VEECO INSTRUMENTS INC Form 10-K February 22, 2012

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

(Mark One)

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

For the fiscal year ended December 31, 2011

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 0

> For the transition period from to Commission file number 0-16244

VEECO INSTRUMENTS INC.

(Exact Name of Registrant as Specified in Its Charter)

Delaware (State or Other Jurisdiction of Incorporation or Organization)

> **Terminal Drive** Plainview, New York

(Address of Principal Executive Offices)

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

Website: 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 ý No o

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files.) Yes ý No o

11-2989601 (I.R.S. Employer Identification No.)

11803

(Zip Code)

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 o No ý

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 ý No o

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, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer," and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

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

smaller reporting company)

Indicate by check mark whether the Registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). o Yes ý 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 July 1, 2011 as reported on The Nasdaq National Market, was \$2,057,494,571. 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 21, 2012, the Registrant had 38,767,203 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, 2012 are incorporated by reference into Part III of this Annual Report on Form 10-K.

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:

Our operating results have been, and may continue to be, adversely affected by unfavorable market conditions;

Market adoption of LED technology for general lighting could be slower than anticipated;

Our failure to successfully manage our outsourcing activities or failure of our outsourcing partners to perform as anticipated could adversely affect our results of operations and our ability to adapt to fluctuating order volumes;

The further reduction or elimination of foreign government subsidies and economic incentives may adversely affect the future order rate for our MOCVD equipment;

Our operating results have been, and may continue to be, adversely affected by tightening credit markets;

Our backlog is subject to customer cancellation or modification and such cancellation could result in decreased sales and increased provisions for excess and obsolete inventory and/or liabilities to our suppliers for products no longer needed;

The failure to estimate customer demand accurately could result in excess or obsolete inventory and/or liabilities to our suppliers for products no longer needed, while manufacturing interruptions or delays could affect our ability to meet customer demand;

The cyclicality of the industries we serve directly affects our business;

We rely on a limited number of suppliers, some of whom are our sole source for particular components;

Our sales to HB LED and data storage manufacturers are highly dependent on these manufacturers' sales for consumer electronics applications, which can experience significant volatility due to seasonal and other factors, which could materially adversely impact our future results of operations;

We are exposed to the risks of operating a global business, including the need to obtain export licenses for certain of our shipments and political risks in the countries we operate;

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

We operate in industries characterized by rapid technological change;

We face significant competition;

We depend on a limited number of customers, located primarily in a limited number of regions, that operate in highly concentrated industries;

Our sales cycle is long and unpredictable;

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

The price of our common shares may be volatile and could decline significantly;

We are subject to foreign currency exchange risks;

The enforcement and protection of our intellectual property rights may be expensive and could divert our limited resources;

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;

We may be required to take additional impairment charges for goodwill and indefinite-lived intangible assets or definite-lived intangible and long-lived assets;

Changes in accounting pronouncements or taxation rules or practices may adversely affect our financial results.

We are subject to internal control evaluations and attestation requirements of Section 404 of the Sarbanes-Oxley Act;

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

We have significant operations in locations which could be materially and adversely impacted in the event of a natural disaster or other significant disruption;

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

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") creates Process Equipment solutions that enable technologies for a cleaner and more productive world. We design, manufacture and market equipment primarily sold to make light emitting diodes ("LEDs") and hard-disk drives, as well as for emerging applications such as concentrator photovoltaics, power semiconductors, wireless components, microelectromechanical systems (MEMS), and other next-generation devices.

Veeco focuses on developing highly differentiated, "best-in-class" Process Equipment products for critical performance steps. Our products feature leading technology, low cost-of-ownership and high throughput, offering a time-to-market advantage for our customers around the globe. Core competencies in advanced thin film technologies, over 150 patents and decades of specialized process know-how helps us to stay at the forefront of these demanding industries.

Veeco's LED & Solar segment designs and manufactures metal organic chemical vapor deposition ("MOCVD") and molecular beam epitaxy ("MBE") systems and components sold to manufacturers of LEDs, wireless devices, power semiconductors, and concentrator photovoltaics, as well as to R&D applications. In 2011 we discontinued the sale of our products related to Copper, Indium, Gallium, Selenide ("CIGS") solar systems technology.

Veeco's Data Storage segment designs and manufactures the critical technologies used to create thin film magnetic heads ("TFMHs") that read and write data on hard disk drives. These technologies include ion beam etch (IBE), ion beam deposition (IBD), diamond-like carbon (DLC), physical vapor deposition (PVD), chemical vapor deposition (CVD), and slicing, dicing and lapping systems. While these technologies are primarily sold to hard drive customers, they also have applications in optical coatings and other markets.

Veeco's approximately 900 employees support our customers through product and process development, training, manufacturing, and sales and service sites in the U.S., Korea, Taiwan, China, Singapore, Japan, Europe and other locations.

Veeco Instruments was organized as a Delaware corporation in 1989.

Our Growth Strategy

Veeco's growth strategy consists of:

Providing differentiated Process Equipment technology solutions to address customers' next generation product development roadmaps;

Investing to win through focused research and development spending in end markets that we believe provide significant growth opportunities or are at an inflection point in Process Equipment requirements. Examples include LED, power semiconductor devices, MEMS, and the concentrator photovoltaic market;

Leveraging our world-class sales channel and local process applications support to build strong strategic relationships with technology leaders in all key regions;

Expanding our portfolio of service products that improve the performance of our systems, including spare parts, upgrades and consumables to drive additional growth and improve customer satisfaction.

Combining outsourced and internal manufacturing strategies to appropriately flex capacity through industry investment cycles;

Pursuing partnerships and strategic mergers and acquisitions to expand our portfolio of Process Equipment technologies and accelerate our growth.

Business Overview and Industry Trends

General Introduction: Our deposition, etch and other technologies are applicable to the creation of a broad range of microelectronic components, including LEDs, solar cells, thin film magnetic heads and compound semiconductor devices such as wireless components and power electronics. Our customers who manufacture these devices continue to invest in new technology equipment in order to advance their next generation products and deliver more efficient and cost effective technology solutions.

Following the global recession in 2008-2009, Veeco experienced a rapid improvement in business conditions in late 2009 and 2010. The combination of an improvement in capital spending by our global customers as well as our focus on high-growth end markets, particularly LED, and successful new product introductions enabled the Company to benefit from growth and market share gains in 2010 and 2011. Veeco's revenues increased over 200% in 2010 and 5% in 2011.

The following is a review of our two business segments and the multi-year technology trends that impact each.

LED & Solar Business Overview and Trends: We are a leading supplier of equipment solutions used to create high brightness LEDs and solar cells. MOCVD and MBE technologies are used to grow compound semiconductor materials (such as GaN (gallium nitride), GaAs (gallium arsenide), AlInGaP (aluminum indium gallium 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.

We believe that the LED market, while cyclical, represents a multi-year secular growth opportunity for us due to the expanding applications for LEDs, such as general illumination, backlighting for large screen flat panel TVs, mobile phones, tablet and laptop computers and automotive applications. According to Strategies Unlimited, a leading market research firm, 2010 revenues for high brightness LEDs for all applications grew by 108% to \$11.2 billion, and despite a slowdown in overall TV demand in 2011, grew by another 10% in 2011 to \$12.3 billion.

The demand for MOCVD tools to grow GaN based materials (the thin films that convert energy to light) to make LEDs for these applications grew dramatically beginning in mid-2009, with merchant industry shipments of MOCVD reactors growing from approximately 230 reactors in 2009, to approximately 800 reactors in 2010 and over 700 in 2011 (Source: Veeco and competitor financial results). Established LED industry leaders in Taiwan, U.S., Europe, Korea and Japan, as well as emerging players in China spurred by government incentives and economic development funding, all invested heavily in MOCVD equipment to ramp LED capacity. However, the industry is currently experiencing an overcapacity situation, evidenced by low tool utilization rates being reported by many key global customers. As a result, new orders for Veeco's MOCVD systems declined sharply in both the third and fourth quarters of 2011. In the short term, it is difficult for us to predict when the supply/demand of LEDs will return to equilibrium and what the demand for our MOCVD products will be. According to the Semiconductor Equipment and Materials Industry's (SEMI) January 2012 Opto/LED Fab Watch report, worldwide MOCVD purchases will decline by 40% in 2012 compared to 2011.

While consumer electronics have been the dominant end markets for LED technology over the past decade, and for which most of the new MOCVD capacity was installed, these applications are expected to reach saturation in the next few years. Conversely, the general lighting market is in its infancy and we believe that thousands of additional MOCVD tools will be required over the next few years as LEDs become widely adopted for this much larger market application. Industry research group

IMS forecasts that LEDs for solid state lighting will represent \$13.3 billion in revenue from 2013 through 2015, and that lighting will become the largest end market for LEDs during this time frame. As a comparison, LEDs for the TV backlighting market represented \$4.3 billion in revenue from 2009-2011.

As part of the shift toward more efficient energy use across the globe, we believe LED technology will play a key role as both an energy and cost savings lever in the area of lighting. We see this opportunity as both vast and long term in nature given that LED lighting is just now beginning to penetrate the global lighting market which accounts for close to 20% of world-wide electricity consumption. LED adoption is happening initially in outdoor and industrial lighting where high usage and lower efficiency make incumbent lighting costly. Further adoption across all forms of lighting is expected to occur in the coming years with rapidly declining LED costs, shortening payback periods versus conventional lighting technologies, and "ban-the-bulb" legislation now underway in more than 20 countries around the globe. Similar to Moore's Law in semiconductors, technology advancements in the LED industry have followed a consistent cadence known as Haitz's Law, which states that luminous flux for LEDs will increase 20X each decade, while over the same period costs will fall by 10x. This implies a 25-35% increase in efficacy in each generation of new LEDs. In addition to the incandescent bulb phase-outs, many countries have begun to implement policies to accelerate adoption of LEDs. These include China's "10 cities 10,000 lights" program, South Korea's "20-60" plan targeting 60% penetration of lighting on a national level by 2020, and Japan's "Basic Energy Plan" with specific goals for energy efficient lighting.

Future equipment and capital spending will continue to drive cost reduction in LED technology through larger wafers, automation and dedicated equipment specifically designed to improve manufacturing yield and throughput for lighting class LED product. In order to maximize this opportunity we have accelerated our R&D investments over the past few years to introduce several generations of MOCVD tools, most recently our TurboDisc® K-Series and MaxBright® MOCVD systems. By introducing new systems, we are focused on delivering better uniformity and repeatability, which helps our customers to make LEDs of consistent quality, ultimately with the goal to deliver more, high quality LEDs at a lower manufacturing cost. Despite the forecasted decline in the MOCVD market in 2012, we intend to continue to invest heavily in research and development in order to deliver more advanced MOCVD solutions to our customers with tool upgrades to improve their performance as well as selling additional after-market services, such as training, process applications support, warranties, spare parts and consumables.

A related MOCVD application for us is in the solar market, since the same MOCVD tool that is critical to the LED manufacturing process can also be used to manufacture high-efficiency triple junction solar cells, otherwise known as Concentrator Photovoltaic (CPV). Arsenide phosphide (As/P) MOCVD is the technology of choice to build the critical compound semiconductor layers for the CPV device. Veeco currently sells a small number of MOCVD systems each year for this new application. CPV Solar is emerging as a new technology niche with proof-of-concept scale installations (1MW or less), and in 2012 and 2013 multiple pilot production utility-scale projects are being developed around the world. According to solar market research firm GTM's 2011 report, new CPV installations will grow from under 5MW in 2010 to more than 1,000MW globally by 2015.

Another new market opportunity for our MOCVD tools is the power semiconductor market. Silicon-based transistors are the mainstream forms of power electronic devices today. However, GaN-based power electronics, developed on MOCVD tools, can potentially deliver higher performance (higher efficiency and switching speed) than silicon. Global industry leaders in power electronics are currently working on research and development programs, many in partnership with Veeco, to explore this new technology opportunity. Examples of the wide array potential applications for GaN-based power devices include those in information technology and consumer devices (power supplies,

inverters), automotive (hybrid automobiles) and industrial applications (power distribution, rail transportation and wind turbines). Additionally, Veeco is actively engaged with customers around the globe that are developing GaN-on-Silicon (GaN-on-Si) based technologies to potentially lower LED manufacturing costs by depositing thin film materials on silicon rather than sapphire substrates.

Veeco's MBE systems, sources and components are used to manufacture critical epilayers in varied end applications such as solar cells, fiber-optics, mobile phones, satellites, radar systems and displays. Our business continues to be influenced by long-term market trends associated with the increasing demand for gallium arsenide (GaAs) devices to support the rapid adoption of smart phones within the larger mobile phone handset market. Each one of these complex devices contains an increasing number of power amplifiers or other compound semiconductor radio frequency (RF) components. Advanced RF solutions for leading edge smart phones and tablet computers are required to support increasing data transfer volumes and long term evolution (LTE) based wireless communications.

Data Storage Business Overview and Trends: Worldwide storage demand continues to increase, driven by proliferation of laptop and netbook PC's, intelligent internet storage, e-mail, external storage devices, and consumer applications (e.g. digital video recorders) reaching higher volume. While much has been written about the competition hard disk drives ("HDDs") face from flash memory, we believe that HDDs will continue to provide the best value for mass storage and will remain at the forefront of large capacity storage applications. According to data storage research firm TrendFocus' August 2011 report, HDDs are forecasted to grow at a CAGR of 8.1% from 2011 to 2015.

While technology change continues in data storage, the industry has gone through a period of maturation, including vertical integration and consolidation. A recovery in capital spending by our key data storage customers in 2010, combined with the successful introduction of several new deposition tools to advance areal density, enabled Veeco to report revenue growth in both 2010 and 2011. Natural disasters in Japan (tsunami) and Thailand (floods) caused major disruptions to the HDD supply chain in 2011. Despite these disruptions the floods in Thailand resulted in an unexpected increase in orders in the fourth quarter of 2011.

Throughout these cycles, Veeco continues to invest in developing systems to support advanced technologies such as heat assisted magnetic recording (HAMR). HAMR is a technology that magnetically records data on high-stability media using laser thermal assistance to first heat the material. HAMR takes advantage of high-stability magnetic compounds that can store single bits in a much smaller area than in current hard drive technology. Veeco's Data Storage business is centered around core technologies where we have a leadership position. We utilize a flexible manufacturing strategy which helps mitigate the impact of industry cycles. In addition, Veeco's product development team has begun to identify non-hard drive market applications (such as LED and MEMS) for our key Data Storage technologies including mechanical process tools, etch and deposition technologies.

Our Products

	Year ended December 31,									
		2011			2009					
		(Dol	lars	in millio	ns)					
LED & Solar	\$	827.8	\$	795.6	\$	205.0				
% of net sales		84.5%	,	85.5%	, 2	72.6%				
Data Storage	\$	151.3	\$	135.3	\$	77.3				
% of net sales		15.5%	,	14.5%	ว	27.4%				
Total net sales	\$	979.1	\$	930.9	\$	282.3				

We have two business segments, LED & Solar and Data Storage. Net sales for these business segments are illustrated in the following table:

See Note 11 to our Consolidated Financial Statements for additional information regarding our reportable segments and sales by geographic location.

LED & Solar

Metal Organic Chemical Vapor Deposition Systems (MOCVD): We are one of the world's leading suppliers of MOCVD technology. MOCVD production systems are used to make GaN-based devices (green and blue LEDs) and As/P-based devices (red, orange and yellow LEDs), which are used today in television and laptop backlighting, general illumination, large area signage, specialty illumination and many other applications. Our As/P MOCVD Systems also are used to make high-efficiency concentrator photovoltaics. In 2011 Veeco introduced the industry's first production-proven multi-chamber MOCVD system, the MaxBright® for high-volume production of LEDs.

Molecular Beam Epitaxy Systems (MBE): 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. We provide MBE systems and components for the production of wireless devices (power amplifiers, high electron mobility transistors or hetero-junction bipolar transistors (pHEMTS and HBTs)) and a broad array of compound semiconductor materials research applications.

Data Storage

Ion Beam Deposition ("IBD") Systems: Our NEXUS® IBD systems utilize ion beam technology to deposit precise layers of thin films and may be included on our cluster system platform to allow either parallel or sequential etch/deposition processes. IBD systems deposit high purity thin film layers and provide maximum uniformity and repeatability. In addition to IBD systems, we provide a broad array of ion beam sources. These technologies are applicable in the hard drive industry as well as for optical coatings and other end markets.

Ion Beam Etch ("IBE") Systems: Our NEXUS IBE systems 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: Our NEXUS PVD systems offer manufacturers a highly flexible deposition platform for developing next-generation data storage applications.

Diamond-Like Carbon ("DLC") Deposition Systems: Our DLC deposition systems deposit protective coatings on advanced TFMHs.

Chemical Vapor Deposition ("CVD") Systems: Our NEXUS CVD systems deposit conformal films for advanced TFMH applications.

Precision Lapping, Slicing, and Dicing Systems: Our Optium® 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. We also manufacture tools that slice and dice wafers into rowbars and TFMHs.

Service and Sales

We sell our products and services worldwide through various strategically located sales and service facilities in the U.S., Europe and Asia Pacific, and we believe that our customer service organization is a significant factor in our success. We provide service and support on a warranty, service contract or an individual service-call basis. We offer 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. We believe that offering timely support creates stronger relationships with customers and provides us with a significant competitive advantage. Revenues from the sale of parts, service and support represented approximately 10%, 8% and 16% of our net sales for the years ended December 31, 2011, 2010 and 2009, respectively. Parts sales represented approximately 6%, 5% and 9% of our net sales for those years, respectively, and service and support sales were 4%, 3% and 7%, respectively.

