
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

For the fiscal year ended December 31, 2013

OR

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

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

VEECO INSTRUMENTS INC.

(Exact Name of Registrant as Specified in Its Charter)

Delaware

(State or Other Jurisdiction of Incorporation or Organization)

11-2989601

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

Terminal Drive

Plainview, New York

(Address of Principal Executive Offices)

11803

(Zip Code)

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 No

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 No

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

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

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

Indicate by check mark whether the Registrant is a large accelerated filer, an accelerated filer, 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 Accelerated filer Non-accelerated filer Smaller reporting company
(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). Yes No

The aggregate market value of the voting stock held by non-affiliates of the Registrant, based on the closing price of the common stock on June 28, 2013 as reported on The Nasdaq National Market, was \$1,376,219,104. 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.

39,846,244 shares of common stock were outstanding as of the close of business on February 18, 2014.

DOCUMENTS INCORPORATED BY REFERENCE

Safe Harbor Statement

This annual report on Form 10-K (the "Report") contains 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. Discussions containing such forward-looking statements may be found in Part I. 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", "will" 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;
- Timing of market adoption of light emitting diode ("LED") technology for general lighting is uncertain;
- 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 metal organic chemical vapor deposition ("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;
- Our 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 cyclical nature 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 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;
- We may be exposed to liabilities under the Foreign Corrupt Practices Act and any determination that we violated these or similar laws could have a material adverse effect on our business;
- 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, which operate in highly concentrated industries;

- Our sales cycle is long and unpredictable;
- We are subject to internal control evaluations and attestation requirements of Section 404 of the Sarbanes-Oxley Act and any delays or difficulty in satisfying these requirements or negative reports concerning our internal controls could adversely affect our future results of operations and our stock price;
- The price of our common shares may be volatile and could decline significantly;
- Our inability to attract, retain, and motivate key employees could have a material adverse effect on our business;
- 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;
- If we are subject to cyber-attacks we could incur substantial costs and, if such attacks are successful, could result in significant liabilities, reputational harm and disruption of our operations;
- 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 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;
- New regulations related to conflict minerals will force us to incur additional expenses, may make our supply chain more complex, and may result in damage to our relationships with customers; and
- The matters set forth in this Report generally, including the risk factors set forth in “Part I. Item 1A. Risk Factors.”

Consequently, such forward-looking statements should be regarded solely as the current plans, estimates and beliefs of Veeco Instruments Inc. (together with its consolidated subsidiaries, “Veeco”, the “Company”, “we”, “us”, and “our”, unless the context indicates otherwise). 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.

VEECO INSTRUMENTS INC.

INDEX

Safe Harbor Statement	1
PART I.....	4
Item 1. Business	4
Item 1A. Risk Factors	10
Item 1B. Unresolved Staff Comments	22
Item 2. Properties.....	22
Item 3. Legal Proceedings.....	23
Item 4. Mine Safety Disclosures	23
PART II	24
Item 5. Market for Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities	24
Item 6. Selected Consolidated Financial Data	26
Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations	27
Item 8. Financial Statements and Supplementary Data.....	48
Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure	48
Item 9A. Controls and Procedures	48
Item 9B. Other Information	51
PART III	51
Item 10. Directors, Executive Officers, and Corporate Governance.....	51
Item 11. Executive Compensation	51
Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters	51
Item 13. Certain Relationships, Related Transactions and Director Independence	52
Item 14. Principal Accounting Fees and Services	52
PART IV	53
Item 15. Exhibits and Financial Statements and Schedule.....	53
SIGNATURES.....	56
INDEX TO EXHIBITS.....	57
Index to Consolidated Financial Statements and Financial Statement Schedule	F-1

PART I.

Item 1. Business

The Company

Veeco Instruments Inc. (together with its consolidated subsidiaries, “Veeco”, the “Company”, “we”, “us”, and “our”, unless the context indicates otherwise) creates process equipment that enables technologies for a cleaner and more productive world. We design, manufacture and market thin film equipment aligned with global “megatrends” such as energy efficiency and mobility. Our equipment is primarily sold to make electronic devices including light emitting diodes (“LED”s), flexible organic LED (OLED) displays, hard-disk drives, solar cells, power semiconductors and wireless components.

We develop highly differentiated, “best-in-class” process equipment for critical performance steps. Our products feature leading technology, low cost-of-ownership and high throughput. Core competencies in advanced thin film technologies, over 300 patents, and decades of specialized process know-how helps us to stay at the forefront of these demanding industries.

Our *LED & Solar segment* includes two related compound semiconductor technologies, metal organic chemical vapor deposition (“MOCVD”) and molecular beam epitaxy (“MBE”) as well as newly acquired atomic layer deposition (“ALD”) technology. Our MOCVD and MBE systems and components enable the manufacture of LEDs used in consumer electronics, displays and lighting, power semiconductors, wireless components and solar cells. Our ALD technology is used by the manufacturers of OLED displays and has further applications in the semiconductor and solar markets.

Our *Data Storage segment* designs and manufactures systems used to create thin film magnetic heads (“TFMH”s) that read and write data on hard disk drives. These include ion beam etch, ion beam deposition, diamond-like carbon, physical vapor deposition, chemical vapor deposition, and slicing, dicing and lapping systems. While our systems are primarily sold to hard drive customers, they also have applications in optical coatings, micro-electro-mechanical systems (“MEMS”) and magnetic sensors, and extreme ultraviolet (“EUV”) lithography.

As of December 31, 2013, we had approximately 800 employees to support our customers through product and process development, training, manufacturing, and sales and service sites in the U.S., South Korea, Taiwan, China, Singapore, Japan, Europe and other locations.

Veeco Instruments Inc. was organized as a Delaware corporation in 1989.

Our Growth Strategy

Our growth strategy consists of:

- Providing differentiated process equipment to address customers’ next generation product development roadmaps;
- Investing to win through focused research and development spending in markets that we believe provide significant growth opportunities or are at an inflection point in process equipment requirements. Examples include LED, OLED, and power semiconductor devices;
- Leveraging our world-class sales channel and local process applications support to build strong strategic relationships with technology leaders;
- Expanding our portfolio of service products that improve the performance of our systems, including spare parts, upgrades and consumables to drive growth and improve customer satisfaction;
- Combining outsourced and internal manufacturing strategies to flex manufacturing capacity through industry investment cycles; and
- Pursuing partnerships and acquisitions to expand our product portfolio and accelerate our growth.

Business Overview and Industry Trends

Business Overview: Our deposition, etch and other systems are applicable to the creation of a broad range of microelectronic components, including LEDs, OLEDs, TFMHs and compound semiconductor devices. Our customers who manufacture these devices invest in equipment in order to advance their next generation products and deliver more efficient and cost effective technology solutions. Our businesses tend to be cyclical, and are highly influenced by customer buying patterns that are dependent upon industry trends. While our products are sold to multiple end markets, we are focused herein on the trends that most influence our business.

LED Industry Trends: Following the global recession in 2008-2009, we experienced a rapid improvement in business conditions in late 2009 through mid-2011, particularly in our MOCVD business. Demand for our MOCVD equipment increased dramatically, primarily from customers in South Korea, China, and Taiwan, as LEDs became the standard illumination for TV backlighting. We experienced a strong increase in demand for MOCVD from customers in China due to government funding of LED fabrication facility expansions throughout the region. Following this large investment, the LED industry entered an overcapacity situation, evidenced by low tool utilization rates being reported by many key global customers. As a result, our MOCVD business declined significantly from the middle of 2011 through the end of 2013. While utilization rates of our equipment in many customer facilities improved in 2013 from prior trough levels in 2012, weak business conditions in MOCVD persist and continue to be difficult at the start of 2014. In the short term, it is difficult for us to predict when the supply/demand of MOCVD equipment will return to equilibrium and when order rates for our MOCVD products will meaningfully recover.

While consumer electronics (e.g. cell phones, laptops, LED-TVs) 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 as LEDs become widely adopted for this much larger market application.

As part of the shift toward more efficient energy use across the globe, we believe LED technology will play a key role in energy and cost savings in lighting. We see this opportunity as both vast and long-term given that LED lighting is just now beginning to penetrate the global lighting market. LED adoption is happening initially in outdoor, commercial 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. In addition to the incandescent bulb phase-outs, many countries are implementing 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. In March 2013, LED industry forecasters at Digitimes Research projected that LED lighting will represent about 38.6% of the total lighting market, and will be worth approximately \$44.2 billion by 2015.

