring increases in equipment capital expenditures. HB-LED/wireless orders increased 78.4%, predominantly due to a significant increase in demand for MOCVD systems. Regionally, the 53.1% increase in orders to the Asia Pacific region and the 21.8% increase in orders to the U.S. were partially offset by decreased orders in Europe of 9.5% and Japan of 6.6%.

The book-to-bill ratio for the year ended December 31, 2006, which is calculated by dividing orders received in a given time period by revenue recognized in that same time period, was 1.12 to 1. During the year ended December 31, 2006, the Company experienced order cancellations and adjustments of \$26.0 million, primarily in the HB-LED/wireless industry for MOCVD products, as well as cancellations for AFM products. The Company also experienced rescheduling of order delivery dates by customers. Due to changing business conditions and customer requirements, the Company may continue to experience cancellations and/or rescheduling of orders.

Gross profit in 2006, increased as a percentage of net sales to 44.0% from 42.4% in 2005. Gross profit was \$194.1 million in 2006, compared to \$174.1 million in 2005. Process Equipment gross margins increased to 39.3% from 35.3% in 2005, primarily due to an increase in sales volume of \$41.0 million, improved product

mix, cost reductions and improved supply chain management, which included outsourcing. Metrology gross margins increased slightly, to 51.5% in 2006 from 51.4% in 2005.

Selling, general and administrative expenses increased \$8.4 million, or 10.0%, in 2006, principally due to higher personnel costs, including increased bonus and profit sharing expenses, higher non-cash compensation related to stock options and restricted shares, as well as annual salary increases. In addition, selling, general and administrative expenses increased due to increased consulting costs related to implementation of a new company-wide integrated applications software, litigation related expenses for the securities class action and consolidated derivative action lawsuits as well as expansion of field sales and marketing personnel to support the Company's new product introductions and the Company's Asia-Pacific operations, including travel and related expenses.

Research and development expense totaled \$61.9 million, or 14.0% of sales, in 2006, compared with \$60.4 million, or 14.7% of sales, in 2005. This \$1.5 million increase in spending principally resulted from new product development efforts in Ion Beam and MOCVD.

Amortization expense totaled \$16.0 million, or 3.6% of sales, in 2006, compared with \$16.6 million, or 4.0% of sales, in 2005. This \$0.6 million decrease is attributable to certain intangible assets becoming fully amortized.

The Company incurred merger, restructuring and other expenses of \$1.2 million during 2005, which consisted of personnel severance costs related to consolidation and cost reduction actions. As of December 31, 2006, the entire amount of these charges had been paid. (See Note 7 to the Consolidated Financial Statements of the Company for details).

In 2006, Veeco invested \$0.5 million to purchase 19.9% of the common stock of Fluens. Approximately 31% of Fluens is owned by a Vice President of one of Veeco's business units. The Company determined that Fluens is a variable interest entity and the Company is its primary beneficiary as defined by Financial Accounting Standards Board (FASB) Interpretation (FIN) 46R, *Consolidation of Variable Interest Entities (revised December 2003)* an interpretation of ARB No. 51. As such, the Company has consolidated the results of Fluens' operations from the acquisition date, and has attributed the 80.1% portion that is not owned by Veeco to noncontrolling interest in the Company's consolidated financial statements. As part of the purchase accounting adjustments made in connection with the acquisition, the Company recorded \$1.2 million of in-process research and development projects, which were written-off during 2006.

Other income, net, was \$0.6 million in 2006 compared with other expense, net of \$0.2 million in 2005. The change is primarily due to \$0.4 million loss realized in 2005 on the sale of fixed assets, miscellaneous income in 2006 related to the sale of one of the Company's domain names and a reduction in foreign currency exchange losses.

During the first quarter of 2006, the Company repurchased \$20.0 million of its convertible subordinated notes, reducing the amount outstanding from \$220.0 million to \$200.0 million. The repurchase amount was \$19.5 million in cash, of which \$19.4 million related to principal and \$0.1 million related to accrued interest. As a result of the repurchase, the Company recorded a net gain from the early extinguishment of debt in the amount of \$0.3 million.

Interest expense totaled \$9.2 million in 2006, compared to \$10.2 million in 2005. This reduction in interest expense is related to the early extinguishment of debt.

Interest income totaled \$4.9 million in 2006, compared to \$2.6 million in 2005. The change is due to the increase in interest rates and higher cash balances invested during 2006.

Income taxes for the year ended December 31, 2006, amounted to \$5.0 million, or 26.8% of income before income taxes and noncontrolling interest as compared to \$4.4 million, or 125.6% of income before

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income taxes in 2005. (See Note 6 to the Consolidated Financial Statements of the Company for details). The 2006 provision for income taxes included \$3.6 million relating to Veeco's foreign operations, which continue to be profitable, and \$1.4 million relating to the Company's domestic operations. Due to significant domestic net operating loss carryforwards, which are fully reserved by a valuation allowance, Veeco's domestic operations are not expected to incur significant income taxes for the foreseeable future. During the year ended December 31, 2006, the Company released \$2.2 million of its valuation allowance due to the utilization of net operating loss carryforwards. The 2005 provision for income taxes primarily related to Veeco's foreign operations, which were profitable.

Noncontrolling interest was a credit to income of \$1.4 million for the year ended December 31, 2006. As the Company is the primary beneficiary of Fluens, a variable interest entity as defined by FIN46(R), Veeco is required to consolidate Fluens and eliminate the portion of its results attributable to noncontrolling interests. As a result, the Company eliminated from its net income 80.1% of the write-off of Fluens in-process technology and Fluens' operating losses since the acquisition date.

## Years Ended December 31, 2005 and 2004

The following tables show selected items of Veeco's Consolidated Statements of Operations, percentages of sales, and comparisons between 2005 and 2004 and the analysis of sales and orders for the same periods between our segments, industries and regions (in \$000's):

	Year ended December 31, 2005		2004		Dollar and Percentage Change Year to Year	
Net sales	\$410,190	100.0 %	\$390,443	100.0 %	\$19,747	5.1 %
Cost of sales	236,090	57.6	238,686	61.1	(2,596 )	(1.1 )
Gross profit	174,100	42.4	151,757	38.9	22,343	14.7
Operating expenses:						
Selling, general and administrative expense	84,667	20.6	82,511	21.2	2,156	2.6
Research and development expense	60,382	14.7	58,338	14.9	2,044	3.5
Amortization expense	16,583	4.0	18,465	4.7	(1,882 )	(10.2 )
Other expense (income), net	237	0.1	(977 )	(0.2 )	1,214	124.3
Merger, restructuring and other expenses	1,165	0.3	3,562	0.9	(2,397 )	(67.3 )
Asset impairment charges		0.0	816	0.2	(816 )	100.0
Write-off of purchased in-process technology		0.0	600	0.2	(600 )	100.0
Total operating expenses	163,034	39.7	163,315	41.9	&nbs	