Customers

We sell our products to many of the world's major HB LED, solar and hard drive manufacturers as well as to customers in other industries, research centers, and universities. We rely on certain principal customers for a significant portion of our sales. Sales to Elec-Tech International Co. Ltd. and Sanan Optoelectronics each accounted for more than 10% of Veeco's total net sales in 2011, LG Innotek Co. Ltd., Seoul OptoDevice Co. Ltd. and Sanan Optoelectronics each accounted for more than 10% of Veeco's total net sales in 2010 and LG Innotek Co. Ltd. and Seagate Technology, Inc. each accounted more than 10% of Veeco's total net sales in 2009. 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 and Marketing

Our marketing and research and development functions are organized by business unit. We believe that this organizational structure allows each business unit manager to more closely monitor the products for which he is responsible, resulting in more efficient marketing and research and development. Our research and development activities are organized by business unit and take place at our facilities in Plainview, New York; Camarillo, California; Ft. Collins, Colorado; Somerset, New Jersey; St. Paul, Minnesota; and Korea.

We believe that continued and timely development of new products and enhancements to existing products are necessary to maintain our competitive position. We work collaboratively with our customers to help ensure our technology and product roadmaps are aligned with customer requirements. Our research and development programs are organized by business unit and new or improved products have been introduced into each of our product lines in each of the past three years.

Our research and development expenses were approximately \$96.6 million, \$56.9 million and \$37.8 million, or approximately 10%, 6% and 13% of net sales for the years ended December 31, 2011, 2010 and 2009, respectively. These expenses consisted primarily of salaries, project materials and other product development and enhancement costs.

Suppliers

We currently outsource certain functions to third parties, including the manufacture of all or substantially all of our new MOCVD systems, Data Storage systems and ion sources. We primarily rely on several suppliers for the manufacturing of these systems. In addition, certain of the components and sub-assemblies included in our products are obtained from a single source or a limited group of suppliers.

Backlog

Our backlog decreased to \$332.9 million as of December 31, 2011 from \$535.4 million as of December 31, 2010. During the year ended December 31, 2011, we experienced net backlog adjustments of approximately \$41.4 million. The adjustments consisted of \$38.1 million of order cancellations and \$3.3 million related to other order adjustments. During the year ended December 31, 2011, we had a net positive adjustment related to foreign currency translation of \$0.1 million.

Our backlog consists of orders for which we received a firm purchase order, a customer-confirmed shipment date within twelve months and a deposit, where required.

Competition

In each of the markets that we serve, we face substantial competition from established competitors, some of which have greater financial, engineering and marketing resources than us, as well as from smaller competitors. In addition, many of our products face competition from alternative technologies, some of which are more established than those used in our products. Significant factors for customer selection of our tools include system performance, accuracy, repeatability, ease of use, reliability, cost of ownership and technical service and support. We believe that we are competitive based on the customer selection factors in each market we serve. None of our competitors compete with us across all of our product lines.

We compete with manufacturers such as Aixtron, Applied Materials, Canon Anelva Corporation, DCA Instruments, Leybold Optics, Oerlikon Balzers, Oxford Instruments, Toyo Nippon Sanso and Riber.

Intellectual Property

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

We have patents and exclusive and non-exclusive licenses to patents owned by others covering certain of our products, which we believe provide us with a competitive advantage. We have a policy of seeking patents on inventions concerning new products and improvements as part of our ongoing research, development and manufacturing activities. We believe that there is no single patent or exclusive or non-exclusive license to patents owned by others that is critical to our operations, as the success of our business depends primarily on the technical expertise, innovation, customer satisfaction and experience of our employees.

We also rely upon trade secret protection for our 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 our trade secrets or that we can meaningfully protect our trade secrets. In addition, we cannot be certain that we will not be sued by third parties alleging that we have infringed their patents or other intellectual property rights. If any third party sues us, our business, results of operations or financial condition could be materially adversely affected.

Employees

As of December 31, 2011, we had 917 employees, of which there were 195 in manufacturing and testing, 118 in sales and marketing, 187 in service and product support, 288 in engineering, research and development and 129 in information technology, general administration and finance. In addition, we also had 46 temporary employees/outside contractors, which support our variable cost strategy. The success of our future operations depends in large part on our ability to recruit and retain engineers,

technicians and other highly-skilled professionals who are in considerable demand. We feel that we have adequate programs in place to attract, motivate and retain our employees. We plan to monitor industry practices to make sure that our compensation and employee benefits remain competitive. However, there can be no assurance that we will be successful in recruiting or retaining key personnel. We believe that our relations with our 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 obtain information 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 *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*. We provide a link on our website, under Investors Financial 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.

Our operating results have been, and may continue to be, adversely affected by unfavorable market conditions.

Market conditions relative to the segments in which we operate have deteriorated significantly in many of the countries and regions in which we do business, and may remain depressed for the foreseeable future. Our MOCVD order volumes decreased significantly in the latter part of 2011 and are expected to remain depressed during 2012 and possibly beyond. Foreign government incentives designed to encourage the development of the LED industry have been curtailed, and the demand for our MOCVD products has softened. We have experienced and may continue to experience customer rescheduling and, to a lesser extent, cancellations of orders for our products. Actual market conditions and ordering volumes in 2012 and beyond may be worse than currently forecasted. Continuing adverse market conditions relative to our products would negatively impact our business, and could result in:

Further reduced demand for our products;

Further rescheduling and cancellations of orders for our products, resulting in negative backlog adjustments;

Increased price competition and lower margin for our products;

Increased competition from sellers of used equipment or lower-priced alternatives to our products;

Increased risk of excess and obsolete inventories;

Increased risk in the collectability of amounts due from our customers;

Increased risk in potential reserves for doubtful accounts and write-offs of accounts receivable;

Disruptions in our supply chain as we reduce our purchasing volumes and limit our contract manufacturing operations; and

Higher operating costs as a percentage of revenues.

If the markets in which we participate experience a protracted downturn and/or a slow recovery period, this could negatively impact our sales and revenue generation, margins and operating expenses, and consequently have a material adverse effect on our business, financial condition and results of operations.

Market adoption of LED technology for general lighting could be slower than anticipated.

Our future business prospects depend largely on the adoption of LED technology for general illumination applications, including residential, commercial and street lighting markets. Potential barriers to adoption include higher initial costs and customer familiarity with, and substantial investment and know-how in, existing lighting technologies. While the use of LED technology for general lighting has grown in recent years, challenges remain and widespread adoption may not occur at currently projected rates. The adoption of, or changes in, government policies that discourage the use of traditional lighting technologies may impact LED adoption rates and, in turn, the demand for our products. Furthermore, if new technologies evolve as a viable alternative to LED devices, our current products and technology could be placed at a competitive disadvantage or become obsolete altogether. Delays in the adoption of LED technology for general lighting purposes could materially and adversely affect our business, financial condition and results of operations.

Our failure to successfully manage our outsourcing activities or failure of our outsourcing partners to perform as anticipated could adversely affect our results of operations and our ability to adapt to fluctuating order volumes.

To better align our costs with market conditions, increase the percentage of variable costs relative to total costs and to increase productivity and operational efficiency, we have outsourced certain functions to third parties, including the manufacture of all or substantially all of our new MOCVD systems, Data Storage systems and ion sources. We are relying heavily on our outsourcing partners to perform their contracted functions and to allow us the flexibility to adapt to changing market conditions, including periods of significantly diminished order volumes. If our outsourcing partners do not perform as required, or if our outsourcing model does not allow us to realize the intended cost savings and flexibility, our results of operations (and those of our third party providers) may be adversely affected. Disputes and possibly litigation involving third party providers could result and we could suffer damage to our reputation. Dependence on contract manufacturing and outsourcing may also adversely affect our ability to bring new products to market. 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 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 in order to realize operational efficiencies, assure quality, and protect our intellectual property. If we do not effectively manage our outsourcing strategy or if third party providers do not perform as anticipated, we may not realize the benefits of productivity improvements and we may experience operational difficulties, increased costs, manufacturing and/or installation interruptions or delays, inefficiencies in the structure and/or operation of our supply chain, loss of intellectual property rights, quality issues, increased product time-to-market and/or inefficient allocation of human resources, any or all

The further reduction or elimination of foreign government subsidies and economic incentives may adversely affect the future order rate for our MOCVD equipment.

Approximately 66% and 29% of our revenues were generated in China for the years ended December 31, 2011 and December 31, 2010, respectively. In recent years, the Chinese government has provided various incentives to encourage development of the LED industry, including subsidizing a significant portion of the purchase cost of MOCVD equipment. These subsidies have enabled and encouraged certain customers in this region to purchase more of our MOCVD equipment than these customers might have purchased without these subsidies. These subsidies have now been curtailed and are expected to further decline over time and may end at some point in the future. The further reduction or elimination of these incentives may result in a further reduction in future orders for our MOCVD equipment in this region which could materially and adversely affect our business, financial condition and results of operations.

A related risk is that many customers use or had planned to use Chinese government subsidies, in addition to other incentives from the Chinese government, to build new manufacturing facilities or to expand existing manufacturing facilities. Delays in the start-up of these facilities or the cancellation of construction plans altogether, together with other related issues pertaining to customer readiness, could adversely impact the timing of our revenue recognition, could result in further order cancellations, and could have other negative effects on our financial condition and operating results.

Our operating results have been, and may continue to be, adversely affected by tightening credit markets.

As a global company with worldwide operations, we are subject to volatility and adverse consequences associated with worldwide economic downturns. As seen in recent years, in the event of a worldwide downturn, many of our customers may delay or further reduce their purchases of our products and services. If negative conditions in the global credit markets prevent our customers' access to credit, product orders in these channels may decrease which could result in lower revenue. Likewise, if our suppliers face challenges in obtaining credit, in selling their products or otherwise in operating their businesses, they may become unable to continue to offer the materials we use to manufacture our products. With the recent downturn in our MOCVD segment, we have experienced, and may continue to experience, lower than anticipated order levels, cancellations of orders in backlog, rescheduling of customer deliveries, and attendant pricing pressures, all of which could adversely affect our results of operations.

Furthermore, tightening macroeconomic measures and monetary policies adopted by China's government aimed at preventing overheating of China's economy and controlling China's high level of inflation have limited, and may continue to limit, the availability of financing to our customers in this region. Limited financing, or delays in the timing of such financing, may result in delays and cancellations of shipments of our products (and associated revenues) conditioned on such financing.

In addition, we finance a portion of our sales through trade credit. In addition to ongoing credit evaluations of our customers' financial condition, we seek to mitigate our credit risk by obtaining deposits and/or letters of credit on certain of our sales arrangements. We could suffer significant losses if a customer whose accounts receivable we have not secured fails or is otherwise unable to pay us. A significant loss in collections on our accounts receivable would have a negative impact on our financial results.

Our backlog is subject to customer cancellation or modification and such cancellation could result in decreased sales and increased provisions for excess and obsolete inventory and/or liabilities to our suppliers for products no longer needed.

Customer purchase orders are subject to cancellation or rescheduling by the customer, sometimes with limited or no penalties. Often, we have incurred expenses prior to such cancellation without adequate monetary compensation. During the year ended December 31, 2011, we experienced net backlog adjustments of approximately \$41.4 million. The adjustment consisted of \$38.1 million of order cancellations and \$3.3 million related to other order adjustments, partially offset by \$0.1 million of adjustments related to foreign currency translation. The current and forecasted downturn in our MOCVD segment could result in further increases in order cancellations and/or postponements.

We record a provision for excess and obsolete inventory based on historical and future usage trends and other factors including the consideration of the amount of backlog we have on hand at any particular point in time. If our backlog is canceled or modified, our estimates of future product demand may prove to be inaccurate, in which case we may have understated the provision required for excess and obsolete inventory. In the future, if we determine that our inventory is overvalued, we will be required to recognize such costs in our financial statements at the time of such determination. In addition, we place orders with our suppliers based on our customers' orders to us. If our customers cancel their orders with us, we may not be able to cancel our orders with our suppliers and may be required to take a charge for these cancelled commitments to our suppliers. Any such charges could be material to our results of operations and financial condition.

The failure to estimate customer demand accurately could result in excess or obsolete inventory and\or liabilities to our suppliers for products no longer needed, while manufacturing interruptions or delays could affect our ability to meet customer demand.

Our business depends on our ability to accurately forecast and supply equipment, services and related products that meet the rapidly changing technical and volume requirements of our customers, which depends in part on the timely delivery of parts, components and subassemblies (collectively, parts) from suppliers. The current uncertain worldwide economic conditions and market instabilities make it increasingly difficult for us (and our customers and our suppliers) to accurately forecast future product demand. If actual demand for our products is different than expected, we may purchase more/fewer parts than necessary or incur costs for canceling, postponing or expediting delivery of parts. If we overestimate the demand for our products, excess inventory could result which could be subject to heavy price discounting, which could become obsolete, and which could subject us to liabilities to our suppliers for products no longer needed. In addition, the volatility of demand for capital equipment increases capital, technical and other risks for companies in the supply chain.

Furthermore, some key parts may be subject to long lead-times and/or obtainable only from a single supplier or limited group of suppliers, and some sourcing or subassembly is provided by suppliers located in countries other than the United States. We may experience significant interruptions of our manufacturing operations, delays in our ability to deliver products or services, increased costs or customer order cancellations as a result of:

the failure or inability of suppliers to timely deliver quality parts;

volatility in the availability and cost of materials;

difficulties or delays in obtaining required import or export approvals;

information technology or infrastructure failures;

natural disasters (such as earthquakes, tsunamis, floods or storms); or

other causes (such as regional economic downturns, pandemics, political instability, terrorism, or acts of war) could result in delayed deliveries, manufacturing inefficiencies, increased costs or order cancellations.

In addition, in the event of an unanticipated increase in demand for our products, our need to rapidly increase our business and manufacturing capacity may be limited by working capital constraints of our suppliers and may exacerbate any interruptions in our manufacturing operations and supply chain and the associated effect on our working capital. Any or all of these factors could materially and adversely affect our business, financial condition and results of operations.

The cyclicality of the industries we serve directly affects our business.

Our business depends in large part upon the capital expenditures of manufacturers in the HB LED and data storage markets. We are 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 proportion of our costs are fixed, our ability to reduce expenses quickly in response to revenue shortfalls may be limited. Downturns in one or more of these industries, including the current MOCVD downturn, have had and will likely have a material adverse effect on our business, financial condition and operating results. Alternatively, 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 rely on a limited number of suppliers, some of whom are our sole source for particular components.

We currently outsource certain functions to third parties, including the manufacture of all or substantially all of our new MOCVD systems, Data Storage systems and ion sources. We primarily rely on several suppliers for the manufacturing of these systems. We plan to maintain some level of internal manufacturing capability for these systems. The failure of our present suppliers to meet their contractual obligations under our supply arrangements and our inability to make alternative arrangements or resume the manufacture of these systems ourselves could have a material adverse effect on our revenues, profitability, cash flows, and relationships with our customers.

In addition, certain of the components and sub-assemblies included in our products are obtained from a single source or a limited group of suppliers. Our inability to develop alternative sources, if necessary, could result in a prolonged interruption in supply or a significant increase in the price of one or more components, which could adversely affect our operating results.

Our sales to HB LED and data storage manufacturers are highly dependent on these manufacturers' sales for consumer electronics applications, which can experience significant volatility due to seasonal and other factors, which could materially adversely impact our future results of operations.

The demand for HB LEDs and hard disk drives is highly dependent on sales of consumer electronics, such as flat-panel televisions and computer monitors, computers, tablets, digital video recorders, camcorders, MP3\4 players, smartphones, cell phones and other mobile devices. Manufacturers of HB LEDs and hard disk drives are among our largest customers and have accounted



for a substantial portion of our revenues for the past several years. Factors that could influence the levels of spending on consumer electronic products include consumer confidence, access to credit, volatility in fuel and other energy costs, conditions in the residential real estate and mortgage markets, labor and healthcare costs and other macroeconomic factors affecting consumer spending behavior. These and other economic factors have had and could continue to have a material adverse effect on the demand for our customers' products and, in turn, on our customers' demand for our products and services and on our financial condition and results of operations. Furthermore, manufacturers of HB LEDs have in the past overestimated their potential market share growth. If this growth is currently overestimated or is overestimated in the future, we may experience further cancellations of orders in backlog, rescheduling of customer deliveries, obsolete inventory and/or liabilities to our suppliers for products no longer needed.

In addition, the demand for some of our customers' products can be even more volatile and unpredictable due to the possibility of competing technologies, such as flash memory as an alternative to hard disk drives. Should flash memory become cost competitive it may result in a rapid shift in demand from the hard disk drives made by our customers to alternative storage technologies. Unpredictable fluctuations in demand for our customers' products or rapid shifts in demand from our customers' products to alternative technologies could materially adversely impact our future results of operations.

We are exposed to the risks of operating a global business, including the need to obtain export licenses for certain of our shipments and political risks in the countries we operate.

Approximately 90% of our 2011 net sales, 90% of our 2010 net sales and 79% of our 2009 net sales were generated from sales outside of 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,

regional economic downturns, varying foreign government support, and unstable political environments,

political and social attitudes, laws, rules, regulations and policies within countries that favor domestic companies over non-domestic companies, including government-supported efforts to promote the development and growth of local competitors,

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,

reliance on various information systems and information technology to conduct our business, which may be vulnerable to cyber attacks by third parties or breached due to employee error, misuse or other causes that could result in business disruptions, loss of or damage to intellectual property, transaction errors, processing inefficiencies, or other adverse consequences should our security practices and procedures prove ineffective, and

different customs and ways of doing business.

These challenges, many of which are associated with sales into China, 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 or disrupt our business and results of operations.

Furthermore, products which are either manufactured in the United States or based on U.S. technology are subject to the United States Export Administration Regulations ("EAR") when exported to and re-exported from international jurisdictions, in addition to the local jurisdiction's export regulations applicable to individual shipments. Currently, our MOCVD deposition systems and certain of our other products are controlled for export under the EAR. Licenses or proper license exceptions may be required for the shipment of our products to certain countries. For example, shipment of our MOCVD systems to China and certain other countries generally requires a U.S. export license. Obtaining an export license requires cooperation from the customer and customer-facility readiness, and can add time to the order fulfillment process. While we have generally been very successful in obtaining export licenses in a timely manner, there can be no assurance that this will continue or that an export license can be obtained in each instance where it is required. If an export license is required but cannot be obtained, then we will not be permitted to export the product to the customer. The administrative processing, potential delay and risk of ultimately not obtaining an export license pose a particular disadvantage to us relative to our non-U.S. competitors who are not required to comply with U.S. export controls. Non-compliance with the EAR or other applicable export regulations could result in a wide range of penalties including the denial of export privileges, fines, criminal penalties, and the seizure of commodities. In the event that any export regulatory body determines that any of our shipments violate applicable export regulations, we could be fined significant sums and/or our export capabilities could be restricted, which could have a material adverse impact on our business.