In order to capitalize on this opportunity, we introduced several new generations of MOCVD tools, including our TurboDisc® K-Series™ and MaxBright® MOCVD systems which provide customers with significant cost of ownership advantages when compared with alternative equipment. These activities enabled us to overtake our primary competitor in market share in 2012. To maintain our leadership position, we continue to invest heavily in MOCVD research and development to help drive down cost of LED manufacturing for our customers in order to accelerate lighting adoption.

Trends in other Markets Impacting our MOCVD Business: Power semiconductors are an emerging market opportunity for MOCVD equipment. While silicon-based transistors are the mainstream of power electronic devices today, gallium nitride (“GaN”)-on-Silicon based power electronics developed on MOCVD tools can potentially deliver higher performance (i.e. higher efficiency and switching speed). Global industry leaders in power electronics are currently working on research and development programs to explore this new technology. GaN-on-Silicon based power devices have potential for information technology and consumer devices (e.g. power supplies, inverters).

Another application for MOCVD is in the solar market. MOCVD equipment can also be used to manufacture high-efficiency triple junction photovoltaic cells. We currently sell a small number of MOCVD systems each year to make solar cells for Concentrator Photovoltaic (CPV) and Space Based applications.

Trends Impacting our MBE Business: Our MBE systems, sources and components are used to manufacture critical epitaxial layers in applications such as solar cells, fiber-optics, mobile phones, radar systems and displays. Our business is primarily influenced by long-term market trends in cell phone manufacturing. Each one of these complex cell phone devices contains an increasing number of power amplifiers or other compound semiconductor radio frequency components. Due to industry consolidation and resulting overcapacity, our sales of MBE production tools have been declining for about a year. In 2013, we refocused our business and product portfolio to increase our market share in sales of MBE systems to scientific research organizations and universities.

Trends Impacting our ALD Business: On October 1, 2013, we completed the acquisition of Synos Technology, Inc. (“Synos”), which brought atomic layer deposition technology to us. We are working with the world leader in mobile OLED displays to develop ALD systems that effectively encapsulate the OLED materials and potentially enable flexible displays for mobile phones. According to industry forecasting firm IHS iSuppli, the flexible OLED display market is expected to grow from \$21 million in 2013 to almost \$12 billion by 2020. In addition, we also see numerous extended opportunities for ALD technology in OLED TV, lighting, semiconductor, solar and other adjacent markets.

Data Storage Business Overview and Trends: Worldwide storage demand continues to increase. While hard disk drives (“HDDs”) face significant competition 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 2013 report, shipments of TFMHs, the HDD component that our equipment makes, are forecasted to grow at a compound annual growth rate of 4.2% from 2013 to 2017.

While technological 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 us 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. The floods in Thailand resulted in an unexpected increase in equipment orders for us in the fourth quarter of 2011 as customers rebuilt lost capacity. This led to record levels of Data Storage revenue in the first half of 2012. However, this significant equipment investment, combined with industry consolidation and a slowdown in hard drive unit demand in mid-2012 due to weak global economic conditions, caused our hard drive customers to freeze capacity additions. So, for the full year of 2012, our Data Storage revenue was flat and orders were well below recent historical averages. Industry overcapacity and weak order rates continued into 2013 and it is unclear when hard drive manufacturers will need to make significant investments in new equipment capacity.

Throughout industry cycles, we continue 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.

Our Data Storage systems are also sold for applications in MEMS magnetic sensors, optical coatings and EUV photomasks. We have put in place new product development, marketing and sales strategies to grow the non-data storage applications for our technologies.

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

	For the year ended December 31,					
	2013	Percent of total	2012	Percent of total	2011	Percent of total
Segment Analysis						
LED & Solar	\$ 249,742	75.3%	\$ 363,181	70.4%	\$ 827,797	84.5%
Data Storage	82,007	24.7%	152,839	29.6%	151,338	15.5%
Total	<u>\$ 331,749</u>	<u>100.0%</u>	<u>\$ 516,020</u>	<u>100.0%</u>	<u>\$ 979,135</u>	<u>100.0%</u>

Please see our footnote *Foreign Operations, Geographic Area and Product Segment Information* in our Consolidated Financial Statements for additional information regarding our segments and sales by geographic location.

LED & Solar

Metal Organic Chemical Vapor Deposition Systems (“MOCVD”): We are the world’s leading supplier of MOCVD technology. MOCVD production systems are used to make GaN-based devices (blue and green LEDs) and AsP-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 AsP MOCVD systems also are used to make high-efficiency triple junction photo cells. In 2011, we introduced the industry’s first production-proven multi-chamber MOCVD system, the MaxBright, for high-volume production of LEDs. We sell MOCVD systems in either single or multi-chamber configurations. In 2012, we introduced the TurboDisc MaxBright M & MHP and K465i HP GaN MOCVD systems, the industry’s highest productivity, highest footprint efficiency platforms for LED manufacturing.

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 (e.g. power amplifiers, high electron mobility transistors or hetero-junction bipolar transistors) and a broad array of compound semiconductor materials research applications. In 2013, we introduced the GENxplor™, the industry’s first fully-integrated MBE system for the compound semiconductor R&D market. The GENxplor creates high quality epitaxial layers on substrates up to 3” in diameter and is ideal for cutting edge research on a wide variety of materials including gallium arsenide, nitrides, and oxides.

Fast Array Scanning Atomic Layer Deposition Systems (“FAST-ALD”): FAST-ALD™ represents a paradigm shift in a technology long known for excellent deposition uniformity and pin-hole free films. While traditional ALD is slow, costly and limited to “chamber-sized” reactors, FAST-ALD can deposit materials below 100° Celsius and 10 times faster, making it capable of deposition on substrates with virtually no size limitation. Our patented linear reactor allows the chemical reaction to occur at the substrate’s surface. We are primarily focused on applying this technology for the encapsulation of organic light emitting diode (OLED) materials used to enable flexible mobile devices and we are also exploring additional applications in solar, semiconductor and other end markets.

Data Storage

Ion Beam Deposition (“IBD”) Systems: Our IBD systems and NEXUS® IBD systems utilize ion beam technology to deposit precise layers of thin films. The NEXUS systems 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 fabrication facility 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.

Optical Coatings: Our SPECTOR offers manufacturers improvements in target material utilization, optical endpoint control and process time for cutting-edge optical interference coating applications.

Service and Sales

We sell our products and services worldwide primarily 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. In 2010 and 2011, we significantly expanded our footprint in Asia to bring training, technology support and R&D closer to our customers through new sites in China, Taiwan and South Korea. We provide service and support on a warranty, service contract or an individual service-call basis. 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 29%, 21% and 9% of our net sales for the years ended December 31, 2013, 2012 and 2011, respectively. Parts and consumables sales represented approximately 23%, 17% and 7% of our net sales for those years, respectively, and service and support sales were 6%, 4% and 2%, respectively.

Customers

We sell our products to many of the world's major 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 HC SemiTek in our LED & Solar segment accounted for more than 10% of our total net sales in 2013, Western Digital in our Data Storage segment accounted for more than 10% of our total net sales in 2012, and Elec-Tech International Co. Ltd. and Sanan Optoelectronics in our LED & Solar segment each accounted for more than 10% of our total net sales in 2011. 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, 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 they are responsible, resulting in more efficient marketing and research and development. Our research and development activities take place at our facilities in Plainview, New York; Poughkeepsie, New York; Camarillo, California; Ft. Collins, Colorado; Somerset, New Jersey; St. Paul, Minnesota; Fremont, California; and South 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 expenses were approximately \$81.4 million, \$95.2 million and \$96.6 million, or approximately 25%, 18% and 10% of net sales for the years ended December 31, 2013, 2012 and 2011, 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 consists of orders for which we received a firm purchase order, a customer-confirmed shipment date within twelve months and a deposit, where required.

Our backlog decreased to \$143.3 million as of December 31, 2013 from \$150.2 million as of December 31, 2012. During the year ended December 31, 2013, we recorded backlog adjustments of approximately \$6.8 million, consisting of a \$5.6 million adjustment related to orders that no longer met our bookings criteria as well as an adjustment related to foreign currency translation of \$1.2 million.

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.

Some of our competitors include, but are not limited to: Aixtron; Canon Anelva 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, 2013, we had approximately 800 employees, of which there were approximately 160 in manufacturing and testing, 90 in sales and marketing, 160 in service and product support, 260 in engineering, research and development and 130 in information technology, general administration and finance. In addition, we had approximately 10 temporary employees/outside contractors in support of 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 filed annual report on Form 10-K, filed 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, remained depressed through 2012 and 2013, and may continue to remain at low levels. 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. 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 continue to experience a slow recovery or an additional down turn, this could have a further negative impact on our sales and revenue generation, margins and operating expenses, and the time it takes us to return to profitability.

Timing of market adoption of LED technology for general lighting is uncertain.

Our future business prospects depend largely on the market adoption of products that incorporate our technologies. Potential barriers to such adoption include higher initial costs and customer familiarity with, and substantial investment and know-how in, existing technologies. These barriers apply to the adoption of LED technology for general illumination applications, including residential, commercial and street lighting markets. 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. Furthermore, the adoption of, or changes in, government policies that discourage the use of traditional lighting technologies may impact LED adoption. These barriers also apply to the adoption of OLED products. While the use of OLED is expected to grow in the near future, it is difficult to predict the rate at which OLED will be adopted by the market. The market adoption of OLED products may not occur at our currently projected rates.

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 of which could materially and adversely affect our business, financial condition and results of operations.

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

We generate a significant portion of our revenue in China. 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. We adjust our backlog for such cancellations, contract modifications, and delivery delays that result in a delivery period in excess of one year, among other items. The current and forecasted downturn in our MOCVD reporting unit 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.

Our 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 cyclical nature of the industries we serve directly affects our business.

Our business depends in large part upon the capital expenditures of manufacturers in the LED markets, data storage markets, and other device 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 portion 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 and Data Storage 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 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 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 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 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. 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 83%, 84%, and 90% of our net sales for the years ended 2013, 2012 and 2011, respectively 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. 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 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.

We may be exposed to liabilities under the Foreign Corrupt Practices Act and any determination that we violated these or similar laws could have a material adverse effect on our business.

We are subject to the Foreign Corrupt Practices Act (“FCPA”) and other laws that prohibit improper payments or offers of payments to foreign government officials, as defined by the statute, for the purpose of obtaining or retaining business. In addition, many of our customers have policies limiting or prohibiting us from providing certain types or amounts of entertainment, meals or gifts to their employees. It is our policy to implement safeguards to discourage these practices by our employees and representatives. However, our safeguards may prove to be ineffective and our employees, consultants, sales agents or distributors may engage in conduct for which we may be held responsible. Violations of the FCPA or similar laws or similar customer policies may result in severe criminal or civil sanctions or the loss of supplier privileges to a customer and we may be subject to other liabilities, which could negatively affect our business, operating results and financial condition.

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 will determine which period revenue is reported in and can cause volatility in our revenue for a given reporting period. 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 the current year 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 technical specifications. We cannot be certain that we will be successful in selecting, developing, manufacturing and marketing new products or new 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, which 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 42%, 34%, and 41% of our total net sales for the years ended 2013, 2012 and 2011, respectively. Customer consolidation activity involving some of our largest customers could 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 2013, 62% of our total net sales were to customers located in China, Taiwan and South Korea. 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 typically ranges

from one to six months. When coupled with the fluctuating amount of time required for shipment, installation and final acceptance, our sales cycles often vary 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 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 sales and, therefore, our cash flow and net income to fluctuate widely from period to period.

We are subject to internal control evaluations and attestation requirements of Section 404 of the Sarbanes-Oxley Act and any delays or difficulty in satisfying these requirements or negative reports concerning our internal controls could adversely affect our future results of operations and our stock price.

Pursuant to Section 404 of the Sarbanes-Oxley Act of 2002, we must include in our Annual Report on Form 10-K a report by management on the effectiveness of our internal control over financial reporting. Ongoing compliance with this requirement is complex, costly, time-consuming and is subject to significant judgment. If our internal controls are ineffective or if our management does not timely assess the adequacy of such internal controls, our ability to file timely and accurate periodic reports may be impeded. Any delays in filing may cause us to face the following risks and concerns, among others:

- concern on the part of our customers, partners, investors, and employees about our financial condition and filing delay status, including the potential loss of business opportunities;
- significant time and expense required to complete delayed filings, and the distraction of our senior management team and board of directors as we work to complete delayed filings;
- investigations by the SEC and other regulatory authorities of the Company and of members of our management;
- limitations on our ability to raise capital and make acquisitions;
- suspension or termination of our stock listing on the NASDAQ stock exchange, and the removal of our stock as a component of certain stock market indices; and
- general reputational harm.

Any or all of the foregoing could result in the commencement of stockholder lawsuits against the Company. Any such litigation, as well as any proceedings that could arise as a result of a filing delay and the circumstances which gave rise to it, may be time consuming and expensive, may divert management attention from the conduct of our business, could have a material adverse effect on our business, financial condition, and results of operations, and may expose us to costly indemnification obligations to current or former officers, directors, or other personnel, regardless of the outcome of such matters, which may not be adequately covered by insurance.

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;
- issues associated with the performance and reliability of 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.

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.

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.

If we are subject to cyber-attacks we could incur substantial costs and, if such attacks are successful, could result in significant liabilities, reputational harm and disruption of our operations.

We manage, store and transmit various proprietary information and sensitive data relating to our operations. We may be subject to breaches of the information technology systems we use for these purposes. Experienced computer programmers and hackers may be able to penetrate our network security and misappropriate or compromise our confidential information or those of third parties, create system disruptions, or cause shutdowns. Computer programmers and hackers also may be able to develop and deploy viruses, worms, and other malicious software programs that attack our systems or our products, or that otherwise exploit any security vulnerabilities.

The costs to address the foregoing security problems and security vulnerabilities before or after a cyber-incident could be significant. Our remediation efforts may not be successful and could result in interruptions, delays, or cessation of service, and loss of existing or potential customers that may impede our sales, manufacturing, distribution, or other critical functions. In addition, breaches of our security measures and the unapproved dissemination of proprietary information or sensitive data about us or our customers or other third parties, could expose us, our customers, or other third parties to a risk of loss or misuse of this information, result in litigation and potential liability for us, damage our reputation, or otherwise harm our business.

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. We are subject to many of these risks in connection with our recent acquisition of Synos.

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.

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. 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 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 research, development, 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 research, development, or use of certain of our products, each of which could have a material adverse effect on our business, financial condition, and results of operation. In addition, some of our operations involve the storage, handling and use of hazardous materials that may pose a risk of fire, explosion, or environmental release. Such events could result from acts of terrorism, natural disasters or operational failures and may result in injury or loss of life to our employees and others, local environmental contamination and property damage. These events might cause a temporary shutdown of an affected facility, or portion thereof, and we could be subject to penalties or claims as a result. Each of these events could have a material adverse effect on our business, financial condition, and results of operation.

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. 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, any of which a holder of our common stock might not consider in the holder's 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.

New regulations related to conflict minerals will force us to incur additional expenses, and may make our supply chain more complex, and may result in damage to our relationships with customers.

On August 22, 2012, under the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, or the Dodd-Frank Act, the SEC adopted new requirements for companies that manufacture products that contain certain minerals and metals, known as conflict minerals. These rules require public companies to perform diligence and to report annually to the SEC whether such minerals originate from the Democratic Republic of Congo and adjoining countries. The implementation of

these new requirements could adversely affect the sourcing, availability and pricing of minerals we use in the manufacture of our products. In addition, we will incur additional costs to comply with the disclosure requirements, including costs related to determining the source of any of the relevant minerals used in our products. Given the complexity of our supply chain, we may not be able to ascertain the origins of these minerals used in our products through the due diligence procedures that we implement, which may harm our reputation. We may also face difficulties in satisfying customers who may require that our products be certified as conflict mineral free, which could harm our relationships with these customers and lead to a loss of revenue. These new requirements could limit the pool of suppliers that can provide conflict-free minerals, and we may be unable to obtain conflict-free minerals at competitive prices, which could increase our costs and adversely affect our manufacturing operations and our profitability.

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:

Owned Facilities Location	Approximate Size (sq. ft.)	Mortgaged	Use
Plainview, NY	80,000	No	Data Storage and Corporate Headquarters
Somerset, NJ	80,000	No	LED & Solar
Somerset, NJ	38,000	No	LED & Solar
St. Paul, MN(1)	111,000	Yes	LED & Solar
Yongin-city, South Korea	56,000	No	Sales Office, Customer Training Center and R&D Center
Hyeongok-ri, South Korea	18,000	No	Sales Office and Clean Room

Leased Facilities Location	Approximate Size (sq. ft.)	Lease Expires	Use
Camarillo, CA	23,000	2015	Data Storage
Fort Collins, CO	26,000	2018	Data Storage
Peabody, MA	30,000	2014	Held for Sublease
Somerset, NJ	14,000	2014	LED & Solar
Poughkeepsie, NY	9,000	2015	LED & Solar
Kingston, NY	44,000	2018	LED & Solar
Fremont, CA	17,000	2015	LED & Solar
Shanghai, China (2)	18,700	2014	Customer Training Center
Hsinchu City, Taiwan	13,500	2015	Sales Office, Process Development, and Customer Training Center

-
- (1) Our LED & Solar segment utilizes approximately 95,000 square feet of this facility. The balance is available for expansion.
(2) We have the option to renew this lease for two consecutive two year terms and also have the option to purchase this facility.