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 sale 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.

We operate in industries characterized by rapid technological change.

All of our businesses 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 2012 and in the future will depend to a great extent on the successful introduction of several new products, many of which require achieving increasingly stringent technologies or in enhancing existing products.

We face significant competition.

We face significant competition throughout the world in each of our reportable segments, which may increase as certain markets in which we operate continue to expand. Some 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, with a focused approach on innovative technology for 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, located primarily in a limited number of regions, 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, our five largest customers accounted for 41%, 55% and 52% of our total net sales in 2011, 2010 and 2009, respectively. Recent customer consolidation activity involving some of our largest customers, particularly in our Data Storage segment, may result in an even greater concentration of our sales in the future.

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.

Our customer base is also highly concentrated in terms of geography, and the majority of our sales are to customers located in a limited number of countries. In 2011, 75% of our total net sales were to customers located in China, Taiwan and Korea alone. Dependence upon sales emanating from a limited number of regions increases our risk of exposure to local difficulties and challenges, such as those associated with regional economic downturns, political instability, fluctuating currency exchange rates, natural disasters, social unrest, pandemics, terrorism or acts of war. In addition, we may encounter challenges associated with political and social attitudes, laws, rules, regulations and policies within these countries that favor domestic companies over non-domestic companies, including customer- or government-supported efforts to promote the development and growth of local competitors. Our reliance upon customer demand arising primarily from a limited number of countries could materially adversely impact our future results of operations.

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 or longer. 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.

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 and marketing positions, as well as highly skilled and qualified technical personnel and personnel to implement and monitor our financial and managerial controls and reporting systems. Attracting, retaining, and motivating such 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. While we have entered into Employment Agreements with certain key personnel, our inability to attract, retain, and motivate key personnel could have a material adverse effect on our business, financial condition or operating results.

The price of our common shares may be volatile and could decline significantly.

The stock market in general and the market for technology stocks in particular, has experienced volatility that has often been unrelated to the operating performance of companies. If these market or industry-based fluctuations continue, the trading price of our common shares could decline significantly independent of our actual operating performance, and shareholders could lose all or a substantial part of their investment. The market price of our common shares could fluctuate significantly in response to several factors, including among others:

general stock market conditions and uncertainty, such as those occasioned by a global liquidity crisis, negative financial news, and a failure of large financial institutions;

receipt of substantial orders or cancellations for our products;

actual or anticipated variations in our results of operations;

announcements of financial developments or technological innovations;

our failure to meet the performance estimates of investment research analysts;

changes in recommendations and/or financial estimates by investment research analysts;

strategic transactions, such as acquisitions, divestitures or spin-offs; and

the occurrence of major catastrophic events.

Significant price and value fluctuations have occurred with respect to the publicly traded securities of the Company and technology companies generally. The price of our common shares is likely to be volatile in the future. In the past, securities class action litigation often has been brought against a company following periods of volatility in the market price of its securities. If similar litigation were pursued against us, it could result in substantial costs and a diversion of management's attention and resources, which could materially and adversely affect our results of operations, financial condition and liquidity.

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, 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.

The enforcement and protection of our intellectual property rights may be expensive and could divert our limited resources.

Our success depends in part upon the protection of our intellectual property rights. We rely primarily on patent, copyright, trademark and trade secret laws, as well as nondisclosure and confidentiality agreements and other methods, to protect our proprietary information, technologies and processes. 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. Policing unauthorized use of our products and technologies is difficult and time consuming. Furthermore, the laws of other countries may less effectively protect our proprietary rights than U.S. laws. Our outsourcing strategy requires that we share certain portions of our technology with our outsourcing partners, which poses additional risks of infringement and trade secret misappropriation. Infringement of our rights by a third party, possibly for purposes of developing and selling competing products, could result in uncompensated lost market and revenue opportunities. Similar exposure could result in the event that former employees seek to compete with us, through their unauthorized use of our intellectual property and proprietary information. We cannot be certain that the steps we have taken will prevent the misappropriation or unauthorized use of our proprietary information and technologies, particularly in foreign countries where the laws may not protect our proprietary intellectual property rights as fully or as readily as United States laws. Further, we cannot be certain that the laws and policies of any country, including the United States, with respect to intellectual property enforcement or licensing will not be changed in a way detrimental to the sale or use of our products or technology.

We may need to litigate to enforce our intellectual property rights, protect our trade secrets or determine the validity and scope of proprietary rights of others. As a result of any such litigation, we could lose our ability to enforce one or more patents or incur substantial unexpected operating costs. Any action we take to enforce our intellectual property rights could be costly and could absorb significant management time and attention, which, in turn, could negatively impact our operating results. In addition, failure to protect our trademark rights could impair our brand identity.

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;

unknown, underestimated and/or undisclosed commitments or liabilities;

increased amortization expense relating to intangible assets; and

the potential impairment and write-down of amounts capitalized as intangible assets and goodwill as part of the acquisition, 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. 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.

We may be required to take additional impairment charges for goodwill and indefinite-lived intangible assets or definite-lived intangible and long-lived assets.

We are required to assess goodwill and indefinite-lived intangible assets annually for impairment, or on an interim basis whenever certain events occur or circumstances change, such as an adverse change in business climate or a decline in the overall industry, that would more likely than not reduce the fair value of a reporting unit below its carrying amount. We are also required to test our definite-lived intangible and long-lived assets, including acquired intangible assets and property, plant and equipment, for recoverability and impairment whenever there are indicators of impairment, such as an adverse change in business climate. During 2011 we discontinued our CIGS solar systems business. As a result we recorded a \$2.1 million asset impairment charge, relating to indefinite-lived intangible assets and a \$10.8 million goodwill impairment charge related to the write-off of these assets (see Note 3 of our Consolidated Financial Statements).

At December 31, 2011, we had \$55.8 million of goodwill and \$114.3 million of intangible and long-lived assets, including \$86.1 million of property, plant and equipment and \$2.3 million of assets

held for sale. As part of our long-term strategy, we may pursue future acquisitions of other companies or assets which could potentially increase our goodwill and intangible and long-lived assets. Adverse changes in business conditions could materially impact our estimates of future operations and result in additional impairment charges to these assets. If our goodwill or intangible and long-lived assets were to become further impaired, our results of operations could be materially and adversely affected.

Changes in accounting pronouncements or taxation rules or practices may adversely affect our financial results.

Changes in accounting pronouncements or taxation rules or practices can have a significant effect on our reported results. See "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations Application of Critical Accounting Policies" below. New accounting pronouncements or taxation rules and varying interpretations of accounting pronouncements or taxation practices have occurred and may occur in the future. New rules, changes to existing rules, if any, or the questioning of current practices may adversely affect our reported financial results or change the way we conduct our business.

We are subject to internal control evaluations and attestation requirements of Section 404 of the Sarbanes-Oxley Act.

Pursuant to Section 404 of the Sarbanes-Oxley Act of 2002, we must include in our Annual Report on Form 10-K a report of management on the effectiveness of our internal control over financial reporting. Ongoing compliance with this requirement is complex, costly and time-consuming. Although our assessment, testing, and evaluation resulted in our conclusion that, as of December 31, 2011, our internal controls over financial reporting were effective, we cannot predict the outcome of our testing in future periods. If our internal controls are ineffective in future periods, or if our management does not timely assess the adequacy of such internal controls, we could be subject to regulatory sanctions, the public's perception of our Company may decline and our financial results or the market price of our shares could be adversely affected.

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

We are subject to environmental, health 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 significant operations in locations which could be materially and adversely impacted in the event of a natural disaster or other significant disruption.

Our operations in the U.S., the Asia-Pacific region and in other areas could be subject to natural disasters or other significant disruptions, including earthquakes, tsunamis, fires, hurricanes, floods, water shortages, other extreme weather conditions, medical epidemics, acts of terrorism, power shortages and blackouts, telecommunications failures, and other natural and manmade disasters or disruptions. Two such occurrences in 2011 include the earthquake and tsunami in Japan and the severe flooding in Thailand. In the event of such a natural disaster or other disruption, we could experience disruptions or interruptions to our operations or the operations of our suppliers, distributors, resellers or customers; destruction of facilities; and/or loss of life, all of which could materially increase our costs and expenses and materially and adversely affect our business, revenue and financial condition.

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 our Company 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; 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 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 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

Our corporate headquarters and our principal product development and marketing, manufacturing, research and development and training facilities, as well as the approximate size and the segments which utilize such facilities, are:

Approximate Size (sq. ft.)	Mortgaged	Use
80,000	No	Data Storage, LED & Solar and
,		Corporate Headquarters
80,000	No	LED & Solar
38,000	No	LED & Solar
125,000	Yes	LED & Solar
110,000	No	Former Metrology Site held for sale
	Size (sq. ft.) 80,000 80,000 38,000 125,000	Size Mortgaged (sq. ft.) Mortgaged 80,000 No 80,000 No 38,000 No 125,000 Yes

	Approximate Size	Lease	
Leased Facilities Location	(sq. ft.)	Expires	Use
			Data Storage and partially held for
Camarillo, CA(3)	26,000	2012	sublease
Fort Collins, CO	26,000	2013	Data Storage
Lowell, MA(4)	28,000	2012	Vacated LED & Solar Facility
Tewksbury, MA(4)	88,900	2013	Vacated LED & Solar Facility
Somerset, NJ	14,000	2012	LED & Solar
Kingston, NY	36,500	2018	LED & Solar
Shanghai, China(5)	17,400	2012	Customer Training Center
			Sales Office & Customer Training
Hsinchu City, Taiwan	13,500	2015	Center

(1)

Our LED & Solar segment utilizes approximately 95,000 square feet of this facility. The balance is available for expansion.

(2)

We vacated this facility during the fourth quarter of 2010 in conjunction with the sale of our Metrology segment to Bruker. We are actively marketing this office for sale.

(3)

We vacated this facility during the second quarter of 2009 in conjunction with the outsourcing of manufacturing for certain Data Storage product lines. We have reoccupied a portion of this space and are marketing the remaining space for sublease.

(4)

We vacated these facilities during the third quarter of 2011 in conjunction with the discontinuance of our CIGS Solar systems business.

(5)

We have the option to renew this lease for three consecutive two year terms and also have the option to purchase this facility.

The St. Paul, Minnesota facility is subject to a mortgage which, at December 31, 2011, had an outstanding balance of \$2.7 million. We also lease small offices in Santa Clara, California and Edina, Minnesota for sales and service. Our foreign sales and service subsidiaries lease office space in England, France, Germany, Japan, Korea, Malaysia, Singapore, Thailand, Philippines and China. We believe our facilities are adequate to meet our current needs.

Item 3. Legal Proceedings

Environmental

We 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 our Plainview, New York facility. We have been indemnified by the former owner for any liabilities we 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, we do not believe that any material loss or expense is probable in connection with any remediation plan that may be proposed.

We are aware that petroleum hydrocarbon contamination has been detected in the soil at the site of a facility formerly leased by us in Santa Barbara, California. We have been indemnified for any liabilities we may incur which arise from environmental contamination at the site. Even without consideration of such indemnification, we do 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 Santa Barbara, California in which our former Metrology operations were located (which business was sold to Bruker on October 7, 2010), has disclosed that there are hazardous substances present in the ground under the building. Management believes that the comprehensive indemnification clause that was part of the purchase contract relating to the purchase of such land provides adequate protection against any environmental issues that may arise. We have provided Bruker with similar indemnification as part of the sale.

Non-Environmental

We are involved in various other legal proceedings arising in the normal course of our business. We do not believe that the ultimate resolution of these matters will have a material adverse effect on our consolidated financial position, results of operations or cash flows.

Item 4. Mine Safety Disclosures Not Applicable

PART II

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

Our common stock is quoted on The NASDAQ National Market under the symbol "VECO." The 2011 and 2010 high and low closing bid prices by quarter are as follows:

		20	11			20	10	
	J	High		Low]	High		Low
First Quarter	\$	52.70	\$	42.82	\$	43.72	\$	30.42
Second Quarter		57.59		46.47		51.61		31.79
Third Quarter		47.21		24.40		45.52		31.02
Fourth Quarter		29.20		20.80		49.97		33.71

On February 21, 2012, the closing bid price for our common stock on the NASDAQ National Market was \$28.89 and we had 131 shareholders of record.

We have not paid dividends on our common stock. The Board of Directors will determine future dividend policy based on our 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 S&P Smallcap 600 Index, The PHLX Semiconductor Index, and the RDG MidCap Technology Index

\$100 invested on 12/31/06 in stock or index, including reinvestment of dividends. Fiscal year ending December 31.

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ASSUMES \$100 INVESTED ON DEC. 31, 2006 ASSUMES DIVIDENDS REINVESTED FISCAL YEAR ENDING DEC. 31

	2006	2007	2008	2009	2010	2011
Veeco Instruments Inc.	100.00	89.16	33.85	176.40	229.36	111.05
S&P Smallcap 600	100.00	99.70	68.72	86.29	108.99	110.10
PHLX Semiconductor	100.00	107.88	60.06	97.21	109.11	107.58
RDG MidCap Technology	100.00	101.28	50.15	78.00	97.97	86.45
				27		

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 our Consolidated Financial Statements and notes thereto included elsewhere in this Form 10-K.

	Year ended December 31,									
	2011(1)			2010(2)		2009(3)	2008(4)			2007(5)
				(In thousa	nds,	except per s	hare	e data)		
Statement of Operations Data:										
Net sales	\$	979,135	\$	930,892	\$	282,262	\$	302,067	\$	252,031
Operating income (loss) from continuing operations		276,259		303,253		7,631		(44,055)		(18,245)
Income (loss) from continuing operations net of income taxes		190,502		277,176		(1,777)		(48,748)		(23,655)
(Loss) income from discontinued operations net of income taxes		(62,515)		84,584		(13,855)		(26,673)		3,817
Net loss attributable to noncontrolling interest						(65)		(230)		(628)
Net income (loss) attributable to Veeco	\$	127,987	\$	361,760	\$	(15,567)	\$	(75,191)	\$	(19,210)
Income (loss) per common share attributable to Veeco:										
Basic:										
Continuing operations	\$	4.80	\$	7.02	\$	(0.05)	\$	(1.55)	\$	(0.74)
Discontinued operations		(1.57)		2.14		(0.43)		(0.85)		0.12
Income (loss)	\$	3.23	\$	9.16	\$	(0.48)	\$	(2.40)	\$	(0.62)
Diluted :										
Continuing operations	\$	4.63	\$	6.52	\$	(0.05)	\$	(1.55)	\$	(0.74)
Discontinued operations		(1.52)		1.99		(0.43)		(0.85)		0.12
Income (loss)	\$	3.11	\$	8.51	\$	(0.48)	\$	(2.40)	\$	(0.62)
Weighted average shares outstanding:										
Basic		39,658		39,499		32,628		31,347		31,020
Diluted		41,155		42,514		32,628		31,347		31,020

]	Dece	mber 31,				
2011		2010		2009		2008		2007
		(In tl	nousands)				
\$ 217,922	\$	245,132	\$	148,500	\$	102,521	\$	116,875
273,591		394,180		135,000				
577		76,115						
587,076		640,139		317,317		168,528		112,089
55,828		52,003		52,003		51,741		71,544
936,063		1,148,034		605,372		429,541		529,334
2,654		104,021		101,176		98,526		132,118
760,520		762,512		359,059		225,026		288,144
\$	\$ 217,922 273,591 577 587,076 55,828 936,063 2,654	\$ 217,922 \$ 273,591 577 587,076 55,828 936,063 2,654	2011 2010 \$ 217,922 \$ 245,132 273,591 394,180 577 76,115 587,076 640,139 55,828 52,003 936,063 1,148,034 2,654 104,021	2011 2010 (In the second	Image: Constraint of the second sec	2011 2010 2009 (In thousands) \$ 217,922 \$ 245,132 \$ 148,500 \$ \$ 217,922 \$ 245,132 \$ 148,500 \$ \$ 273,591 394,180 135,000 \$ \$ 577 76,115 \$ \$ \$ 587,076 640,139 317,317 \$ \$ 55,828 52,003 52,003 \$ \$ 936,063 1,148,034 605,372 \$ \$ 2,654 104,021 101,176 \$	2011 2010 2009 2008 (In thousands) \$ 217,922 \$ 245,132 \$ 148,500 \$ 102,521 \$ 217,922 \$ 245,132 \$ 148,500 \$ 102,521 \$ 273,591 394,180 135,000 \$ 102,521 \$ 577 76,115 \$ \$ 168,528 \$ 55,828 52,003 52,003 \$ 51,741 \$ 936,063 1,148,034 605,372 429,541 \$ 2,654 104,021 101,176 \$ 98,526	2011 2010 2009 2008 (In thousands) \$ 217,922 \$ 245,132 \$ 148,500 \$ 102,521 \$ \$ 217,922 \$ 245,132 \$ 148,500 \$ 102,521 \$ 273,591 394,180 135,000 - - - - 577 76,115 -

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On July 28, 2011, we announced a plan to discontinue our CIGS solar systems business. The action was completed on September 27, 2011. Accordingly, the results of operations for the CIGS solar

systems business have been recorded as discontinued operations in the accompanying consolidated results of operations for all periods presented. During the year ended December 31, 2011, total discontinued operations include pre-tax charges totaling \$69.8 million. These charges include an asset impairment charge totaling \$6.2 million, a goodwill write-off of \$10.8 million, an inventory write-off totaling \$27.0 million, charges to settle contracts totaling \$22.1 million, lease related charges totaling \$1.4 million and personnel severance charges totaling \$2.3 million.