The St. Paul, Minnesota facility is subject to a mortgage which, as of December 31, 2013, had an outstanding balance of \$2.1 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 Germany, Japan, South Korea, Malaysia, Singapore, Thailand, Philippines and China. We believe our facilities are adequate to meet our current needs.

Item 3. Legal Proceedings

Environmental

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 Corporation (“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

Veeco and certain other parties were named as defendants in a lawsuit filed on April 25, 2013 in the Superior Court of California, County of Sonoma. The plaintiff in the lawsuit, Patrick Colbus, seeks unspecified damages and asserts claims that he suffered burns and other injuries while he was cleaning a molecular beam epitaxy system alleged to have been manufactured by Veeco. The lawsuit alleges, among other things, that the molecular beam epitaxy system was defective and that Veeco failed to adequately warn of the potential risks of the system. Veeco believes this lawsuit is without merit and intends to defend vigorously against the claims. Veeco is unable to predict the outcome of this action or to reasonably estimate the possible loss or range of loss, if any, arising from the claims asserted therein. The Company believes that, in the event of any recovery by the plaintiff from Veeco, such recovery would be fully covered by Veeco’s insurance.

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 2013 and 2012 high and low closing bid prices by quarter are as follows:

	2013		2012	
	High	Low	High	Low
First Quarter	\$ 38.41	\$ 28.71	\$ 33.40	\$ 21.46
Second Quarter	42.60	32.23	36.97	26.54
Third Quarter	36.41	33.16	38.11	30.00
Fourth Quarter	38.15	28.44	31.52	26.89

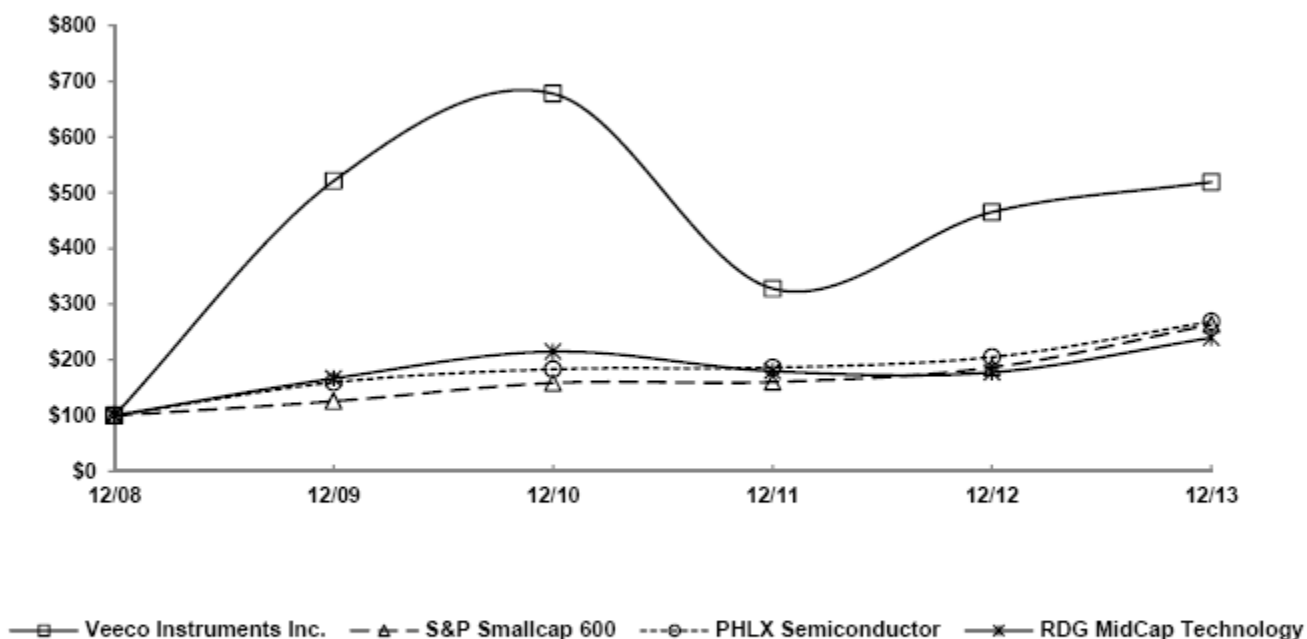
On February 18, 2014, the closing bid price for our common stock on The NASDAQ National Market was \$41.13 and we had 120 shareholders of record.

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 12/31/08 in stock or index, including reinvestment of dividends.
Fiscal year ending December 31.

Copyright© 2014 S&P, a division of The McGraw-Hill Companies Inc. All rights reserved.

**ASSUMES \$100 INVESTED ON DEC. 31, 2008
ASSUMES DIVIDENDS REINVESTED
FISCAL YEAR ENDING DEC. 31**

	2008	2009	2010	2011	2012	2013
Veeco Instruments Inc.	100.00	521.14	677.60	328.08	465.14	519.09
S&P Smallcap 600	100.00	125.57	158.60	160.22	186.37	263.37
PHLX Semiconductor	100.00	159.68	183.23	186.05	204.93	268.55
RDG MidCap Technology	100.00	166.67	214.78	179.75	177.47	239.71

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

	Year ended December 31,				
	2013	2012	2011	2010	2009
(in thousands, except per share data)					
Statement of Operations Data:					
Net sales	\$ 331,749	\$ 516,020	\$ 979,135	\$ 930,892	\$ 282,262
Operating income (loss)	(71,812)	37,212	276,259	303,253	7,631
Income (loss) from continuing operations net of income taxes	(42,263)	26,529	190,502	277,176	(1,777)
Income (loss) from discontinued operations net of income taxes	—	4,399	(62,515)	84,584	(13,855)
Net income (loss) attributable to noncontrolling interest	—	—	—	—	(65)
Net income (loss) attributable to Veeco	\$ (42,263)	\$ 30,928	\$ 127,987	\$ 361,760	\$ (15,567)
Income (loss) per common share attributable to Veeco:					
Basic:					
Continuing operations	\$ (1.09)	\$ 0.69	\$ 4.80	\$ 7.02	\$ (0.05)
Discontinued operations	—	0.11	(1.57)	2.14	(0.43)
Income (loss)	\$ (1.09)	\$ 0.80	\$ 3.23	\$ 9.16	\$ (0.48)
Diluted :					
Continuing operations	\$ (1.09)	\$ 0.68	\$ 4.63	\$ 6.52	\$ (0.05)
Discontinued operations	—	0.11	(1.52)	1.99	(0.43)
Income (loss)	\$ (1.09)	\$ 0.79	\$ 3.11	\$ 8.51	\$ (0.48)
Weighted average shares outstanding:					
Basic	38,807	38,477	39,658	39,499	32,628
Diluted	38,807	39,051	41,155	42,514	32,628
	December 31,				
	2013	2012	2011	2010	2009
(in thousands)					
Balance Sheet Data:					
Cash and cash equivalents	\$ 210,799	\$ 384,557	\$ 217,922	\$ 245,132	\$ 148,500
Short-term investments	281,538	192,234	273,591	394,180	135,000
Restricted cash	2,738	2,017	577	76,115	—
Working capital	485,452	632,197	587,076	640,139	317,317
Goodwill	91,348	55,828	55,828	52,003	52,003
Total assets	947,969	937,304	936,063	1,148,034	605,372
Long-term debt (including current installments)	2,137	2,406	2,654	104,021	101,176
Total equity	780,230	811,212	760,520	762,512	359,059

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", "we", "us", and "our", unless the context indicates otherwise) creates process equipment that enables technologies for a cleaner and more productive world. We design, manufacture and market equipment primarily sold to make LEDs and hard-disk drives, as well as for concentrator photovoltaics, power semiconductors, wireless components, and micro-electro-mechanical systems ("MEMS").

Veeco develops highly differentiated, "best-in-class" process equipment for critical performance steps. Our products feature leading technology, low cost-of-ownership and high throughput. Core competencies in advanced thin film technologies, over 300 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 components, power semiconductors, and concentrator photovoltaics, as well as for R&D applications. Our ALD technology is used by the manufacturers of OLED displays and has further applications in the semiconductor and solar markets.

Veeco's Data Storage segment designs and manufactures systems used to create thin film magnetic heads ("TFMH"s) that read and write data on hard disk drives. These include ion beam etch, ion beam deposition, diamond-like carbon, physical vapor deposition, chemical vapor deposition, and slicing, dicing and lapping systems. While our systems are primarily sold to hard drive customers, they also have applications in optical coatings, MEMS and magnetic sensors, and extreme ultraviolet ("EUV") lithography.

As of December 31, 2013, Veeco had approximately 800 employees to support our customers through product and process development, training, manufacturing, and sales and service sites in the U.S., South Korea, Taiwan, China, Singapore, Japan, Europe and other locations.

Veeco Instruments Inc. was organized as a Delaware corporation in 1989.

Summary of Results for 2013

Selected financial highlights include:

- Revenue decreased 35.7% to \$331.7 million in 2013 from \$516.0 million in 2012. LED & Solar revenues decreased 31.2% to \$249.7 million from \$363.2 million in 2012. Data Storage revenues decreased 46.3% to \$82.0 million from \$152.8 million in 2012;
- Orders were down 15.4%, to \$331.6 million in 2013, compared to \$391.9 million in 2012;
- Our gross margin decreased, to 31.1%, in 2013 compared to 41.7% in 2012. Gross margins in LED & Solar decreased from 40.9% in 2012 to 28.0%. Data Storage gross margins also decreased from 43.7% to 40.4%.
- Our selling, general and administrative expenses increased to \$85.5 million, from \$73.1 million in 2012. Selling, general and administrative expenses were 25.8% of net sales in 2013, compared to 14.2% in 2012;
- Our research and development expenses decreased to \$81.4 million from \$95.2 million in 2012. Research and development expenses were 24.5% of net sales in 2013, compared to 18.4% in 2012;
- Net income (loss) from continuing operations in 2013 was \$(42.3) million compared to \$26.5 million in 2012;
- Diluted net income (loss) from continuing operations per share in 2013 was \$(1.09) compared to \$0.68 in 2012.

Outlook

As we begin 2014, it is unclear when business conditions may improve for Veeco.

We are seeing some positive signs in our MOCVD business. LED customer facility utilization rates are stable and at a high level. It is clear that LED lighting adoption is accelerating. Some of our key customers are currently contemplating capacity additions. However, it remains difficult to accurately predict if, and when, a turnaround will happen and to what extent we will see growth in our MOCVD business. Competitive pricing pressure, which had a dramatic effect on our gross margins in 2013, is also difficult to predict. Our focus is to introduce next-generation products that will offer our customers additional value, and that, combined with potentially higher volumes, could help restore gross margins in MOCVD.

Our new ALD business was acquired as a “pre-revenue” business and thus decreased our earnings in 2013. The timing of production ALD orders from our key customer could have a significant impact on our expected revenue growth and potential return to profitability.

While Data Storage orders increased 8.4% from the prior year period and low growth is expected in hard drives, our customers have excess manufacturing capacity and they have only been making select technology purchases. Future demand for our Data Storage products is unclear.

Our priorities for 2014 include taking the steps we believe are necessary to transition us back to profitable growth. We are focused on four areas to improve our financial performance: 1) developing and launching new products that enable cost effective LED lighting, flexible OLED encapsulation and other emerging technologies; 2) executing manufacturing cost reduction programs; 3) driving process improvement initiatives to make us more efficient; and 4) improving product differentiation and customer value to stem margin erosion. We currently anticipate that our losses will continue in the near term.

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, 2013 and 2012

The following table shows our Consolidated Statements of Operations, percentages of sales and comparisons between 2013 and 2012 (dollars in thousands):

	Year ended December 31,				Dollar and Percentage Change Year to Year	
	2013		2012			
Net sales	\$ 331,749	100.0%	\$ 516,020	100.0%	\$ (184,271)	(35.7)%
Cost of sales	228,607	68.9%	300,887	58.3%	(72,280)	(24.0)%
Gross profit	103,142	31.1%	215,133	41.7%	(111,991)	(52.1)%
Operating expenses:						
Selling, general and administrative	85,486	25.8%	73,110	14.2%	12,376	16.9%
Research and development	81,424	24.5%	95,153	18.4%	(13,729)	(14.4)%
Amortization	5,527	1.7%	4,908	1.0%	619	12.6%
Restructuring	1,485	0.4%	3,813	0.7%	(2,328)	(61.1)%
Asset impairment	1,220	0.4%	1,335	0.3%	(115)	(8.6)%
Total operating expenses	175,142	52.8%	178,319	34.6%	(3,177)	(1.8)%
Other, net	(1,017)	(0.3)%	(398)	(0.1)%	(619)	155.5%
Changes in contingent consideration	829	0.2%	—	0.0%	829	*
Operating income (loss)	(71,812)	(21.6)%	37,212	7.2%	(109,024)	*
Interest income (expense), net	602	0.2%	974	0.2%	(372)	(38.2)%
Income (loss) from continuing operations						
before income taxes	(71,210)	(21.5)%	38,186	7.4%	(109,396)	*
Income tax provision (benefit)	(28,947)	(8.7)%	11,657	2.3%	(40,604)	*
Income (loss) from continuing operations	(42,263)	(12.7)%	26,529	5.1%	(68,792)	*
Discontinued operations:						
Income (loss) from discontinued operations before income taxes	—	0.0%	6,269	1.2%	(6,269)	*
Income tax provision (benefit)	—	0.0%	1,870	0.4%	(1,870)	*
Income (loss) from discontinued operations	—	0.0%	4,399	0.9%	(4,399)	*
Net income (loss)	\$ (42,263)	(12.7)%	\$ 30,928	6.0%	\$ (73,191)	*

* Not Meaningful

Net Sales

The following is an analysis of sales by segment and by region (dollars in thousands):

	For the year ended December 31,				Dollar and Percentage Change Year to Year	
	2013	Percent of total	2012	Percent of total		
Segment Analysis						
LED & Solar	\$ 249,742	75.3%	\$ 363,181	70.4%	\$(113,439)	(31.2)%
Data Storage	82,007	24.7%	152,839	29.6%	(70,832)	(46.3)%
Total	<u>\$ 331,749</u>	<u>100.0%</u>	<u>\$ 516,020</u>	<u>100.0%</u>	<u>\$(184,271)</u>	<u>(35.7)%</u>
Regional Analysis						
Asia Pacific	\$ 252,199	76.0%	\$ 390,995	75.8%	\$(138,796)	(35.5)%
Americas (1)	57,609	17.4%	83,317	16.1%	(25,708)	(30.9)%
Europe, Middle East and Africa	21,941	6.6%	41,708	8.1%	(19,767)	(47.4)%
Total	<u>\$ 331,749</u>	<u>100.0%</u>	<u>\$ 516,020</u>	<u>100.0%</u>	<u>\$(184,271)</u>	<u>(35.7)%</u>

- (1) Less than 1% of sales included within the Americas caption above have been derived from other regions outside the United States.

LED & Solar segment sales decreased in 2013 primarily due to lower MOCVD sales as a result of continued industry manufacturing overcapacity and our customer's hesitancy to make new investments. Data Storage sales decreased in 2013 due to customer fabrication facility overcapacity and weak hard drive demand. Our Data Storage sales in 2012 were favorably impacted by the replacement of equipment at one of our customer's sites that was damaged by the floods in Thailand. By region, net sales decreased in Asia Pacific ("APAC"), primarily due to a significant decrease in MOCVD sales in China resulting from industry manufacturing overcapacity. Net sales in the Americas and Europe, Middle East and Africa ("EMEA") also decreased, due to reduced end-market demand resulting from the weak global economy. We believe that there will continue to be year-to-year variations in the geographic distribution of sales.

Orders decreased 15.4% to \$331.6 million from \$391.9 million in the prior year, primarily attributable to a 22.1% decrease in LED & Solar orders, principally driven by a decline in MOCVD orders due to industry manufacturing overcapacity. Since hitting a peak in the second quarter of 2011, our orders have slowed dramatically. While Data Storage orders increased 8.4% from the prior year period and low growth is expected in hard drives, our customers have excess manufacturing capacity and they have only been making select technology purchases. We continue to experience weak overall market conditions due to overcapacity in all of our businesses.