(2)

On August 15, 2010, we signed a definitive agreement to sell our Metrology business to Bruker comprising our entire Metrology reporting segment for \$229.4 million. Accordingly, Metrology's operating results are accounted for as discontinued operations in determining the consolidated results of operations. The sales transaction closed on October 7, 2010, except for assets located in China due to local restrictions. Total proceeds, which included a working capital adjustment of \$1 million, totaled \$230.4 million of which \$7.2 million relates to the assets in China. As part of our agreement with Bruker, \$22.9 million of proceeds was held in escrow and was restricted from use for one year from the closing date of the transaction to secure certain specified losses arising out of breaches of representations, warranties and covenants we made in the stock purchase agreement and related documents. The restriction relating to the escrowed proceeds was released on October 6, 2011. As part of the sale we incurred transaction costs, which consisted of investment bank fees and legal fees, totaling \$5.2 million. The Company recognized a pre-tax gain on disposal of \$156.3 million and a pre-tax deferred gain of \$5.4 million related to the assets in China.

In addition, operating income and income from continuing operations includes a restructuring credit of \$0.2 million.

Operating loss and net loss from continuing operations include restructuring expenses of \$4.5 million, as well as an asset impairment charge of \$0.3 million for property, plant and equipment no longer being utilized in our Data Storage segment and a \$1.5 million inventory write-off associated with Data Storage legacy products.

(4)

(3)

Operating loss and net loss from continuing operations include a \$51.4 million asset impairment charge of which \$30.4 million was related to goodwill and \$21.0 million was related to other long-lived assets, a restructuring charge of \$9.4 million consisting of lease-related commitments, the mutually agreed-upon termination of the employment agreement with our former CEO and personnel severance costs. Net loss from continuing operations also reflects a net gain from the early extinguishment of debt in the amount of \$3.8 million.

(5)

Operating loss and net loss from continuing operations include restructuring expenses of \$4.8 million, as well as charges of \$1.1 million and \$4.8 million associated with the write-off of property and equipment and inventory, respectively, related to product lines discontinued as part of management's cost reduction plan. Net loss from continuing operations also reflects a net gain from the early extinguishment of debt in the amount of \$0.7 million.

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

Executive Summary

Veeco Instruments Inc. (together with its consolidated subsidiaries, "Veeco," the "Company" or "we") creates Process Equipment solutions that enable technologies for a cleaner and more productive world. We design, manufacture and market equipment primarily sold to make light emitting diodes ("LEDs") and hard-disk drives, as well as for emerging applications such as concentrator photovoltaics, power semiconductors, wireless components, microelectromechanical systems (MEMS), and other next-generation devices.

Veeco focuses on developing highly differentiated, "best-in-class" Process Equipment products for critical performance steps. Our products feature leading technology, low cost-of-ownership and high throughput, offering a time-to-market advantage for our customers around the globe. Core competencies in advanced thin film technologies, over 150 patents and decades of specialized process know-how helps us to stay at the forefront of these demanding industries.

Veeco's LED & Solar segment designs and manufactures metal organic chemical vapor deposition ("MOCVD") and molecular beam epitaxy ("MBE") systems and components sold to manufacturers of LEDs, wireless devices, power semiconductors, and concentrator photovoltaics, as well as to R&D applications. In 2011 we discontinued the sale of our products related to Copper, Indium, Gallium, Selenide ("CIGS") solar systems technology.

Veeco's Data Storage segment designs and manufactures the critical technologies used to create thin film magnetic heads ("TFMHs") that read and write data on hard disk drives. These technologies include ion beam etch (IBE), ion beam deposition (IBD), diamond-like carbon (DLC), physical vapor deposition (PVD), chemical vapor deposition (CVD), and slicing, dicing and lapping systems. While these technologies are primarily sold to hard drive customers, they also have applications in optical coatings and other markets.

Veeco's approximately 900 employees support our customers through product and process development, training, manufacturing, and sales and service sites in the U.S., Korea, Taiwan, China, Singapore, Japan, Europe and other locations.

Summary of Results for 2011

Selected financial highlights include:

Revenue increased 5% to \$979.1 million in 2011 from \$930.9 million in 2010. LED & Solar revenues increased 4% to \$827.8 million from \$795.6 million in 2010. Data Storage revenues increased 12% to \$151.3 million from \$135.3 million in 2010;

Orders were down 27%, to \$817.9 million in 2011, compared to \$1,121.6 million in 2010;

Our gross margin increased slightly, to 48.4%, for 2011 compared to 48.3% for 2010. Gross margins in LED & Solar decreased from 48.3% in 2010 to 48.0%, while Data Storage gross margins increased from 48.4% to 50.7%.

Our selling, general and administrative expenses increased to \$95.1 million, up from \$87.3 million in 2010, remaining at about 10% of net sales.

Our research and development expenses increased to \$96.6 million from \$56.9 million in 2010. Research and development expenses were 10% of net sales in 2011, compared with 6% in 2010;

Net income from continuing operations in 2011 was \$190.5 million compared \$277.2 million in 2010;

Diluted net income from continuing operations per share was \$4.63 compared to \$6.52 in 2010.

Business Highlights of 2011

In 2011, Veeco achieved revenue of \$979.1 million and net income from continuing operations of \$190.5 million. During the first half of 2011 Veeco experienced strong levels of business driven by growth in LED, including new orders in excess of \$300 million in second quarter of 2011. Business conditions began to deteriorate mid-year due to oversupply in the LED market and Veeco's bookings slowed dramatically in the third and fourth quarters of the year.

Veeco's revenue increase in our LED & Solar segment was primarily due to penetration of new customers, including strong adoption of our MOCVD technology by a rapidly expanding Chinese customer base, increased market share, and the introduction of the industry's first multi-chamber MOCVD System, the MaxBright.

Veeco's Data Storage business delivered record revenue and profit levels as a result of strong technology alignment with our key customers, and our flexible manufacturing strategy.

Outlook

Veeco's first quarter 2012 revenue is currently forecasted to be between \$115 million and \$140 million. Earnings per share are currently forecasted to be between \$0.04 and \$0.25.

We don't see signs of near-term improvement in the LED environment and the current overcapacity situation could mean that MOCVD orders remain at these depressed levels for multiple quarters. In Data Storage, while overall market conditions are healthy, the continued consolidation of our customer base will likely mean that order patterns will fluctuate from quarter to quarter.

The LED industry is currently experiencing an overcapacity situation, evidenced by low tool utilization rates being reported by many key global customers. As a result, new orders for Veeco's MOCVD systems declined sharply in both the third and fourth quarters of 2011 and we do not see signs of a near-term improvement in MOCVD business conditions. In the short term, it is difficult for us to predict when the supply/demand of LEDs will return to equilibrium and what the demand for our MOCVD products will be. According to the Semiconductor Equipment and Materials Industry's (SEMI) January 2012 Opto/LED Fab Watch report, worldwide MOCVD purchases will decline by 40% in 2012 compared to 2011. While Veeco is currently expecting revenue growth in its Data Storage and MBE businesses in 2012, the Company has forecasted that total revenue will decline from 38-48% in 2012 to be in the range of \$500-600 million as a result of the cyclical downturn in MOCVD equipment purchases.

Our outlook discussion above constitutes "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. Our expectations regarding future results are subject to risks and uncertainties. Our actual results may differ materially from those anticipated.

You should not place undue reliance on any forward-looking statements, which speak only as of the dates they are made.

Results of Operations

Years Ended December 31, 2011 and 2010

The following table shows our Consolidated Statements of Income, percentages of sales and comparisons between 2011 and 2010 (dollars in 000s):

	Year ended December 31,						Dollar and Percentage Change		
	2011			2010			Year to Ye		
Net sales	\$ 979,135	100.0%	\$	930,892	100.0%	\$	48,243	5.2%	
Cost of sales	504,801	51.6		481,407	51.7		23,394	4.9	
Gross profit	474,334	48.4		449,485	48.3		24,849	5.5	
Operating expenses (income):									
Selling, general and administrative	95,134	9.7		87,250	9.4		7,884	9.0	
Research and development	96,596	9.9		56,948	6.1		39,648	69.6	
Amortization	4,734	0.5		3,703	0.4		1,031	27.8	
Restructuring	1,288	0.1		(179)	(0.0)		1,467	(819.6)	
Asset impairment	584	0.1					584	*	
Other, net	(261)	(0.0)		(1,490)	(0.2)		1,229	(82.5)	
Total operating expenses	198,075	20.2		146,232	15.7		51,843	35.5	
Operating income	276,259	28.2		303,253	32.6		(26,994)	(8.9)	
Interest expense, net	824	0.1		6,572	0.7		(5,748)	(87.5)	
Loss on extinguishment of debt	3,349	0.3					3,349	*	
Income from continuing operations before income									
taxes	272,086	27.8		296,681	31.9		(24,595)	(8.3)	
Income tax provision	81,584	8.3		19,505	2.1		62,079	318.3	
Income from continuing operations	190,502	19.5		277,176	29.8		(86,674)	(31.3)	
Discontinued operations:									
(Loss) income from discontinued operations before									
income taxes	(91,885)	(9.4)		129,776	13.9		(221,661)	*	
Income tax (benefit) provision	(29,370)	(3.0)		45,192	4.9		(74,562)	*	
(Loss) income from discontinued operations	(62,515)	(6.4)		84,584	9.1		(147,099)	*	
Net income	\$ 127,987	13.1%	\$	361,760	38.9%	\$	(233,773)	(64.6)%	

*

Not Meaningful

Net Sales and Orders

Net sales of \$979.1 million for the year ended December 31, 2011, were up 5.2% compared to 2010. The following is an analysis of sales and orders by segment and by region (dollars in 000s):

		Sal	es							
	Year Decem			r and ge Change		ended nber 31,	Dollar a Percentage		Book t Ra	
	2011	2010	Year t	o Year	2011	2010	Year to Y	Year	2011	2010
Segment Analysis										
LED & Solar	\$ 827,797	\$ 795,565	\$ 32,23	2 4.1% 5	\$ 650,608	\$ 968,143	\$ (317,535)	(32.8)%	0.79	1.22
Data Storage	151,338	135,327	16,01	1 11.8	167,249	153,406	13,843	9.0	1.11	1.13
Total	\$ 979,135	\$ 930,892	\$ 48,24	3 5.2% 5	\$ 817,857	\$ 1,121,549	\$ (303,692)	(27.1)%	0.84	1.20
Regional Analysis										
Americas	\$ 100,635	\$ 92,646	\$ 7,98	9 8.6% 5	\$ 87,355	\$ 107,039	\$ (19,684)	(18.4)%	0.87	1.16
Europe, Middle East and										
Africa ("EMEA")	57,617	92,112	(34,49)	5) (37.4)	52,366	83,784	(31,418)	(37.5)	0.91	0.91
Asia Pacific ("APAC")										
China	649,846	266,813	383,03	3 143.6	479,141	537,740	(58,599)	(10.9)	0.74	2.02
Taiwan	64,228	101,130	(36,90	2) (36.5)	60,455	112,016	(51,561)	(46.0)	0.94	1.11
Korea	24,701	301,026	(276,32	5) (91.8)	14,813	207,337	(192,524)	(92.9)	0.60	0.69
Other APAC	82,108	77,165	4,94	3 6.4	123,727	73,633	50,094	68.0	1.51	0.95
APAC	820,883	746,134	74,74	9 10.0	678,136	930,726	(252,590)	(27.1)	0.83	1.25
T-4-1	¢ 070 125	¢ 020 802	¢ 49.04	2 5 201 9	h 017 057	¢ 1 121 540	¢ (202 (02)	(27.1)(1	0.94	1.20
Total	\$ 979,135	\$ 930,892	\$ 48,24	5 5.2% 5	\$ 817,857	\$ 1,121,549	\$ (303,692)	(27.1)%	0.84	1.20

By segment, LED & Solar sales increased 4.1% in 2011 primarily due to increases in shipments of our newest systems as compared to 2010 (3.9% increase in MOCVD reactor shipments from 2010) as a result of the high demand which slowed by the beginning of the second half 2011 for LED applications. Data Storage sales also increased 11.8%, primarily as a result of an increase in capital spending by data storage customers for capacity and technology buys. LED & Solar sales represented 84.5% of total sales for the year ended December 31, 2011, down from 85.5% in the prior year. Data Storage sales accounted for 15.5% of net sales, up from 14.5% in the prior year. By region, net sales increased by 10.0% in Asia Pacific, primarily due to MOCVD sales to HB LED customers. In addition, sales in the Americas increased 8.6% and sales in EMEA decreased 37.4%. We believe that there will continue to be year-to-year variations in the geographic distribution of sales.

Orders in 2011 decreased 27.1% compared to 2010, primarily attributable to a 32.8% decrease in LED & Solar orders that were principally driven by a mid-year deterioration due to oversupply in the LED market, slowing orders dramatically in the third and fourth quarters after hitting a peak in the second quarter of 2011. Data Storage orders increased 9.0% from the continued increase in our customer's capital spending for capacity and technology buys.

Our book-to-bill ratio for 2011, which is calculated by dividing orders received in a given time period by revenue recognized in the same time period, was 0.84 to 1 compared to 1.20 to 1 in 2010. Our backlog as of December 31, 2011 was \$332.9 million, compared to \$535.4 million as of December 31, 2010. During the year ended December 31, 2011, we experienced a net backlog adjustment of approximately \$41.4 million. The adjustment consisted of \$38.1 million of order cancellations and \$3.3 million related to other order adjustments. During the year ended December 31, 2011, we had a positive adjustment related to foreign currency translation of \$0.1 million. For certain sales arrangements we require a deposit for a portion of the sales price before shipment. As of December 31, 2011 and 2010 we had deposits and advanced billings of \$57.1 million and \$129.2 million, respectively.

Gross Profit

Gross profit was \$474.3 million or 48.4% for 2011 compared to \$449.5 million or 48.3% in 2010. LED & Solar gross margins decreased to 48.0% from 48.3% in the prior year, primarily due to higher overhead costs and service support spending, partially offset by increases in volume, favorable product mix and lower average material costs. Data Storage gross margins increased to 50.7% from 48.4% in the prior year due to increased sales volume and a favorable product mix, partially offset by higher overhead costs and service support spending.

Operating Expenses

Selling, general and administrative expenses increased by \$7.9 million or 9.0%, from the prior year primarily to support the increased level of business in our LED & Solar segment. Selling, general and administrative expenses were 9.7% of net sales in 2011, compared with 9.4% of net sales in the prior year.

Research and development expense increased \$39.6 million or 69.6% from the prior year, primarily due to continued product development in areas of high-growth for end market opportunities in our LED & Solar segment. As a percentage of net sales, research and development expense increased to 9.9% from 6.1% in the prior year.

Amortization expense increased \$1.0 million from the prior year, primarily resulting from the increase in intangible assets as a result of our acquisition of a privately held company that occurred during the second quarter of 2011.

Restructuring expense of \$1.3 million for the year ended December 31, 2011, consisted of personnel severance costs associated with the company-wide reduction of approximately 65 employees in our workforce. Restructuring credit of \$0.2 million for the year ended December 31, 2010, was attributable to a change in estimate in our Data Storage segment.

During 2011, the Company recorded a \$0.6 million asset impairment charge related to the disposal of equipment associated with the discontinuance of a certain product line in our LED & Solar segment.

Interest Expense, net

Interest expense, net for 2011 was \$0.8 million, comprised of \$1.4 million in cash interest expense, \$1.9 million in non-cash interest expense relating to net amortization of our short-term investments and \$1.3 million in non-cash interest expense relating to our convertible debt, which was retired during the first half of 2011 creating a loss on extinguishment of approximately \$3.3 million. Interest expense was partially offset by \$3.8 million in cash interest expense, \$0.4 million in non-cash interest expense relating to our short-term investments and \$3.1 million in non-cash interest expense relating to our convertible debt, partially offset by \$1.6 million in interest income earned on our cash and short-term investment balances. The non-cash interest expense is related to accounting rules that requires a portion of convertible debt to be allocated to equity in 2011 and 2010 and accretion of debt discounts and amortization of debt premiums related to our short-term investments in 2011 and 2010.

Income Taxes

The income tax provision attributable to continuing operations for the year ended December 31, 2011 was \$81.6 million or 30.0% of income before taxes compared to \$19.5 million or 6.6% of income before taxes in the prior year. The 2011 provision for income taxes included \$9.6 million relating to our foreign operations and \$72.0 million relating to our domestic operations. The 2010 provision for income taxes included \$8.0 million relating to our foreign operations and \$11.5 million relating to our domestic operations. Our 2010 effective tax rate was lower than our 2011 effective tax rate as a result of the utilization of our domestic net operating loss and tax credit carry forwards due to the reversal of

our valuation allowance during 2010. Our 2011 effective tax rate is lower than the statutory rate as a result of the jurisdictional mix of earnings in our foreign locations, which impacted the effective tax rate by approximately 1.9%, and other favorable tax benefits including the Domestic Production Activities Deduction and the Research and Development Credit, which impacted the effective tax rate by approximately 3.4%.

Discontinued Operations

Discontinued operations represent the results of the operations of our disposed Metrology segment, which was sold to Bruker on October 7, 2010, and our CIGS solar systems business, which was discontinued on September 27, 2011, reported as discontinued operations. The 2011 results reflect an operational loss before taxes of \$1.6 million related to the Metrology segment and an operational loss before taxes of \$90.3 million related to the CIGS solar systems business. The 2010 results reflect an operational loss before taxes of \$0.8 million and a gain on disposal of \$156.3 million before taxes related to the Metrology segment and an operational loss before taxes of \$25.7 million related to the CIGS solar systems business.