Our book-to-bill ratio for 2013, which is calculated by dividing orders recorded in a given time period by revenue recognized in the same time period, was 1 to 1 compared to 0.76 to 1 in 2012. Our backlog as of December 31, 2013 was \$143.3 million, compared to \$150.2 million as of December 31, 2012. During the year ended December 31, 2013, we recorded backlog adjustments of approximately \$6.8 million, consisting of a \$5.6 million adjustment related to orders that no longer met our bookings criteria as well as an adjustment related to foreign currency translation of \$1.2 million. For certain sales arrangements we require a deposit for a portion of the sales price before shipment. As of December 31, 2013 and 2012, we had customer deposits of \$27.5 million and \$32.7 million, respectively.

Gross Profit

(dollars in thousands)	Year ended December 31,		Dollar and Percentage Change Year to Year	
	2013	2012		
Gross profit - LED & Solar	\$ 69,998	\$ 148,383	\$ (78,385)	(52.8)%
<i>Gross margin</i>	28.0%	40.9%		
Gross profit - Data Storage	\$ 33,144	\$ 66,750	\$ (33,606)	(50.3)%
<i>Gross margin</i>	40.4%	43.7%		
Gross profit - Total Veeco	\$ 103,142	\$ 215,133	\$ (111,991)	(52.1)%
<i>Gross margin</i>	31.1%	41.7%		

LED & Solar gross margins decreased primarily due to lower average selling prices, reduced volume and fewer final acceptances partially offset by cost reductions associated with reduced volumes and reduced expenses in 2013 for slow moving inventory items. Data Storage gross margins decreased primarily due to a significant reduction in volume.

Operating Expenses

(dollars in thousands)	Year ended December 31,		Dollar and Percentage Change Year to Year	
	2013	2012		
Selling, general and administrative	\$ 85,486	\$ 73,110	\$ 12,376	16.9%
<i>Percentage of sales</i>	25.8%	14.2%		

Selling, general and administrative expenses increased primarily from professional fees associated with our review of our revenue accounting that began in 2012 and completed in October 2013, partially offset by a reduction in bonus and profit sharing expense and increased cost control measures put into place in response to weak market conditions, which resulted in lower personnel-related costs and discretionary expenses. The addition of our ALD business in the fourth quarter of 2013 has also contributed to an increase in our selling, general and administrative expenses.

(dollars in thousands)	Year ended December 31,		Dollar and Percentage Change Year to Year	
	2013	2012		
Research and development	\$ 81,424	\$ 95,153	\$ (13,729)	(14.4)%
<i>Percentage of sales</i>	24.5%	18.4%		

Research and development expense decreased as we sharpened our focus on product development in areas of anticipated high-growth. We selectively funded certain product development activities which resulted in reduced spending for project materials and professional consultants as well as lower personnel and personnel-related costs.

(dollars in thousands)	Year ended December 31,		Dollar and Percentage Change Year to Year	
	2013	2012		
Amortization	\$ 5,527	\$ 4,908	\$ 619	12.6%
<i>Percentage of sales</i>	1.7%	1.0%		

Amortization expense increased primarily due to additional amortization associated with intangible assets acquired as part of our acquisition of Synos during the fourth quarter of 2013, partially offset by certain intangible assets becoming fully amortized.

(dollars in thousands)	Year ended December 31,		Dollar and Percentage Change	
	2013	2012	Year to Year	
Restructuring	\$ 1,485	\$ 3,813	\$ (2,328)	(61.1)%
<i>Percentage of sales</i>	0.4%	0.7%		

During 2013, we recorded \$1.5 million in personnel severance and related costs principally resulting from the transition from a direct sales presence to a distributor in one of our international sales offices and the consolidation of certain sales, business and administrative functions. During 2012, we took measures to improve profitability, including a reduction in discretionary expenses, realignment of our senior management team and consolidation of certain sales, business and administrative functions. As a result of these actions, we recorded a restructuring charge in 2012 consisting of \$3.0 million in personnel severance and related costs, \$0.4 million in equity compensation and related costs and \$0.4 million in other severance costs resulting from a headcount reduction of 52 employees.

(dollars in thousands)	Year ended December 31,		Dollar and Percentage Change	
	2013	2012	Year to Year	
Asset impairment	\$ 1,220	\$ 1,335	\$ (115)	(8.6)%
<i>Percentage of sales</i>	0.4%	0.3%		

During 2013, we recorded asset impairment charges in LED & Solar of \$0.9 million related to certain lab tools carried in property, plant and equipment which we are holding for sale and \$0.3 million related to another asset carried in Other assets. During 2012, we recorded an asset impairment charge related to a license agreement in our Data Storage segment.

Income Taxes

(dollars in thousands)	Year ended December 31,		Dollar and Percentage Change	
	2013	2012	Year to Year	
Income tax provision (benefit)	\$ (28,947)	\$ 11,657	\$ (40,604)	*
<i>Effective tax rate</i>	40.7%	30.5%		

* Not Meaningful

The 2013 net benefit for income taxes included a \$3.5 million provision relating to our foreign operations and \$32.4 million benefit relating to our domestic operations. The 2012 provision for income taxes included \$8.3 million relating to our foreign operations and \$3.4 million relating to our domestic operations. Our 2013 effective tax rate is higher than the statutory rate as a result of the jurisdictional mix of earnings in our foreign locations, an income tax benefit related to the generation of current year research and development tax credits and legislation enacted in the first quarter of 2013 which extended the Federal Research and Development Credit for both the 2012 and 2013 tax years.

During the fourth quarter of 2012, we determined that we may not meet the criteria required to receive a certain incentive tax rate pursuant to a negotiated tax holiday in one foreign jurisdiction. Although we are continuing to negotiate the criteria for the incentive, for financial reporting purposes we have recorded additional tax provisions of \$0.9 million and \$4.0 million in 2013 and 2012, respectively, totaling \$4.9 million, which represents the cumulative effect of calculating the tax provision using the incentive tax rate as compared to the foreign country's statutory rate. If we successfully renegotiate the incentive criteria, this additional tax provision could be reversed as a future benefit in the period in which the negotiations are finalized.

During 2012, we recorded an income tax expense of \$1.9 million related to discontinued operations, with no comparable amount in 2013. In addition, we recorded a current tax benefit of \$2.1 million related to equity-based compensation in 2012 for which no current tax benefit was recorded in 2013.

Discontinued Operations

(dollars in thousands)	Year ended December 31,		Dollar and Percentage Change Year to Year	
	2013	2012		
Income (loss) from discontinued operations before income taxes	\$ —	\$ 6,269	\$ (6,269)	*
Income tax provision (benefit)	—	1,870	(1,870)	*
Income (loss) from discontinued operations	\$ —	\$ 4,399	\$ (4,399)	*

* Not Meaningful

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. The 2012 results included a \$1.4 million gain (\$1.1 million net of taxes) on the sale of the assets of discontinued segment held for sale and a \$5.4 million gain (\$4.1 million net of taxes) associated with the closing of the sale to Bruker.

Years Ended December 31, 2012 and 2011

The following table shows our Consolidated Statements of Operations, percentages of sales and comparisons between 2012 and 2011 (dollars in thousands):

	Year ended December 31,				Dollar and Percentage Change Year to Year	
	2012		2011			
Net sales	\$ 516,020	100.0%	\$ 979,135	100.0%	\$ (463,115)	(47.3)%
Cost of sales	300,887	58.3%	504,801	51.6%	(203,914)	(40.4)%
Gross profit	215,133	41.7%	474,334	48.4%	(259,201)	(54.6)%
Operating expenses:						
Selling, general and administrative	73,110	14.2%	95,134	9.7%	(22,024)	(23.2)%
Research and development	95,153	18.4%	96,596	9.9%	(1,443)	(1.5)%
Amortization	4,908	1.0%	4,734	0.5%	174	3.7%
Restructuring	3,813	0.7%	1,288	0.1%	2,525	196.0%
Asset impairment	1,335	0.3%	584	0.1%	751	128.6%
Total operating expenses	178,319	34.6%	198,336	20.3%	(20,017)	(10.1)%
Other, net	(398)	(0.1)%	(261)	(0.0)%	(137)	52.5%
Operating income (loss)	37,212	7.2%	276,259	28.2%	(239,047)	(86.5)%
Interest income (expense), net	974	0.2%	(824)	(0.1)%	1,798	*
Loss on extinguishment of debt	—	0.0%	(3,349)	(0.3)%	3,349	*
Income (loss) from continuing operations before income taxes	38,186	7.4%	272,086	27.8%	(233,900)	(86.0)%
Income tax provision (benefit)	11,657	2.3%	81,584	8.3%	(69,927)	(85.7)%
Income (loss) from continuing operations	26,529	5.1%	190,502	19.5%	(163,973)	(86.1)%
Discontinued operations:						
Income (loss) from discontinued operations before income taxes	6,269	1.2%	(91,885)	(9.4)%	98,154	*
Income tax provision (benefit)	1,870	0.4%	(29,370)	(3.0)%	31,240	*
Income (loss) from discontinued operations	4,399	0.9%	(62,515)	(6.4)%	66,914	*
Net income (loss)	\$ 30,928	6.0%	\$ 127,987	13.1%	\$ (97,059)	(75.8)%

* Not Meaningful

Net Sales

The following is an analysis of sales by segment and by region (dollars in thousands):

	For the year ended December 31,				Dollar and Percentage Change Year to Year	
	2012	Percent of total	2011	Percent of total		
Segment Analysis.						
LED & Solar	\$ 363,181	70.4%	\$ 827,797	84.5%	\$ (464,616)	(56.1)%
Data Storage	152,839	29.6%	151,338	15.5%	1,501	1.0%
Total	<u>\$ 516,020</u>	<u>100.0%</u>	<u>\$ 979,135</u>	<u>100.0%</u>	<u>\$ (463,115)</u>	<u>(47.3)%</u>
Regional Analysis						
Asia Pacific	\$ 390,995	75.8%	\$ 820,883	83.8%	\$ (429,888)	(52.4)%
Americas (1)	83,317	16.1%	100,635	10.3%	(17,318)	(17.2)%
Europe, Middle East and Africa	41,708	8.1%	57,617	5.9%	(15,909)	(27.6)%
Total	<u>\$ 516,020</u>	<u>100.0%</u>	<u>\$ 979,135</u>	<u>100.0%</u>	<u>\$ (463,115)</u>	<u>(47.3)%</u>

(1) Less than 1%, of sales included within the United States caption above has been derived from other regions within the Americas.

By segment, LED & Solar sales decreased from the prior year primarily due to a 62.0% decrease in MOCVD reactor shipments as a result of industry overcapacity following over two years of strong customer investments. Data Storage sales increased slightly from the prior year, primarily due to an increase in shipments to replace equipment destroyed by flooding in customer facilities in Thailand offset by reduced demand due to our customers' hesitancy to add manufacturing capacity during weak global economic conditions. By region, net sales decreased in APAC, primarily due to lower MOCVD sales to LED customers. Sales in the Americas and EMEA also decreased due to reduced end market demand resulting from the weak global economy. We believe that there will continue to be year-to-year variations in the geographic distribution of sales.

Orders in 2012 decreased 52.1% compared to 2011, primarily attributable to a 53.1% decrease in LED & Solar orders that were principally driven by a decline in MOCVD bookings due to industry overcapacity. After hitting a peak in the second quarter of 2011, our bookings slowed dramatically in the second half of 2011, which continued throughout 2012. Data Storage orders decreased 48.1% as strong prior year orders from hard drive customers recovering from the flood in Thailand resulted in those customers being over-invested in capacity. In addition, the industry appears to have frozen further investments as end-user hard drive demand has slowed.

Our book-to-bill ratio for 2012, which is calculated by dividing orders received in a given time period by revenue recognized in the same time period, was 0.76 to 1 compared to 0.84 to 1 in 2011. Our backlog as of December 31, 2012 was \$150.2 million, compared to \$332.9 million as of December 31, 2011. During the year ended December 31, 2012, we recorded net backlog adjustments of approximately \$58.5 million. The adjustments consisted of \$42.0 million related to orders that no longer met our booking criteria, primarily due to contracts being extended past a twelve month delivery time frame, and \$15.4 million of order cancellations and order adjustments of \$1.1 million. For certain sales arrangements we require a deposit for a portion of the sales price before shipment. As of December 31, 2012 and 2011, we had customer deposits of \$32.7 million and \$57.1 million, respectively.

Gross Profit

(dollars in thousands)	Year ended December 31,		Dollar and Percentage Change	
	2012	2011	Year to Year	
Gross profit - LED & Solar	\$ 148,383	\$ 397,614	\$ (249,231)	(62.7)%
<i>Gross margin</i>	40.9%	48.0%		
Gross profit - Data Storage	\$ 66,750	\$ 76,720	\$ (9,970)	(13.0)%
<i>Gross margin</i>	43.7%	50.7%		
Gross profit - Total Veeco	\$ 215,133	\$ 474,334	\$ (259,201)	(54.6)%
<i>Gross margin</i>	41.7%	48.4%		

Total Veeco gross margins decreased primarily due to the weak business environment. As a result, we recorded a total expense for slow moving items in 2012 of approximately \$9.6 million, which negatively impacted our gross margins.

LED & Solar gross margins decreased from the prior year, primarily due to a significant decrease in sales volumes, lower average selling prices and fewer final acceptances partially offset by lower plant and service spending associated with reduced volumes and cost reductions in response to lower business levels. Data Storage gross margins decreased from the prior year, primarily due to a sales mix of lower margin products. We anticipate a continuing weak business environment resulting in persistent selling price pressure in our MOCVD business.

Operating Expenses

(dollars in thousands)	Year ended December 31,		Dollar and Percentage Change	
	2012	2011	Year to Year	
Selling, general and administrative	\$ 73,110	\$ 95,134	\$ (22,024)	(23.2)%
<i>Percentage of sales</i>	14.2%	9.7%		

Selling, general and administrative expenses decreased primarily due to lower commissions and bonus and profit sharing expenses from the reduced level of business in each of our segments. In addition our cost control measures put into place throughout the year resulting in lower personnel-related costs, travel and entertainment expense, professional consulting fees and other discretionary expenses.

(dollars in thousands)	Year ended December 31,		Dollar and Percentage Change	
	2012	2011	Year to Year	
Research and development	\$ 95,153	\$ 96,596	\$ (1,443)	(1.5)%
<i>Percentage of sales</i>	18.4%	9.9%		

We continued to invest, at approximately the prior year levels, in the development of products in areas of high-growth for end market opportunities in our LED & Solar segment.

(dollars in thousands)	Year ended December 31,		Dollar and Percentage Change	
	2012	2011	Year to Year	
Amortization	\$ 4,908	\$ 4,734	\$ 174	3.7%
<i>Percentage of sales</i>	1.0%	0.5%		

Amortization expense increased from the prior year, primarily due to additional amortization associated with intangible assets acquired as part of our acquisition of a privately held company during the second quarter of 2011, partially offset by certain intangible assets becoming fully amortized.

(dollars in thousands)	Year ended December 31,		Dollar and Percentage Change	
	2012	2011	Year to Year	
Restructuring	\$ 3,813	\$ 1,288	\$ 2,525	196.0%
<i>Percentage of sales</i>	0.7%	0.1%		

During 2012, we took measures to improve profitability, including a reduction in discretionary expenses, realignment of our senior management team and consolidation of certain sales, business and administrative functions. As a result of these actions, we recorded a restructuring charge consisting of \$3.0 million in personnel severance and related costs, \$0.4 million in equity compensation and related costs and \$0.4 million in other severance costs resulting from a headcount reduction of 52 employees. During 2011, we recorded \$1.3 million in personnel severance and related costs related to a companywide reorganization resulting in a headcount reduction of 65 employees. These reductions in workforce included executives, management, administration, sales and service personnel and manufacturing employees companywide.

(dollars in thousands)	Year ended December 31,		Dollar and Percentage Change	
	2012	2011	Year to Year	
Asset impairment	\$ 1,335	\$ 584	\$ 751	128.6%
<i>Percentage of sales</i>	0.3%	0.1%		

During 2012, we recorded an asset impairment charge related to a license agreement in our Data Storage segment. During 2011, we recorded an asset impairment charge for property, plant and equipment related to the discontinuance of a certain product line in our LED & Solar segment.

Interest Income (Expense), Net

(dollars in thousands)	Year ended December 31,		Dollar and Percentage Change	
	2012	2011	Year to Year	
Interest income (expense), net	\$ 974	\$ (824)	\$ 1,798	*
<i>Percentage of sales</i>	0.2%	(0.1)%		

* Not Meaningful

Interest income, net for 2012 was comprised of \$2.5 million in cash interest income, partially offset by \$0.2 million in cash interest expense and \$1.3 million in non-cash interest expense relating to net amortization of our short-term investments. Interest expense, net for 2011 was 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 in 2011 was partially offset by \$3.8 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 accretion of debt discounts and amortization of debt premiums related to our short-term investments in 2012 and 2011.