Years Ended December 31, 2010 and 2009

The following table shows our Consolidated Statements of Operations, percentages of sales and comparisons between 2010 and 2009 (dollars in 000s):

		ar ended De	Dollar and Percentage Change			
	2010		2009		Year to	
Net sales	\$ 930,892	100.0%	· · · · ·	100.0% \$		229.8%
Cost of sales	481,407	51.7	168,003	59.5	313,404	186.5
Gross profit	449,485	48.3	114,259	40.5	335,226	293.4
Operating expenses (income):						
Selling, general and administrative	87,250	9.4	59,419	21.1	27,831	46.8
Research and development	56,948	6.1	37,767	13.4	19,181	50.8
Amortization	3,703	0.4	3,977	1.4	(274)	(6.9)
Restructuring	(179)	(0.0)	4,479	1.6	(4,658)	*
Asset impairment			304	0.1	(304)	(100.0)
Other, net	(1,490)		682	0.2	(2,172)	*
Total operating expenses	146,232	15.7	106,628	37.8	39,604	37.1
Operating income	303,253	32.6	7,631	2.7	295,622	3,874.0
Interest expense, net	6,572	0.7	6,850	2.4	(278)	(4.1)
Income from continuing operations before income	296,681	31.9	781	0.3	295,900	37,887.3
taxes	19,505	2.1			,	662.5
Income tax provision	, ,		2,558	0.9	16,947	
Income (loss) from continuing operations	277,176	29.8	(1,777)	(0.6)	278,953	*
Discontinued operations:						
Income (loss) from discontinued operations, before		12.0		(7 a)		
income taxes	129,776	13.9	(15,066)	(5.3)	144,842	*
Income tax provision (benefit)	45,192	4.9	(1,211)	(0.4)	46,403	*
Income (loss) from discontinued operations	84,584	9.1	(13,855)	(4.9)	98,439	*
Net income (loss)	361,760	38.9	(15,632)	(5.5)	377,392	*
Net loss attributable to noncontrolling interest			(65)	(0.0)	65	(100.0)
Net income (loss) attributable to Veeco	\$ 361,760	38.9%	\$ (15,567)	(5.5)% \$	\$ 377,327	*

Not Meaningful

*

Net Sales and Orders

Net sales of \$930.9 million for the year ended December 31, 2010, were up 229.8% compared to 2009. The following is an analysis of sales and orders by segment and by region (dollars in 000s):

		Sal	es							
	Year Decem		Dollar and Percentage Change		Year e Decemb		Dollar a Percentage	Book to Bill Ratio		
	2010	2009	Year to '	Year	2010	2009	Year to Y	2010	2009	
Segment Analysis										
LED & Solar	\$ 795,565	\$ 205,003	\$ 590,562	288.1% \$	968,143	\$ 409,232	\$ 558,911	136.6%	1.22	2.00
Data Storage	135,327	77,259	58,068	75.2	153,406	97,497	55,909	57.3	1.13	1.26
Total	\$ 930,892	\$ 282,262	\$ 648,630	229.8% \$	1,121,549	\$ 506,729	\$ 614,820	121.3%	1.20	1.80
Regional Analysis										
Americas	\$ 92,646	\$ 60,730	\$ 31,916	52.6% \$	107,039	\$ 75,946	\$ 31,093	40.9%	1.16	1.25
EMEA	92.112	49,938	42,174	84.5	83.784	47.049	36,735	78.1	0.91	0.94
	- ,									
Korea	301,026	99,132	201,894	203.7	207,337	222,114	(14,777)	(6.7)	0.69	2.24
China	266,813	31,114	235,699	757.5	537,740	75,559	462,181	611.7	2.02	2.43
Taiwan	101,130	13,882	87,248	628.5	112,016	34,642	77,374	223.4	1.11	2.50
Other Asia Pacific	77,165	27,466	49,699	180.9	73,633	51,419	22,214	43.2	0.95	1.87
Asia Pacific	746,134	171,594	574,540	334.8	930,726	383,734	546,992	142.5	1.25	2.24
Total	\$ 930,892	\$ 282,262	\$ 648,630	229.8% \$	1,121,549	\$ 506,729	\$ 614,820	121.3%	1.20	1.80

By segment, LED & Solar sales increased 288.1% in 2010 due to increases in shipments of our newest systems as compared to 2009 (363.9% increase in MOCVD reactor shipments from 2009) as a result of an increase in demand for HB LED backlighting applications and general illumination. Data Storage sales also increased 75.2%, primarily as a result of an increase in capital spending by data storage customers for capacity and technology buys. LED & Solar sales represented 85.5% of total sales for the year ended December 31, 2010, up from 72.6% in the prior year. Data Storage sales accounted for 14.5% of net sales, down from 27.4% in the prior year. By region, net sales increased by 334.8% in Asia Pacific, primarily due to MOCVD sales to HB LED customers. In addition, sales in the Americas and EMEA also increased 52.6% and 84.5%, respectively. We believe that there will continue to be year-to-year variations in the geographic distribution of sales.

Orders in 2010 increased 121.3% compared to 2009, primarily attributable to a 136.6% increase in LED & Solar orders that were principally driven by HB LED manufacturers increasing production for television and laptop backlighting applications. Data Storage orders increased 57.3% from the continued increase in our customer's capital spending for capacity and technology buys.

Our book-to-bill ratio for 2010, which is calculated by dividing orders received in a given time period by revenue recognized in the same time period, was 1.20 to 1 compared to 1.80 to 1 in 2009. Our backlog as of December 31, 2010 was \$535.4 million, compared to \$345.9 million as of December 31, 2009. During the year ended December 31, 2010, we experienced a net backlog adjustment of approximately \$2.9 million, consisting of order cancellations. During the year ended December 31, 2010, we had a positive adjustment related to foreign currency translation of \$1.8 million. For certain sales arrangements we require a deposit for a portion of the sales price before shipment. As of December 31, 2010 and 2009 we had deposits and advanced billings of \$129.2 million and \$59.8 million, respectively.

Gross Profit

Gross profit was \$449.5 million or 48.3% for 2010 compared to \$114.3 million or 40.5% in 2009. LED & Solar gross margins increased to 48.3% from 42.0% in the prior year, primarily due to increases in volume (262 additional system shipments and 185 additional final acceptances received compared to prior year in our MOCVD business) and higher average selling prices coupled with lower manufacturing costs. Data Storage gross margins increased to 48.4% from 36.4% in the prior year due to increased sales volume and a favorable product mix. During 2009, Data Storage gross margins were also negatively impacted by a charge to cost of sales of \$1.5 million for the write off of inventory associated with discontinued legacy product lines.

Operating Expenses

Selling, general and administrative expenses increased by \$27.8 million or 46.8%, from the prior year primarily to support the business ramp in our LED & Solar segment. Selling, general and administrative expenses were 9.4% of net sales in 2010, compared with 21.1% of net sales in the prior year.

Research and development expense increased \$19.2 million or 50.8% from the prior year, primarily due to continued product development in areas of high-growth for end market opportunities in our LED & Solar segment. As a percentage of net sales, research and development expense decreased to 6.1% from 13.4% in the prior year.

Amortization expense decreased \$0.3 million or 6.9% from the prior year. This decrease is mainly due to certain intangibles being fully amortized at the end of 2009.

Restructuring credit of \$0.2 million for the year ended December 31, 2010, was attributable to a change in estimate in our Data Storage segment. Restructuring expense of \$4.5 million for the year ended December 31, 2009, consisted primarily of personnel severance costs of \$3.1 million associated with the reduction of approximately 161 employees in our workforce. Additionally, we took a \$1.4 million charge during the second quarter of 2009 for costs associated with vacating a leased facility in Camarillo, California and the related relocation of 27 employees.

During 2009, the Company recorded a \$0.3 million asset impairment charge. The charge was for property, plant and equipment no longer being utilized in our Data Storage segment.

Interest Expense, net

Interest expense, net for 2010 was \$6.6 million, comprised of \$4.7 million in cash interest expense, \$0.4 million in non-cash interest expense relating to net amortization of our short-term investments and \$3.1 million in non-cash interest expense relating to our convertible debt, partially offset by \$1.6 million in interest income earned on our cash and short-term investment balances. Interest expense, net for 2009 was \$6.9 million, comprised of \$4.9 million in cash interest expense and \$2.8 million in non-cash interest expense, partially offset by \$0.8 million in interest income. The non-cash interest expense is related to accounting rules that requires a portion of convertible debt to be allocated to equity in 2010 and 2009 and accretion of debt discounts and amortization of debt premiums related to our short-term investments in 2010.

Income Taxes

The income tax provision attributable to continuing operations for the year ended December 31, 2010 was \$19.5 million or 6.6% of income before taxes compared to \$2.6 million or 327.5% of income before taxes in the prior year. The 2010 provision for income taxes included \$8.0 million relating to our foreign operations and \$11.5 million relating to our domestic operations. The 2009 provision for income taxes included \$1.6 million relating to our foreign operations and \$1.0 million relating to our domestic operations. Our effective tax rate in 2010 is lower than the statutory rate as a result of the reversal of our valuation allowance, which impacted the effective tax rate by approximately 28.0%.

Discontinued Operations

Discontinued operations represent the results of the operations of our disposed Metrology segment, which was sold to Bruker on October 7, 2010, and our CIGS solar systems business, which was discontinued on September 27, 2011, reported as discontinued operations. The 2010 results reflect an operational loss before taxes of \$0.8 million and a gain on disposal of \$156.3 million before taxes related to the Metrology segment and an operational loss before taxes of \$25.7 million related to the CIGS solar systems business. The 2009 results reflect an operational loss before taxes of \$2.7 million related to the Metrology segment and an operational loss before taxes of \$12.4 million related to the CIGS solar systems business.

Liquidity and Capital Resources

Historically, our principal capital requirements have included the funding of acquisitions, working capital, capital expenditures and the repayment of debt. We traditionally have generated cash from operations and stock issuances. Our ability to generate sufficient cash flows from operations is dependent on the continued demand for our products and services.

Cash and cash equivalents as of December 31, 2011 was \$217.9 million. This amount represents a decrease of \$27.2 million from December 31, 2010. We also had short-term investments and restricted cash of \$273.6 million and \$0.6 million, respectively, as of December 31, 2011. A summary of the current year cash flow activity is as follows (*in thousands*):

	Year ended December 31,				
		2011		2010	
Net income	\$	127,987	\$	361,760	
Net cash provided by operating activities	\$	115,442	\$	194,214	
Net cash provided by (used in) investing activities		106,294		(121,621)	
Net cash (used in) provided by financing activities		(249,935)		25,505	
Effect of exchange rate changes on cash and cash equivalents		989		(1,466)	
Net (decrease) increase in cash and cash equivalents		(27,210)		96,632	
Cash and cash equivalents at beginning of year		245,132		148,500	
Cash and cash equivalents at end of year	\$	217,922	\$	245,132	

Cash provided by operations during the year ended December 31, 2011 was \$115.4 million compared to \$194.2 million during the year ended December 31, 2010. The \$115.4 million cash provided by operations in 2011 included adjustments to the \$128.0 million of net income for non-cash items, which increased the cash provided by net income by \$76.9 million. The adjustments consisted of \$44.4 million of discontinued operations, \$12.9 million of depreciation and amortization, \$12.8 million of non-cash equity-based compensation expense, \$11.3 million of deferred income taxes, \$(10.4) million of excess tax benefits from stock option exercises, \$3.3 million of loss on extinguishment of debt, \$1.3 million of amortization of debt discount, \$0.8 million of inventory write-offs and a \$0.6 million asset impairment charge. Net cash provided by operations was unfavorably impacted by a net \$89.4 million of changes in operating assets and liabilities, which included a \$19.4 million increase in inventories, a \$42.2 million decrease in income taxes payable, a \$72.7 million decrease in accrued expenses, principally resulting from customer deposits associated primarily with the significant increase in shipments in our LED & Solar segment compared to bookings, a \$25.5 million increase in prepaid expenses and other current assets and \$6.9 million decrease in supplier deposits. Cash provided by operations during the year ended December 31, 2010 was \$194.2 million and included adjustments to the \$361.8 million of net income for non-cash items, which reduced the cash provided by net income by \$168.3 million. The adjustments to the \$361.8 million of net income for non-cash items, which reduced the cash provided by net income by \$168.3 million. The adjustments

consisted of \$10.8 million of depreciation and amortization, \$8.8 million of non-cash equity-based compensation expense, \$3.1 million of amortization of debt discount, \$(25.1) million of deferred income taxes, \$(23.3) million of excess tax benefits from stock option exercises, \$(156.3) million of gain on disposal of our Metrology segment and \$14.0 million of discontinued operations. Net cash provided by operations was favorably impacted by a net \$0.7 million of changes in operating assets and liabilities.

Cash provided by investing activities of \$106.3 million for the year ended December 31, 2011, resulted primarily from proceeds of \$707.7 million from the sale of short-term investments, \$75.5 million of transfers from restricted cash and \$0.2 million of other, net, partially offset by \$588.5 million of purchases of short-term investments, \$60.4 million of capital expenditures and \$28.3 million of payments for net assets of a business acquired. Cash used in investing activities of \$121.6 million during the year ended December 31, 2010, resulted primarily from \$506.1 million of purchases of short-term investments, \$10.7 million of capital expenditures, \$76.1 million of transfers to restricted cash and \$0.5 million of discontinued operations, partially offset by proceeds of \$33.0 million from the sale of short-term investments, \$225.2 million net proceeds from the disposal of our Metrology segment and \$213.6 million from the maturity of CDAR's.

Cash used in financing activities of \$249.9 million during the year ended December 31, 2011, consisted primarily of \$162.1 million of purchases of treasury stock, \$105.8 million of repayments of long-term debt and \$3.2 million of restricted stock tax withholdings, partially offset by \$10.7 million from stock option exercises and \$10.4 million excess tax benefits from stock option exercises. Cash provided by financing activities of \$25.5 million during the year ended December 31, 2010, consisted primarily of \$45.2 million of cash proceeds from stock option exercises and \$23.3 million excess tax benefits from stock options exercises, partially offset by \$4.6 million of restricted stock tax withholdings, \$38.1 million of purchases of treasury stock and \$0.2 million of repayments of long-term debt.

During the first quarter of 2011, at the option of the holders, \$7.5 million of notes were tendered for conversion at a price of \$45.95 per share, calculated as defined in the indenture relating to the notes, in a net share settlement. As a result, we paid the principal amount of \$7.5 million in cash and issued 111,318 shares of our common stock. We recorded a loss on extinguishment totaling \$0.3 million related to these transactions.

During the second quarter of 2011, we issued a notice of redemption on the remaining notes outstanding. In lieu of redemption, at the option of the holders, the notes were tendered for conversion at a price of \$50.59 per share, calculated as defined in the indenture relating to the notes, in a net share settlement. Accordingly, we paid the principal amount of \$98.1 million in cash and issued 1,660,095 shares of our common stock. We recorded a loss on extinguishment totaling \$3.0 million related to these transactions.

On April 4, 2011, we purchased a privately-held company which supplies certain components to our business for \$28.3 million in cash.

On October 6, 2011, the restriction has lapsed on the \$22.9 million of cash held in escrow relating to the proceeds received from the sale of our Metrology segment. This cash was held in escrow and was restricted from use for one year from the closing date of the transaction to secure potential losses, if any, arising out of breaches of representations, warranties and covenants we made in the stock purchase agreement and related documents.

On July 28, 2011, we announced a plan to discontinue our CIGS solar systems business. The action, which was completed on September 27, 2011 and impacted approximately 80 employees, was in response to the dramatically reduced cost of mainstream solar technologies driven by significant reductions in prices, large industry investment, a lower than expected end market acceptance for CIGS technology and technical barriers in scaling CIGS. This business was previously included as part of our LED & Solar segment.

Accordingly, the results of operations for the CIGS solar systems business have been recorded as discontinued operations in the accompanying consolidated statements of operations for all periods

presented. During the year ended December 31, 2011, total discontinued operations include charges totaling \$69.8 million. These charges include an asset impairment charge totaling \$6.2 million, a goodwill write-off of \$10.8 million, an inventory write-off totaling \$27.0 million, charges to settle contracts totaling \$22.1 million, lease related charges totaling \$1.4 million and personnel severance charges totaling \$2.3 million.

As of December 31, 2011, our contractual cash obligations and commitments are as follows (in thousands):

	Payments due by period									
		Less than								
Contractual Cash Obligations and Commitments		Total		1 year	1-3 years		3-5 years		5 years	
Long-term debt(1)	\$	2,654	\$	248	\$	558	\$	654	\$	1,194
Interest on debt(1)		935		201		339		244		151
Operating leases(2)		10,804		3,936		4,348		1,804		716
Letters of credit and bank guarantees(3)		5,295		5,295						
Purchase commitments(4)		91,069		91,069						
	\$	110,757	\$	100,749	\$	5,245	\$	2,702	\$	2,061

(1)

Long-term debt obligations consist of mortgage and interest payments for our St. Paul, MN facility.

(2)

In accordance with relevant accounting guidance, we account for our office leases as operating leases with expiration dates ranging from 2012 through 2017. There are future minimum annual rental payments required under the leases. Leasehold improvements made at the beginning of or during a lease are amortized over the shorter of the remaining lease term or the estimated useful lives of the assets.

(3)

Issued by a bank on our behalf as needed. We had letters of credit outstanding of \$1.7 million and bank guarantees outstanding of \$3.6 million, of which, \$0.6 million that is collateralized against cash that is restricted from use.

(4)

Purchase commitments are primarily for inventory used in manufacturing our products. It has been our practice not to enter into purchase commitments extending beyond one year.

We believe that existing cash balances and short-term investments together with cash generated from operations will be sufficient to meet our projected working capital and other cash flow requirements for the next twelve months, as well as our contractual obligations, detailed in the above table.

Off-Balance Sheet Arrangements

We do not have any off-balance sheet arrangements that have, or are reasonably likely to have, a current or future material effect on our financial condition, changes in financial condition, revenue or expenses, results of operations, liquidity, capital expenditures or capital resources other than operating leases, letters of credit and bank guarantees, and purchase commitments disclosed in the preceding "Contractual Cash Obligations and Commitments" table.

Application of Critical Accounting Policies

General: Our discussion and analysis of our financial condition and results of operations are based upon our Consolidated Financial Statements, which have been prepared in accordance with accounting principles generally accepted in the United States. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses. Management continually monitors and evaluates its estimates and judgments, including those related to bad debts, inventories, intangible and other long-lived assets, income taxes, warranty obligations, restructuring costs, and contingent liabilities, including potential

litigation. Management bases its estimates and judgments on historical experience and on various other factors that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions. We consider certain accounting policies related to revenue recognition, short-term investments, the valuation of inventories, the impairment of goodwill and indefinite-lived intangible assets, the impairment of long-lived assets, fair value measurements, warranty costs, income taxes and equity-based compensation to be critical policies due to the estimation processes involved in each.

Revenue Recognition: We recognize revenue based on current accounting guidance provided by the Securities and Exchange Commission ("SEC") and the Financial Accounting Standards Board ("FASB"). Our revenue transactions include sales of products under multiple-element arrangements. Revenue under these arrangements is allocated to each element based upon its estimated selling price.

We consider a broad array of facts and circumstances when evaluating each of our sales arrangements in determining when to recognize revenue, including specific terms of the purchase order, contractual obligations to the customer, the complexity of the customer's post-delivery acceptance provisions, customer creditworthiness and the installation process. Management also considers the party responsible for installation, whether there are process specification requirements which need to be demonstrated before final sign off and payment, whether Veeco can replicate the field testing conditions and procedures in our factory and our past experience with demonstrating and installing a particular system. Sales arrangements are reviewed on a case-by-case basis; however, the Company's revenue recognition protocol for established systems is as described below.

System revenue is generally recognized upon shipment or delivery provided title and risk of loss has passed to the customer, evidence of an arrangement exists, prices are contractually fixed or determinable, collectability is reasonably assured and there are no material uncertainties regarding customer acceptance. Revenue from installation services is recognized at the time acceptance is received from the customer. If the arrangement does not meet all the above criteria, the entire amount of the sales arrangement is deferred until the criteria have been met or all elements have been delivered to the customer or been completed.

For those transactions on which we recognize systems revenue, either at the time of shipment or delivery, our sales and contractual arrangements with customers do not contain provisions for right of return or forfeiture, refund or other purchase price concessions. In the rare instances where such provisions are included, the Company defers all revenue until customer acceptance is achieved. In cases where products are sold with a retention of 10% to 20%, which is typically payable by the customer when installation and field acceptance provisions are completed, the customer has the right to withhold this payment until such provisions have been achieved. We defer the greater of the retention amount or the estimated selling price of the installation on systems that we recognize revenue at the time of shipment or delivery.

For new products, new applications of existing products or for products with substantive customer acceptance provisions where performance cannot be fully assessed prior to meeting agreed upon specifications at the customer site, revenue is deferred as deferred profit in the accompanying Consolidated Balance Sheets and fully recognized upon completion of installation and receipt of final customer acceptance.

Our systems are principally sold to manufacturers in the HB-LED, the data storage, solar and other industries. Sales arrangements for these systems generally include customer acceptance criteria based upon Veeco and/or customer specifications. Prior to shipment a customer source inspection of the system is performed in our facility or test data is sent to the customer documenting that the system is functioning within agreed upon specifications. Such source inspection or test data replicates the acceptance testing that will be performed at the customer's site prior to final acceptance of the system. Customer acceptance provisions include reassembly and installation of the system at the customer site, which includes performing functional or mechanical test procedures (i.e. hardware checks, leak testing,

gas flow monitoring and quality control checks of the basic features of the product). Additionally, a material demonstration process may be performed to validate the functionality of the product. Upon meeting the agreed upon specifications the customer approves final acceptance of the product.

Veeco generally is required to install these products and demonstrate compliance with acceptance tests at the customer's facility. Such installations typically are not considered complex and the installation process is not deemed essential to the functionality of the equipment because it does not involve significant changes to the features or capabilities of the equipment or involve building complex interfaces or connections. We have a demonstrated history of completing such installations in a timely, consistent manner and can reliably estimate the costs of such. In such cases, the test environment at our facilities prior to shipment replicates the customer's environment. While there are others in the industry with sufficient knowledge about the installation process for our systems as a practical matter, most customers engage the Company to perform the installation services.

In Japan, where our contractual terms with customers generally specify risk of loss and title transfers upon customer acceptance, revenue is recognized and the customer is billed upon receipt of written customer acceptance.

Revenue related to maintenance and service contracts is recognized ratably over the applicable contract term. Component and spare part revenue is recognized at the time of shipment or delivery in accordance with the terms of the applicable sales arrangement.

Short-Term Investments: We determine the appropriate balance sheet classification of our investments at the time of purchase and evaluate the classification at each balance sheet date. As part of our cash management program, we maintain a portfolio of marketable securities which are classified as available-for-sale. These securities include FDIC insured corporate bonds, treasury bills, commercial paper and CDARS with maturities of greater than three months when purchased in principal amounts that, when aggregated with interest to accrue over the term, will not exceed FDIC limits. Securities classified as available-for-sale are carried at fair market value, with the unrealized gains and losses, net of tax, included in the determination of comprehensive income (loss) and reported in equity. Net realized gains and losses are included in net income (loss) attributable to Veeco.

Inventory Valuation: Inventories are stated at the lower of cost (principally first-in, first-out method) or market. Management evaluates the need to record adjustments for impairment of inventory on a quarterly basis. Our policy is to assess the valuation of all inventories, including raw materials, work-in-process, finished goods, and spare parts and other service inventory. Obsolete or slow-moving inventory, based upon historical usage, or inventory in excess of management's estimated usage for the next 12 month's requirements is written-down to its estimated market value, if less than its cost. Inherent in the estimates of market value are management's estimates related to our future manufacturing schedules, customer demand, technological and/or market obsolescence, possible alternative uses, and ultimate realization of excess inventory.

Goodwill and Indefinite-Lived Intangible Asset Impairment: The Company does not amortize goodwill or intangible assets with indefinite useful lives, but instead tests the balances in these asset accounts for impairment at least annually at the reporting unit level. Our policy is to perform this annual impairment test in the fourth quarter, using a measurement date of October 1st, of each fiscal year or more frequently if impairment indicators arise. Impairment indicators include, among other conditions, cash flow deficits, a historical or anticipated decline in revenue or operating profit, adverse legal or regulatory developments, and a material decrease in the fair value of some or all of the assets.

Pursuant to relevant accounting pronouncements we are required to determine if it is appropriate to use the operating segment as defined under accounting guidance as the reporting unit or one level below the operating segment, depending on whether certain criteria are met. We have identified two reporting units that are required to be reviewed for impairment. The reporting units are LED & Solar and Data Storage. In identifying the reporting units management considered the economic



characteristics of operating segments including the products and services provided, production processes, types or classes of customer and product distribution.

We perform this impairment test by first comparing the fair value of our reporting units to their respective carrying amount. When determining the estimated fair value of a reporting unit, we utilize a discounted future cash flow approach since reported quoted market prices are not available for our reporting units. Developing the estimate of the discounted future cash flow requires significant judgment and projections of future financial performance. The key assumptions used in developing the discounted future cash flows are the projection of future revenues and expenses, working capital requirements, residual growth rates and the weighted average cost of capital. In developing our financial projections, we consider historical data, current internal estimates and market growth trends. Changes to any of these assumptions could materially change the fair value of the reporting unit. We reconcile the aggregate fair value of our reporting units to the Company's adjusted market capitalization as a supporting calculation. The adjusted market capitalization is calculated by multiplying the average share price of our common stock for the last ten trading days prior to the measurement date by the number of outstanding common shares and adding a control premium.

If the carrying value of the reporting units exceed the fair value we would then compare the implied fair value of our goodwill to the carrying amount in order to determine the amount of the impairment, if any.

Definite-Lived Intangible and Long-Lived Assets: Intangible assets consist of purchased technology, customer-related intangible assets, patents, trademarks, covenants not-to-compete, software licenses and deferred financing costs. Purchased technology consists of the core proprietary manufacturing technologies associated with the products and offerings obtained through acquisition and are initially recorded at fair value. Customer-related intangible assets, patents, trademarks and covenants not-to-compete are initially recorded at fair value and software licenses and deferred financing costs are initially recorded at cost. Intangible assets with definitive useful lives are amortized using the straight-line method over their estimated useful lives for periods ranging from 2 years to 17 years.

Property, plant and equipment are recorded at cost. Depreciation is provided over the estimated useful lives of the related assets using the straight-line method for financial statement purposes. Amortization of leasehold improvements is computed using the straight-line method over the shorter of the remaining lease term or the estimated useful lives of the improvements.

Long-lived assets, such as property, plant, and equipment and intangible assets with definite useful lives, are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Impairment indicators include, among other conditions, cash flow deficits, a historical or anticipated decline in revenue or operating profit, adverse legal or regulatory developments and a material decrease in the fair value of some or all of the assets. Assets are grouped at the lowest level for which there are identifiable cash flows that are largely independent of the cash flows generated by other asset groups. Recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset to the estimated undiscounted future cash flow expected to be generated by the asset. If the carrying amount of an asset exceeds its estimated future cash flows, an impairment charge is recognized by the amount by which the carrying amount of the asset.

Fair Value Measurements: Accounting guidance for our non-financial assets and non-financial liabilities requires that we disclose the type of inputs we use to value our assets and liabilities, based on three categories of inputs as defined in such. Level 1 inputs are quoted, unadjusted prices in active markets for identical assets or liabilities that the company has the ability to access at the measurement date. Level 2 inputs are inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly, such as quoted prices for similar assets or liabilities. Level 3 inputs are unobservable inputs for the asset or liability. Unobservable inputs are used to measure fair value to the extent that observable inputs are not available, thereby allowing for situations



in which there is little, if any, market activity for the asset or liability at the measurement date. These requirements apply to our long-lived assets, goodwill and intangible assets. We use Level 3 inputs to value all of such. The Company primarily applies the market approach for recurring fair value measurements.

Warranty Costs: We estimate the costs that may be incurred under the warranty we provide and record a liability in the amount of such costs at the time the related revenue is recognized. Estimated warranty costs are determined by analyzing specific product and historical configuration statistics and regional warranty support costs. Our warranty obligation is affected by product failure rates, material usage, and labor costs incurred in correcting product failures during the warranty period. Unforeseen component failures or exceptional component performance can also result in changes to warranty costs. If actual warranty costs differ substantially from our estimates, revisions to the estimated warranty liability would be required.

Income Taxes: As part of the process of preparing our Consolidated Financial Statements, we are required to estimate our income taxes in each of the jurisdictions in which we operate. This process involves estimating the actual current tax expense, together with assessing temporary differences resulting from differing treatment of items for tax and accounting purposes. These differences result in deferred tax assets and liabilities, which are included within our Consolidated Balance Sheets. The carrying value of our deferred tax assets is adjusted by a partial valuation allowance to recognize the extent to which the future tax benefits will be recognized on a more likely than not basis. Our net deferred tax assets consist primarily of net operating loss and tax credit carry forwards, and timing differences between the book and tax treatment of inventory, acquired intangible assets and other asset valuations. Realization of these net deferred tax assets is dependent upon our ability to generate future taxable income.

We record valuation allowances in order to reduce our deferred tax assets to the amount expected to be realized. In assessing the adequacy of recorded valuation allowances, we consider a variety of factors, including the scheduled reversal of deferred tax liabilities, future taxable income, and prudent and feasible tax planning strategies. Under the relevant accounting guidance, factors such as current and previous operating losses are given significantly greater weight than the outlook for future profitability in determining the deferred tax asset carrying value.

Relevant accounting guidance addresses the determination of how tax benefits claimed or expected to be claimed on a tax return should be recorded in the financial statements. Under such guidance, we must recognize the tax benefit from an uncertain tax position only if it is more likely than not that the tax position will be sustained on examination by the taxing authorities, based on the technical merits of the position. The tax benefits recognized in the financial statements from such uncertain tax positions are measured based on the largest benefit that has a greater than fifty percent likelihood of being realized upon ultimate resolution.

Equity-based Compensation: Equity-based compensation cost is measured at the grant date, based on the fair value of the award and is recognized as expense over the employee requisite service period. In order to determine the fair value of stock options on the date of grant, we apply the Black-Scholes option-pricing model. Inherent in the model are assumptions related to risk-free interest rate, dividend yield, expected stock-price volatility and option life.

The risk-free rate assumed in valuing the options is based on the U.S. Treasury yield curve in effect at the time of grant for the expected term of the option. The dividend yield assumption is based on the Company's historical and future expectation of dividend payouts. While the risk-free interest rate and dividend yield are less subjective assumptions, typically based on factual data derived from public sources, the expected stock-price volatility and option life assumptions require a level of judgment which make them critical accounting estimates.

We use an expected stock-price volatility assumption that is a combination of both historical volatility, calculated based on the daily closing prices of our common stock over a period equal to the



expected term of the option and implied volatility, utilizing market data of actively traded options on our common stock, which are obtained from public data sources. We believe that the historical volatility of the price of our common stock over the expected term of the option is a strong indicator of the expected future volatility and that implied volatility takes into consideration market expectations of how future volatility will differ from historical volatility. Accordingly, we believe a combination of both historical and implied volatility provides the best estimate of the future volatility of the market price of our common stock.

The expected term, representing the period of time that options granted are expected to be outstanding, is estimated using a lattice-based model incorporating historical post vest exercise and employee termination behavior.

We estimate forfeitures using our historical experience, which is adjusted over the requisite service period based on the extent to which actual forfeitures differ or are expected to differ, from such estimates. Because of the significant amount of judgment used in these calculations, it is reasonably likely that circumstances may cause the estimate to change.

With regard to the weighted-average option life assumption, we consider the exercise behavior of past grants and model the pattern of aggregate exercises.

Recent Accounting Pronouncements

Balance Sheet: In December 2011, the FASB issued amended guidance related to the Balance Sheet (Disclosures about Offsetting Assets and Liabilities). This amendment requires an entity to disclose information about offsetting and related arrangements to enable users of its financial statements to understand the effect of those arrangements on its financial position. An entity is required to apply the amendments for annual reporting periods beginning on or after January 1, 2013, and interim periods within those annual periods. The amendment should be applied retrospectively. The Company does not believe that this guidance will have a material impact on its consolidated financial statements.

Comprehensive Income: In December 2011, the FASB issued amended guidance related to Comprehensive Income. In order to defer only those changes in the June amendment (addressed below) that relate to the presentation of reclassification adjustments, the FASB issued this amendment to supersede certain pending paragraphs in the June amendment. The amendments are being made to allow the FASB time to redeliberate whether to present on the face of the financial statements the effects of reclassifications out of accumulated other comprehensive income on the components of net income and other comprehensive income for all periods presented. While the FASB is considering the operational concerns about the presentation requirements for reclassification adjustments and the needs of financial statement users for additional information about reclassification adjustments, entities should continue to report reclassifications out of accumulated other comprehensive income consistent with the presentation requirements in effect before the June amendment. All other requirements are not affected, including the requirement to report comprehensive income either in a single continuous financial statement or in two separate but consecutive financial statements. Public entities should apply these requirements for fiscal years, and interim periods within those years, beginning after December 15, 2011. Early adoption is permitted. The Company does not believe that this guidance will have a material impact on its consolidated financial statements.

In June 2011, the FASB issued amended guidance related to Comprehensive Income. This amendment allows an entity the option to present the total of comprehensive income, the components of net income, and the components of other comprehensive income either in a single continuous statement of comprehensive income or in two separate but consecutive statements. In both choices, an entity is required to present each component of net income along with total net income, each component of other comprehensive income along with a total for other comprehensive income, and a total amount for comprehensive income. The amendment eliminates the option to present the components of other comprehensive income as part of the statement of equity. The amendments do



not change the items that must be reported in other comprehensive income or when an item of other comprehensive income must be reclassified to net income. The amendment should be applied retrospectively. The amendments are effective for fiscal years, and interim periods within those years, beginning after December 15, 2011. Early adoption is permitted. The Company does not believe that this guidance will have a material impact on its consolidated financial statements.

Business Combinations: In December 2010, the FASB issued amended guidance related to Business Combinations. The amendments affect any public entity that enters into business combinations that are material on an individual or aggregate basis. The amendments specify that if a public entity presents comparative financial statements, the entity should disclose revenue and earnings of the combined entity as though the business combination(s) that occurred during the current year had occurred as of the beginning of the comparable prior annual reporting period only. The amendments also expand the supplemental pro forma disclosures to include a description of the nature and amount of material, nonrecurring pro forma adjustments directly attributable to the business combination included in the reported pro forma revenue and earnings. The amendments are effective prospectively for business combinations for which the acquisition date is on or after the beginning of the first annual reporting period beginning on or after December 15, 2010. Early adoption is permitted. The Company will assess the impact of these amendments on its consolidated financial statements if and when a material acquisition occurs.

Intangibles Goodwill and Other: In September 2011, the FASB issued amended guidance related to Intangibles Goodwill and Other: Testing Goodwill for Impairment. The amendment is intended to simplify how entities test goodwill for impairment. The amendment permits an entity to first assess qualitative factors to determine whether it is "more likely than not" that the fair value of a reporting unit is less than its carrying amount as a basis for determining whether it is necessary to perform the two-step goodwill impairment test. The more-likely-than-not threshold is defined as having a likelihood of more than 50%. This amendment is effective for annual and interim goodwill impairment tests performed for fiscal years beginning after December 15, 2011. Early adoption is permitted, including for annual and interim goodwill impairment tests performed as of a date before September 15, 2011, if an entity's financial statements for the most recent annual or interim period have not yet been issued. The Company does not believe that this guidance will have a material impact on its consolidated financial statements.

In December 2010, the FASB issued amended guidance related to Intangibles Goodwill and Other. The amendments modify Step 1 of the goodwill impairment test for reporting units with zero or negative carrying amounts. For those reporting units, an entity is required to perform Step 2 of the goodwill impairment test if it is more likely than not that a goodwill impairment exists. In determining whether it is more likely than not that goodwill impairment exists, an entity should consider whether there are any adverse qualitative factors indicating that impairment may exist. The qualitative factors are consistent with the existing guidance and examples, which require that goodwill of a reporting unit be tested for impairment between annual tests if an event occurs or circumstances change that would more likely than not reduce the fair value of a reporting unit below its carrying amount. For public entities, the amendments are effective for fiscal years, and interim periods within those years, beginning after December 15, 2010. Early adoption is not permitted. The Company does not believe that this guidance will have a material impact on its consolidated financial statements.

Fair Value Measurements: In January 2010, the FASB issued amended guidance for Fair Value Measurements and Disclosures. This update requires some new disclosures and clarifies existing disclosure requirements about fair value measurement. The FASB's objective is to improve these disclosures and, thus, increase the transparency in financial reporting. Specifically, this update requires that a reporting entity disclose separately the amounts of significant transfers in and out of Level 1 and Level 2 fair value measurements and describe the reasons for the transfers; and in the reconciliation for fair value measurements using significant unobservable inputs, a reporting entity should present separately information about purchases, sales, issuances, and settlements. In addition, this update

clarifies the requirements of existing disclosures. For purposes of reporting fair value measurement for each class of assets and liabilities, a reporting entity needs to use judgment in determining the appropriate classes of assets and liabilities; and a reporting entity should provide disclosures about the valuation techniques and inputs used to measure fair value for both recurring and nonrecurring fair value measurements. This update was adopted on January 1, 2010, except for the disclosures about purchases, sales, issuances, and settlements in the roll forward of activity in Level 3 fair value measurements. The adoption of this guidance did not have a material impact on the Company's consolidated financial statements. Those disclosures are effective for fiscal years beginning after December 15, 2010, and for interim periods within those fiscal years. Early application is permitted. The Company does not believe that this guidance will have a material impact on its consolidated financial statements.

In May 2011, the FASB issued amended guidance related to Fair Value Measurements. This amendment represents the converged guidance of the FASB and the International Accounting Standards Board (the Boards) on fair value measurement. The collective efforts of the Boards and their staffs, reflected in this amendment, have resulted in common requirements for measuring fair value and for disclosing information about fair value measurements, including a consistent meaning of the term "fair value." The Boards have concluded the common requirements will result in greater comparability of fair value measurements presented and disclosed in financial statements prepared in accordance with U.S. GAAP and IFRSs. The amendments are to be applied prospectively. The amendments are effective during interim and annual periods beginning after December 15, 2011. Early application is not permitted. The Company does not believe that this guidance will have a material impact on its consolidated financial statements.

Revenue Recognition: In October 2009, the FASB issued amended guidance related to multiple-element arrangements which requires an entity to allocate arrangement consideration at the inception of an arrangement to all of its deliverables based on their relative selling prices. This update eliminates the use of the residual method of allocation and requires the relative-selling-price method in all circumstances. All entities must adopt the guidance no later than the beginning of their first fiscal year beginning on or after June 15, 2010. Entities may elect to adopt the guidance through either prospective application for revenue arrangements entered into or materially modified, after the effective date or through retrospective application to all revenue arrangements for all periods presented. The adoption of this guidance did not have a material impact on the Company's consolidated financial statements.

In October 2009, the FASB issued amended guidance that is expected to significantly affect how entities account for revenue arrangements that contain both hardware and software elements. As a result, many tangible products that rely on software will be accounted for under the revised multiple-element arrangements revenue recognition guidance, rather than the software revenue recognition guidance. The revised guidance must be adopted by all entities no later than fiscal years beginning on or after June 15, 2010. An entity must select the same transition method and same period for the adoption of both this guidance and the revisions to the multiple-element arrangements guidance noted above. The adoption of this guidance did not have a material impact on the Company's consolidated financial statements.

Item 7A. Quantitative and Qualitative Disclosures about Market Risk

Market Risk

The principal market risks (such as the risk of loss arising from adverse changes in market rates and prices) to which we are exposed are:

rates on investment portfolios, and

exchange rates, generating translation and transaction gains and losses.

Interest Rates

We centrally manage our investment portfolios considering investment opportunities and risk, tax consequences and overall financing strategies. Our investment portfolio includes fixed-income securities with a fair value of approximately \$273.6 million at December 31, 2011. These securities are subject to interest rate risk and will decline in value if interest rates increase. Based on our investment portfolio at December 31, 2011, an immediate 100 basis point increase in interest rates may result in a decrease in the fair value of the portfolio of approximately \$1.6 million. While an increase in interest rates may reduce the fair value of the investment portfolio, we will not realize the losses in the consolidated statement of operations unless the individual fixed-income securities are sold prior to recovery or the loss is determined to be other-than-temporary.

Foreign Operations

Operating in international markets involves exposure to movements in currency exchange rates, which are volatile at times. The economic impact of currency exchange rate movements on Veeco is complex because such changes are often linked to variability in real growth, inflation, interest rates, governmental actions and other factors. These changes, if material, could cause us to adjust our financing and operating strategies. Consequently, isolating the effect of changes in currency does not incorporate these other important economic factors.

Our net sales to foreign customers represented approximately 90%, 90% and 79% of our total net sales in 2011, 2010 and 2009, respectively. We expect that net sales to foreign customers will continue to represent a large percentage of our total net sales. Our net sales denominated in foreign currencies represented approximately 3%, 2% and 6% of total net sales in 2011, 2010 and 2009, respectively. The aggregate foreign currency exchange (loss) gain included in determining consolidated results of operations was approximately \$(1.0) million, \$1.3 million and \$(0.7) million in 2011, 2010 and 2009, respectively. Included in the aggregate foreign currency exchange (loss) gain were gains relating to forward contracts of \$0.5 million, \$0.1 million and \$(0.1 million in 2011, 2010 and 2009, respectively. These amounts were recognized and are included in other, net in the accompanying Consolidated Statements of Operations.

As of December 31, 2011, there were no gains or losses related to forward contracts included in prepaid expenses and other current assets or accrued expenses and other current liabilities. As of December 31, 2010, approximately \$0.3 million of gains related to forward contracts were included in prepaid expenses and other current assets and these amounts were subsequently received in January 2011. As of December 31, 2009, approximately \$0.2 million of gains related to forward contracts were included in prepaid expenses and other current assets and these amounts were subsequently received in January 2010. Monthly forward contracts for a notional amount of \$3.6 million for the month of January 2012 were entered into in December 2011. We are exposed to financial market risks, including changes in foreign currency exchange rates. To mitigate these risks, we use derivative financial instruments. We do not use derivative financial instruments for speculative or trading purposes. We enter into monthly forward contracts to reduce the effect of fluctuating foreign currencies on short-term foreign currency-denominated intercompany transactions and other known currency exposures. The average notional amount of such contracts outstanding was approximately \$10.3 million for the year ended December 31, 2011. The changes in currency exchange rates that have the largest impact on translating our international operating profit (loss) are the Japanese Yen and the Euro. We believe that based upon our hedging program, a 10% change in foreign exchange rates would have an immaterial impact on the consolidated results of operations. We believe that this quantitative measure has inherent limitations because, as discussed in the first paragraph of this section, it does not take into account any governmental actions or changes in either customer purchasing patterns or our financing and operating strategies.

Item 8. Financial Statements and Supplementary Data

Our Consolidated Financial Statements are listed in the Index to Consolidated Financial Statements and Financial Statement Schedule filed as part of this Form 10-K.

Quarterly Results of Operations

The following table presents selected unaudited financial data for each quarter of fiscal 2011 and 2010. Consistent with prior years, we report interim quarters, other than fourth quarters which always end on December 31, on a 13-week basis ending on the last Sunday within such period. The interim quarter ends are determined at the beginning of each year based on the 13-week quarters. The 2011 interim quarter ends were April 3, July 3 and October 2. The 2010 interim quarter ends were March 28, June 27 and September 26. For ease of reference, we report these interim quarter ends as March 31, June 30 and September 30 in our interim condensed consolidated financial statements.

Although unaudited, this information has been prepared on a basis consistent with our audited Consolidated Financial Statements and, in the opinion of our management, reflects all adjustments (consisting only of normal recurring adjustments) that we consider necessary for a fair presentation of this information in accordance with accounting principles generally accepted in the United States. Such quarterly results are not necessarily indicative of future results of operations and should be read in conjunction with our audited Consolidated Financial Statements and the notes thereto.

	Fiscal 2011								Fiscal 2010											
		Q1		Q2		Q3		Q4		Year		Q1		Q2		Q3		Q4		Year
								(in thou	sa	nds, exce	pt	per shar	e e	data)						
Net sales	\$ 2	54,676	\$	264,815	\$:	267,959	\$	191,685	\$	979,135	\$	132,647	\$	221,389	\$	277,094	\$	299,762	\$	930,892
Gross profit	1	30,963		135,349		124,934		83,088		474,334		56,636		100,283		137,383		155,183		449,48
Income from continuing																				
operations, net of income taxes		57,979		56,318		52,617		23,588		190,502		26,156		53,910		93,687		103,423		277,170
(Loss) income from																				
discontinued operations, net of																				
income taxes		(5,337)		(37, 112)		(16,754)		(3,312)		(62,515)		(112)		(1,517)		(7,524)		93,737		84,58
Net income attributable to																				
Veeco	\$	52,642	\$	19,206	\$	35,863	\$	20,276	\$	127,987	\$	26,044	\$	52,393	\$	86,163	\$	197,160	\$	361,76
Income (loss) per common																				
share attributable to Veeco:																				
Basic:																				
Continuing operations	\$	1.46	\$	1.37	\$	1.34	\$	0.62	\$	4.80	\$	0.67	\$	1.36	\$	2.35	\$	2.62	\$	7.0
Discontinued operations	Ψ	(0.14)		(0.90)	Ψ	(0.43)	Ψ	(0.09)		(1.57)	Ψ	0107	Ŷ	(0.04)		(0.19)		2.38	Ψ	2.1
		(0.12.1)		(01) 0)		(01.12)		(0.07)		(212.)				(0.0.1)		(0.07)				
T	\$	1.32	¢	0.47	¢	0.01	¢	0.53	¢	2 22	¢	0.7	¢	1.22	¢	2.16	¢	5 00	¢	0.1
Income	\$	1.32	\$	0.47	\$	0.91	\$	0.53	\$	3.23	\$	0.67	\$	1.32	\$	2.16	\$	5.00	\$	9.1
Diluted :																				
Continuing operations	\$	1.36		1.31	\$	1.31	\$	0.61		4.63	\$	0.62	\$	1.24		2.22		2.46	\$	6.5
Discontinued operations		(0.12)		(0.86)		(0.41)		(0.09)		(1.52)				(0.04)		(0.18)		2.24		1.9
Income	\$	1.24	\$	0.45	\$	0.90	\$	0.52	\$	3.11	\$	0.62	\$	1.20	\$	2.04	\$	4.70	\$	8.5
Weighted average shares																				
outstanding:																				
Basic		39.842		40,998		39,335		38,212		39.658		38,784		39,761		39,946		39,453		39,49
Diluted		42.531		43.002		40.069		38,771		41.155		42,269		43,506		42.258		41,972		42,51
Solar Systems Business Dis		/		15,002		10,007		50,771		11,155		12,207		15,500		12,230		11,972		12,51

CIGS Solar Systems Business Disposal

On July 28, 2011, we announced a plan to discontinue our CIGS solar systems business. The action, which was completed on September 27, 2011 and impacted approximately 80 employees, was in response to the dramatically reduced cost of mainstream solar technologies driven by significant reductions in prices, large industry investment, a lower than expected end market acceptance for CIGS

technology and technical barriers in scaling CIGS. This business was previously included as part of our LED & Solar segment.

Accordingly, the results of operations for the CIGS solar systems business have been recorded as discontinued operations in the accompanying consolidated statements of operations for all periods presented. During the year ended December 31, 2011, total discontinued operations include charges totaling \$69.8 million (\$50.7 million in the second quarter and \$19.1 million in the third quarter). These charges include an asset impairment charge totaling \$6.2 million, a goodwill write-off of \$10.8 million, an inventory write-off totaling \$27.0 million, charges to settle contracts totaling \$22.1 million, lease related charges totaling \$1.4 million and personnel severance charges totaling \$2.3 million.

Metrology Divestiture

On August 15, 2010, we signed a definitive agreement to sell our Metrology business to Bruker comprising our entire Metrology reporting segment for \$229.4 million. Accordingly, Metrology's operating results are accounted for as discontinued operations in determining the consolidated results of operations. The sales transaction closed on October 7, 2010, except for assets located in China due to local restrictions. Total proceeds, which included a working capital adjustment of \$1 million, totaled \$230.4 million of which \$7.2 million relates to the assets in China. As part of our agreement with Bruker, \$22.9 million of proceeds was held in escrow and was restricted from use for one year from the closing date of the transaction to secure certain specified losses arising out of breaches of representations, warranties and covenants we made in the stock purchase agreement and related documents. The restriction relating to the escrowed proceeds was released on October 6, 2011. As part of the sale we incurred transaction costs, which consisted of investment bank fees and legal fees, totaling \$5.2 million. During the fourth quarter of 2010, we recognized a pre-tax gain on disposal of \$156.3 million and a pre-tax deferred gain of \$5.4 million related to the assets in China.

Other Quarterly Items

During the fourth quarter of 2011, we recognized a restructuring charge of \$1.3 million for personnel severance related to a company-wide reorganization. We also recognized an asset impairment charge of \$0.6 million for property and equipment and \$0.8 million inventory write-off charged to cost of sales related to the discontinuance of a certain product line in our LED & Solar reporting unit.

During the third quarter of 2011 there was overstatement in our discontinued operations tax benefit totaling \$3.4 million. We corrected this error in the discontinued operations income tax provision in the fourth quarter of 2011 for the same amount, representing the amount not previously recorded in the third quarter of 2011. We do not believe that this difference was material to our results of operations for the third and fourth quarter of 2011.

During the first quarter of 2010, we recognized a restructuring credit of \$0.2 million associated with a change in estimate.

A variety of factors influence the level of our net sales in a particular quarter including economic conditions in the HB LED, solar, data storage and semiconductor industries, the timing of significant orders, shipment delays, specific feature requests by customers, the introduction of new products by us and our competitors, production and quality problems, changes in material costs, disruption in sources of supply, seasonal patterns of capital spending by customers, and other factors, many of which are beyond our control. In addition, we derive a substantial portion of our revenues from the sale of products which have an average selling price in excess of \$2,000,000. As a result, the timing of recognition of revenue from a single transaction could have a significant impact on our net sales and operating results in any given quarter.

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

None.

Item 9A. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

Our senior management is responsible for establishing and maintaining a system of disclosure controls and procedures (as defined in Rule 13a-14 and 15d-14 under the Securities Exchange Act of 1934 (the "Exchange Act")) designed to ensure that information required to be disclosed by us in the reports that we file or submit under the Exchange Act is recorded, processed, summarized, and reported, within the time periods specified in the Securities and Exchange Commission's rules and forms. Disclosure controls and procedures include, without limitation, controls, and procedures designed to ensure that information required to be disclosed by an issuer in the reports that it files or submits under the Exchange Act is accumulated and communicated to the issuer's management, including its principal executive officer or officers and principal financial officer or officers, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure.

We have evaluated the effectiveness of the design and operation of our disclosure controls and procedures under the supervision of and with the participation of management, including the chief executive officer and chief financial officer, as of the end of the period covered by this report. Based on that evaluation, our chief executive officer and our chief financial officer concluded that our disclosure controls and procedures are effective to ensure that information required to be disclosed by us in reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in Securities and Exchange Commission rules and forms and is accumulated and communicated to our management, including our principal executive officer and principal financial officer, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure.

Subsequent to that evaluation there have been no significant changes in our disclosure controls or procedures or other factors that could significantly affect these controls or procedures after such evaluation.

Design and Evaluation of Internal Control Over Financial Reporting

Pursuant to Section 404 of the Sarbanes-Oxley Act of 2002, we have included a report of management's assessment of the design and effectiveness of its internal controls as part of this Annual Report on Form 10-K for the year ended December 31, 2011. Our independent registered public accounting firm also attested to, and reported on, the effectiveness of internal control over financial reporting. Management's report and the independent registered public accounting firm's attestation report are included in our Consolidated Financial Statements for the year ended December 31, 2011 under the caption entitled "Management's Report on Internal Control Over Financial Reporting" and "Report of Independent Registered Public Accounting Firm on Internal Control Over Financial Reporting."

Changes in Internal Control Over Financial Reporting

There have been no significant changes in our internal controls or other factors during the fiscal quarter ended December 31, 2011 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. Other Information

None.

PART III

Portions of the information required by Part III of Form 10-K are incorporated by reference from Veeco's Proxy Statement to be filed with the SEC in connection with Veeco's 2012 Annual Meeting of Stockholders (the "Proxy Statement").

Item 10. Directors, Executive Officers, and Corporate Governance

The information required by Item 10 of Form 10-K is incorporated by reference to our Proxy Statement under the headings "Corporate Governance," "Executive Officers" and "Section 16(a) Reporting Compliance."

We have adopted a Code of Ethics for Senior Officers (the "Code") which applies to our chief executive officer, principal financial officer, principal accounting officer, and persons performing similar functions. A copy of the Code can be found on our website (*www.veeco.com*). We intend to disclose on our website the nature of any future amendments to and waivers of the Code that apply to the chief executive officer, principal financial officer, principal accounting officer or persons performing similar functions. We have also adopted a Code of Business Conduct which applies to all of our employees, including those listed above, as well as to our directors. A copy of the Code of Business Conduct can be found on our website (*www.veeco.com*). The website address above is intended to be an inactive, textual reference only. None of the material on this website is part of this report.

Item 11. Executive Compensation

The information required by Item 11 of Form 10-K is incorporated by reference to our Proxy Statement under the heading "Executive Compensation."

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

The information required by Item 12 of Form 10-K is incorporated by reference to our Proxy Statement under the heading "Security Ownership of Certain Beneficial Owners and Management" and "Equity Compensation Plan Information."

The following table gives information about our common stock that may be issued under our equity compensation plans as of December 31, 2011. See Note 8 to the Consolidated Financial Statements included herein for information regarding the material features of these plans.

	Number of securities to be issued upon exercise of outstanding options, warrants, and rights (a)	Weighted average exercise price of outstanding options, warrants, and rights (b)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a)) (c)
Equity compensation plans approved by security			
holders	2,105,777	\$ 25.58	1,764,570
Equity compensation plans not approved by security holders			
Total	2,105,777		1,764,570

Item 13. Certain Relationships, Related Transactions and Director Independence

The information required by Item 13 of Form 10-K is incorporated by reference to our Proxy Statement under the headings "Independence of the Board of Directors" and "Certain Relationships and Related Transactions."

Item 14. Principal Accounting Fees and Services

The information required by Item 14 of Form 10-K is incorporated by reference to our Proxy Statement under the heading "Proposal 3 Ratification of the Appointment of Ernst & Young LLP as Independent Registered Public Accounting Firm."

PART IV

Item 15. Exhibits and Financial Statement Schedules

(a)

The Registrant's financial statements together with a separate table of contents are annexed hereto. The financial statement schedule is listed in the separate table of contents annexed hereto.

(b)

Exhibits

Unless otherwise indicated, each of the following exhibits has been previously filed with the Securities and Exchange Commission by the Company under File No. 0-16244.

Number 2.1	Exhibit Stock Purchase Agreement dated August 15, 2010 among Veeco Instruments Inc. (Veeco), Veeco Metrology Inc. and	Incorporated by Reference to the Following Documents Quarterly Report on Form 10-Q for the quarter ended September 30, 2010, Exhibit 2.1
3.1	Bruker Corporation Amended and Restated Certificate of Incorporation of	Quarterly Report on Form 10-Q for the quarter ended
5.1	Veeco dated December 1, 1994, as amended June 2, 1997 and July 25, 1997.	June 30, 1997, Exhibit 3.1
3.2	Amendment to Certificate of Incorporation of Veeco dated May 29, 1998.	Annual Report on Form 10-K for the year ended December 31, 2000, Exhibit 3.2
3.3	Amendment to Certificate of Incorporation of Veeco dated May 5, 2000.	Quarterly Report on Form 10-Q for the quarter ended June 30, 2000, Exhibit 3.1
3.4	Certificate of Designation, Preferences, and Rights of Series A Junior Participating Preferred Stock of Veeco.	Quarterly Report on Form 10-Q for the quarter ended March 31, 2001, Exhibit 3.1
3.5	Amendment to Certificate of Incorporation of Veeco dated May 16, 2002	Quarterly Report on Form 10-Q for the quarter ended September 30, 2009, Exhibit 3.1
3.6	Amendment to Certificate of Incorporation of Veeco dated May 14, 2010	Annual Report on Form 10-K for the year ended December 31, 2010, Exhibit 3.8
3.7	Fourth Amended and Restated Bylaws of Veeco, effective October 23, 2008	Current Report on Form 8-K filed October 27, 2008, Exhibit 3.1
3.8	Amendment No. 1 to the Fourth Amended and Restated Bylaws of Veeco effective May 20, 2010	Current Report on Form 8-K, filed May 26, 2010, Exhibit 3.1
3.9	Amendment No. 2 to the Fourth Amended and Restated Bylaws of Veeco effective October 20, 2011	Current Report on Form 8-K, filed October 24, 2011, Exhibit 3.1
10.1	Loan Agreement dated as of December 15, 1999 between Applied Epi, Inc. and Jackson National Life Insurance Company.	Quarterly Report on Form 10-Q for the quarter ended September 30, 2001, Exhibit 10.2
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Number 10.2	Exhibit Amendment to Loan Documents effective as of September 17, 2001 between Applied Epi, Inc. and Jackson National Life Insurance Company (executed in June 2002).	Incorporated by Reference to the Following Documents Quarterly Report on Form 10-Q for the quarter ended June 30, 2002, Exhibit 10.2
10.3	Promissory Note dated as of December 15, 1999 issued by Applied Epi, Inc. to Jackson National Life Insurance Company.	Quarterly Report on Form 10-Q for the quarter ended September 30, 2001, Exhibit 10.3
10.4*	Form of Indemnification Agreement entered into between Veeco and each of its directors and executive officers.	Current Report on Form 8-K filed on October 23, 2006, Exhibit 10.1
10.5*	Veeco Amended and Restated 2000 Stock Incentive Plan, effective July 20, 2006.	Quarterly Report on Form 10-Q for the quarter ended June 30, 2006, Exhibit 10.4
10.6*	Amendment No. 1 effective April 18, 2007 (ratified by the Board August 7, 2007) to Veeco Amended and Restated 2000 Stock Incentive Plan.	Quarterly Report on Form 10-Q for the quarter ended June 30, 2007, Exhibit 10.1
10.7*	Amendment No. 2 dated January 22, 2009 to Veeco Amended and Restated 2000 Stock Incentive Plan.	Annual Report on Form 10-K for the year ended December 31, 2008, Exhibit 10.41
10.8*	Form of Restricted Stock Agreement pursuant to the Veeco 2000 Stock Incentive Plan, effective November 2005	Quarterly Report on Form 10-Q for the quarter ended September 30, 2005, Exhibit 10.3
10.9*	Form of Notice of Restricted Stock Award and related terms and conditions pursuant to the Veeco 2000 Stock Incentive Plan, effective June 2006	Quarterly Report on Form 10-Q for the quarter ended September 30, 2006, Exhibit 10.3
10.10*	Veeco 2010 Stock Incentive Plan, effective May 14, 2010	Registration Statement on Form S-8 (File Number 333-166852) filed May 14, 2010, Exhibit 10.1
10.11*	Form of 2010 Stock Incentive Plan Stock Option Agreement	Registration Statement on Form S-8 (File Number 333-166852) filed May 14, 2010, Exhibit 10.2
10.12*	Form of 2010 Stock Incentive Plan Restricted Stock Agreement	Registration Statement on Form S-8 (File Number 333-166852) filed May 14, 2010, Exhibit 10.3
10.13*	Veeco Performance-Based Restricted Stock 2010	Quarterly Report on Form 10-Q for the quarter ended June 30, 2010, Exhibit 10.2
10.14*	Veeco 2010 Management Bonus Plan dated January 22, 2010	Quarterly Report on Form 10-Q for the quarter ended March 31, 2010, Exhibit 10.2
10.15*	Veeco 2010 Special Profit Sharing Plan dated February 15, 2010 54	Quarterly Report on Form 10-Q for the quarter ended March 31, 2010, Exhibit 10.3

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Number 10.16*	Exhibit Senior Executive Change in Control Policy effective as of September 12, 2008	Incorporated by Reference to the Following Documents Quarterly Report on Form 10-Q for the quarter ended September 30, 2008, Exhibit 10.3								
10.17*	Amendment No. 1 dated December 23, 2008 (effective September 12, 2008) to Veeco Senior Executive Change in Control Policy	Annual Report on Form 10-K for the year ended December 31, 2008, Exhibit 10.37								
10.18*	Employment Agreement effective as of July 1, 2007 between Veeco and John R. Peeler	Quarterly Report on Form 10-Q for the quarter ended June 30, 2007, Exhibit 10.3								
10.19*	Amendment effective December 31, 2008 to Employment Agreement between Veeco and John R. Peeler	Annual Report on Form 10-K for the year ended December 31, 2008, Exhibit 10.38								
10.20*	Second Amendment effective June 11, 2010 to Employment Agreement between Veeco and John R. Peeler	Quarterly Report on Form 10-Q for the quarter ended June 30, 2010, Exhibit 10.1								
10.21*	Employment Agreement dated December 17, 2009 (effective January 18, 2010) between Veeco and David D. Glass	Quarterly Report on Form 10-Q for the quarter ended March 31, 2010, Exhibit 10.1								
10.22*	Letter Agreement dated January 21, 2004 between Veeco and John P. Kiernan.	Annual Report on Form 10-K for the year ended December 31, 2003, Exhibit 10.38								
10.23*	Form of Amendment effective June 9, 2006 to Letter Agreements between Veeco and each of John P. Kiernan and Robert P. Oates	Quarterly Report on Form 10-Q for the quarter ended June 30, 2006, Exhibit 10.3								
10.24*	Form of Amendment effective December 31, 2008 to Letter Agreements between Veeco and each of John P. Kiernan and Robert P. Oates	Annual Report on Form 10-K for the year ended December 31, 2008, Exhibit 10.40								
10.25*	Letter agreement effective as of June 19, 2009 between Veeco and John P. Kiernan	Quarterly Report on Form 10-Q for the quarter ended June 30, 2009, Exhibit 10.2								
10.26*	Letter Agreement dated October 31, 2005 between Veeco and Robert P. Oates	Quarterly Report on Form 10-Q for the quarter ended September 30, 2005, Exhibit 10.1								
10.27*	Amendment dated September 12, 2008 to Employment Agreement between Veeco and Robert P. Oates	Quarterly Report on Form 10-Q for the quarter ended September 30, 2008, Exhibit 10.2								
10.28*	Veeco 2011 Management Bonus Plan, dated January 26, 2011	Quarterly Report on Form 10-Q for the quarter ended June 30, 2011, Exhibit 10.1								
10.29*	Service Agreement effective January 1, 2012 between Veeco and Edward H. Braun	Filed herewith								
10.30*	Letter Agreement dated January 30, 2012 between Veeco and Dr. William J. Miller 55	Filed herewith								

Number 21.1	Exhibit Subsidiaries of the Registrant.	Incorporated by Reference to the Following Documents Filed herewith
23.1	Consent of Ernst & Young LLP.	Filed herewith
31.1	Certification of Chief Executive Officer pursuant to Rule 13a-14(a) or Rule 15d-14(a) of the Securities and Exchange Act of 1934.	Filed herewith
31.2	Certification of Chief Financial Officer pursuant to Rule 13a-14(a) or Rule 15d-14(a) of the Securities and Exchange Act of 1934.	Filed herewith
32.1	Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	Filed herewith
32.2	Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	Filed herewith
101.INS	XBRL Instance	**
101.XSD	XBRL Schema	**
101.PRE	XBRL Presentation	**
101.CAL	XBRL Calculation	**
101.DEF	XBRL Definition	**
101.LAB	XBRL Label	**

*

Indicates a management contract or compensatory plan or arrangement, as required by Item 15(a)(3) of Form 10-K.

**

Filed herewith electronically.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, as amended, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized, on February 22, 2012.

VEECO INSTRUMENTS INC.

By: /s/ JOHN R. PEELER

John R. Peeler

Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, as amended, this report has been signed below by the following persons on behalf of the Registrant and in the capacities indicated, on February 22, 2012.

Signature Title /s/ EDWARD H. BRAUN Director and Chairman Edward H. Braun /s/ RICHARD A. D'AMORE Director Richard A. D'Amore /s/ JOEL A. ELFTMANN Director Joel A. Elftmann /s/ GORDON HUNTER Director Gordon Hunter /s/ ROGER D. MCDANIEL Director Roger D. McDaniel /s/ JOHN R. PEELER Director and Chief Executive Officer (principal executive officer) John R. Peeler /s/ PETER J. SIMONE Director Peter J. Simone /s/ DAVID D. GLASS Executive Vice President and Chief Financial Officer (principal financial officer) David D. Glass /s/ JOHN P. KIERNAN Senior Vice President, Finance, Corporate Controller and Treasurer (principal accounting officer) John P. Kiernan 57

Veeco Instruments Inc. and Subsidiaries

Index to Consolidated Financial Statements

and Financial Statement Schedule

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Management's Report on Internal Control Over Financial Reporting

Management of the Company is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rules 13a-15(f) and 15d-15(f) under the Securities Exchange Act of 1934. The Company's internal control over financial reporting is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with accounting principles generally accepted in the United States of America ("GAAP"). The Company's internal control over financial reporting includes those policies and procedures that:

pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the Company;

provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with GAAP, and that receipts and expenditures of the Company are being made only in accordance with authorizations of management and directors of the Company; and

provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the Company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

As required by Section 404 of the Sarbanes-Oxley Act of 2002, management assessed the effectiveness of the Company's internal control over financial reporting as of December 31, 2011. In making this assessment, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO") in *Internal Control-Integrated Framework*.

Based on our assessment and those criteria, management believes that the Company maintained effective internal control over financial reporting as of December 31, 2011.

The effectiveness of the Company's internal control over financial reporting as of December 31, 2011 has been audited by Ernst & Young LLP, an independent registered public accounting firm, as stated in their report which appears under the heading "Report of Independent Registered Public Accounting Firm on Internal Control Over Financial Reporting."

Veeco Instruments Inc. Plainview, NY February 22, 2012

/s/ JOHN R. PEELER

John R. Peeler *Chief Executive Officer* Veeco Instruments Inc. February 22, 2012

/s/ DAVID D. GLASS

David D. Glass Executive Vice President and Chief Financial Officer Veeco Instruments Inc. February 22, 2012 F-2

Report of Independent Registered Public Accounting Firm on Internal Control Over Financial Reporting

The Board of Directors and Shareholders of Veeco Instruments Inc.

We have audited Veeco Instruments Inc. and Subsidiaries (the "Company") internal control over financial reporting as of December 31, 2011, based on criteria established in Internal Control Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (the COSO criteria). The Company's management is responsible for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management's Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2011, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the 2011 consolidated financial statements of the Company and our report dated February 22, 2012 expressed an unqualified opinion thereon.

/s/ ERNST & YOUNG LLP

New York, New York February 22, 2012

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Report of Independent Registered Public Accounting Firm on Financial Statements

To the Shareholders and Board of Directors of Veeco Instruments Inc.

We have audited the accompanying consolidated balance sheets of Veeco Instruments Inc. and Subsidiaries (the "Company") as of December 31, 2011 and 2010, and the related consolidated statements of operations, equity, comprehensive income (loss) and cash flows for each of the three years in the period ended December 31, 2011. Our audits also included the financial statement schedule in the accompanying index. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements and schedules based on our audits.

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

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of the Company at December 31, 2011 and 2010, and the consolidated results of their operations and their cash flows for each of the three years in the period ended December 31, 2011, in conformity with U.S. generally accepted accounting principles. Also, in our opinion, the related financial statement schedule, when considered in relation to the basic financial statements taken as a whole, presents fairly in all material respects the information set forth therein.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the Company's internal control over financial reporting as of December 31, 2011, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated February 22, 2012, expressed an unqualified opinion thereon.

/s/ ERNST & YOUNG LLP

New York, New York February 22, 2012

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Veeco Instruments Inc. and Subsidiaries

Consolidated Balance Sheets

(Dollars in thousands)

	December 31,			
		2011		2010
Assets				
Current assets:				
Cash and cash equivalents	\$	217,922	\$	245,132
Short-term investments		273,591		394,180
Restricted cash		577		76,115
Accounts receivable, net		95,038		150,528
Inventories		113,434		108,487
Prepaid expenses and other current assets		40,756		34,328
Assets held for sale		2,341		
Deferred income taxes		10,885		13,803
		,		,
Total current assets		754,544		1,022,573
Property, plant and equipment at cost, net		86,067		42,320
Goodwill		55,828		52,003
Deferred income taxes				9,403
Intangible assets, net		25,882		16,893
Other assets		13,742		4,842
Total assets	\$	936,063	\$	1,148,034
Liabilities and equity				
Current liabilities:	•	40.000	<i>ф</i>	22.220
Accounts payable	\$	40,398	\$	32,220
Accrued expenses and other current liabilities		107,656		183,010
Deferred profit		10,275		4,109
Income taxes payable		3,532		56,369
Liabilities of discontinued segment held for sale		5,359		5,359
Current portion of long-term debt		248		101,367
Total current liabilities		167,468		382,434
Deferred income taxes		5,029		002,101
Long-term debt		2,406		2,654
Other liabilities		640		434
Equity:		0+0		
Preferred stock, 500,000 shares authorized; no shares issued and outstanding				
Common stock; \$.01 par value; authorized 120,000,000 shares; 38,768,436 and 40,337,950 shares issued and				
outstanding in 2011 and 2010, respectively		435		409
Additional paid-in-capital		688,353		656,969
Retained earnings		265,317		137,436
Accumulated other comprehensive income		6,590		5,796
Less: treasury stock, at cost; 5,278,828 shares and 1,118,600 shares in 2011 and 2010, respectively		(200,175)		(38,098)
Total equity		760,520		762,512
Total liabilities and equity	\$	936,063	\$	1,148,034

The accompanying notes are an integral part of these consolidated financial statements.

Veeco Instruments Inc. and Subsidiaries

Consolidated Statements of Operations

(In thousands, except per share data)

	Year ended December 31,				
	2011		2010		2009
Net sales	\$ 979,135	\$	930,892	\$	282,262
Cost of sales	504,801		481,407		168,003
Gross profit	474,334		449,485		114,259
Operating expenses (income):					
Selling, general and administrative	95,134		87,250		59,419
Research and development	96,596		56,948		37,767
Amortization	4,734		3,703		3,977
Restructuring	1,288		(179)		4,479
Asset impairment	584				304
Other, net	(261)		(1,490)		682
Total operating expenses	198,075		146,232		106,628
Operating income	276,259		303,253		7,631
Interest expense	4,600		8,201		7,732
Interest income	(3,776)		(1,629)		(882)
Loss on extinguishment of debt	3,349				
Income from continuing operations before income taxes	272,086		296,681		781
Income tax provision	81,584		19,505		2,558
Income (loss) from continuing operations	190,502		277,176		(1,777)
Discontinued operations:					
(Loss) income from discontinued operations, before income taxes (includes gain on disposal of \$156,290 in 2010)	(91,885)		129,776		(15,066)
Income tax (benefit) provision	(29,370)		45,192		(1,211)
(Loss) income from discontinued operations	(62,515)		84,584		(13,855)
Net income (loss)	127,987		361,760		(15,632)
Net loss attributable to noncontrolling interest	,		,		(65)
Net income (loss) attributable to Veeco	\$ 127,987	\$	361,760	\$	(15,567)
Income (loss) per common share attributable to Veeco:					
Basic:					
Continuing operations	\$ 4.80	\$		\$	(0.05)
Discontinued operations	(1.57)		2.14		(0.43)
Income (loss)	\$ 3.23	\$	9.16	\$	(0.48)
Diluted:					
Continuing operations	\$ 4.63	\$	6.52	\$	(0.05)
Discontinued operations	(1.52)		1.99		(0.43)

Income (loss)