Income Taxes

(dollars in thousands)	Year ended December 31,		Dollar and Percentage Change	
	2012	2011	Year to Year	
Income tax provision (benefit)	\$ 11,657	\$ 81,584	\$ (69,927)	(85.7)%
Effective tax rate	30.5%	30.0%		

The 2012 provision for income taxes included \$8.3 million relating to our foreign operations and \$3.4 million relating to our domestic operations. The 2011 provision for income taxes included \$9.6 million relating to our foreign operations and \$72.0 million relating to our domestic operations. Our 2012 effective tax rate is lower than the statutory rate as a result of the jurisdictional mix of earnings in our foreign locations and other favorable tax benefits including the Domestic Production Activities Deduction and an adjustment for the Research and Development Credit related to the filing of our 2011 Federal income tax return.

During the fourth quarter of 2012, we determined that we may not meet the criteria required to receive a certain incentive tax rate pursuant to a negotiated tax holiday in one foreign jurisdiction. Although we are continuing to negotiate the criteria for the incentive, for financial reporting purposes we have recorded an additional tax provision of \$4.0 million which represents the cumulative effect of calculating the tax provision using the incentive tax rate as compared to the foreign country's statutory rate. As such amount is not expected to be paid within twelve months, we have recorded the \$4.0 million as a long term taxes payable. If we successfully renegotiate the incentive criteria, this additional tax provision could be reversed as a future benefit in the period in which the successful negotiations are finalized.

During 2012, we recorded an income tax expense of \$1.9 million related to discontinued operations compared to the \$29.4 million income tax benefit from discontinued operations in the prior year which was reported in accordance with the intraperiod tax allocation provisions. In addition, we recorded a current tax benefit of \$2.1 million related to equity-based compensation which was a credit to additional paid in capital compared to \$10.4 million tax benefit recorded in the prior year.

Discontinued Operations

(dollars in thousands)	Year ended December 31,		Dollar and Percentage Change	
	2012	2011	Year to Year	
Income (loss) from discontinued operations				
before income taxes	\$ 6,269	\$ (91,885)	\$ 98,154	*
Income tax provision (benefit)	1,870	(29,370)	31,240	*
Income (loss) from discontinued operations	\$ 4,399	\$ (62,515)	\$ 66,914	*

* Not Meaningful

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 2012 results included a \$1.4 million gain (\$1.1 million net of taxes) on the sale of the assets of discontinued segment held for sale and a \$5.4 million gain (\$4.1 million net of taxes) associated with the closing of the China Assets with Bruker. 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.

Liquidity and Capital Resources

As of December 31, 2013 and 2012, we had cash and cash equivalents of \$210.8 million and \$384.6 million, respectively, of which \$150.6 million and \$128.0 million, respectively, were held outside the United States. Liquidity is affected by many factors, some of which are based on normal ongoing operations of our business and some of which arise from fluctuations related to global economics and markets. Cash balances are generated and held in many locations throughout the world. It is our current intent to permanently reinvest our funds from Singapore, China, Taiwan, South Korea, and Malaysia outside of the United States and our current plans do not demonstrate a need to repatriate them to fund our United States operations. As of December 31, 2013, we had \$115.0 million in cash held offshore on which we would have to pay significant United States income taxes to repatriate in the event that we need the funds for our operations in the United

States. Additionally, local government regulations may restrict our ability to move cash balances to meet cash needs under certain circumstances. We currently do not expect such regulations and restrictions to impact our ability to make acquisitions, pay vendors, or conduct operations throughout the global organization. As of December 31, 2013 and 2012, in addition to our cash balances, we also had short-term investments in the United States of \$281.5 million and \$192.2 million, respectively, and restricted cash in Germany of \$2.7 million and \$2.0 million, respectively. We believe that our projected cash flow from operations combined with our cash and short term investments 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.

A summary of cash flow activity is as follows (*in thousands*):

	Year ended December 31,	
	2013	2012
Net income (loss)	\$ (42,263)	\$ 30,928
Net cash provided by (used in) operating activities	727	111,963
Net cash provided by (used in) investing activities	(168,056)	48,321
Net cash provided by (used in) financing activities	(5,766)	5,555
Effect of exchange rate changes on cash and cash equivalents	(663)	796
Net increase (decrease) in cash and cash equivalents	(173,758)	166,635
Cash and cash equivalents as of beginning of year	384,557	217,922
Cash and cash equivalents as of end of year	\$ 210,799	\$ 384,557

During 2013, we continued to generate cash from operations despite the \$184.3 million decrease in revenues. Cash provided by operations declined primarily due to a \$73.2 million reduction in net income, generating a net loss for 2013. The net loss for 2013 included \$22.5 million of noncash items. A \$38.8 million decrease in accounts receivable and \$7.5 million increase in accounts payable contributed most significantly to our cash provided from operations. This was partially offset by a \$17.3 million reduction of accrued expenses, customer deposits and deferred revenue and a \$12.6 million increase in income taxes receivable, primarily resulting from a net operating loss carryback claim.

Net cash from investing activities in 2013 declined by \$216.4 million compared to the prior year. The cash used in investing activities was primarily driven by our acquisition of Synos, which consumed \$71.5 million and the \$89.3 million increase in short-term investments. This was partially offset by a \$15.8 million reduction in capital expenditures from the prior year.

Net cash from financing activities in 2013 declined by \$11.3 million compared to the prior year. This change results primarily from a \$5.0 million payment of a contingent consideration milestone made in accordance with the terms of our agreement to purchase Synos and a change of \$6.3 million related to option and restricted stock activity, including tax impacts.

On October 1, 2013, we acquired Synos for an initial purchase price of \$71.5 million. Synos develops atomic layer deposition technology. As a result of this purchase, we acquired \$99.3 million of definite-lived intangibles, of which \$78.2 million is related to core technology, and \$35.5 million of goodwill. The financial results of this acquisition are included in our LED & Solar segment as of the acquisition date. As of October 1, 2013, we had a contingent obligation to pay up to an additional \$115.0 million if certain conditions are met. The first \$5.0 million of the \$115.0 million was earned and paid in the fourth quarter of 2013. Up to \$35.0 million of the remaining contingent obligation could be payable in the first quarter of 2014, if the conditions related to earning the payments are met. The remaining \$75.0 million contingent consideration could be payable in 2015 if the conditions related to earning the payments are met. As part of the purchase price allocation, we recorded a liability of \$33.5 million related to the fair value of the contingent consideration.

As of December 31, 2013, our contractual cash obligations and commitments are as follows (*in thousands*):

	Payments due by period				
	Total	Less than 1 year	1-3 years	3-5 years	More than 5 years
Long-term debt (1)	\$ 2,137	\$ 290	\$ 654	\$ 766	\$ 427
Interest on debt (1)	553	159	244	132	18
Operating leases (2)	8,082	3,076	3,418	1,588	—
Letters of credit and bank guarantees (3)	6,493	6,493	—	—	—
Purchase commitments (4)	60,290	60,290	—	—	—
	<u>\$ 77,555</u>	<u>\$ 70,308</u>	<u>\$ 4,316</u>	<u>\$ 2,486</u>	<u>\$ 445</u>

- (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 2014 through 2018, excluding renewal options. 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. This also includes other operating leases we hold, such as cars, apartments and office equipment. There are no material sublease payments receivable associated with the leases.
- (3) Issued by a bank on our behalf as needed. We had letters of credit outstanding of \$0.6 million and bank guarantees outstanding of \$5.9 million, of which, \$2.7 million is collateralized against cash that is restricted from use. As of December 31, 2013, we had \$40.4 million of unused lines of credit available. The line of credit is available to draw upon to cover performance bonds as required by our customers.
- (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 have \$9.4 million of offsetting supplier deposits against these purchase commitments as of December 31, 2013.

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, accounting for acquisitions, fair value measurements, warranty costs, income taxes and equity-based compensation to be critical policies due to the estimation processes involved in each. We have reclassified certain amounts previously reported in our financial statements to conform to the current presentation, including amounts related to discontinued operations.

Revenue Recognition: We recognize revenue when all of the following criteria have been met: persuasive evidence of an arrangement exists with a customer; delivery of the specified products has occurred or services have been rendered; prices are contractually fixed or determinable; and collectability is reasonably assured. Revenue is recorded including shipping and handling costs and excluding applicable taxes related to sales. A significant portion of our revenue is derived from contractual arrangements with customers that have multiple elements, such as systems, upgrades, components, spare parts, maintenance and service plans. For sales arrangements that contain multiple elements, we split the arrangement into separate units of accounting if the individually delivered elements have value to the customer on a standalone basis. We also evaluate whether multiple transactions with the same customer or related party should be considered part of a multiple element arrangement, whereby we assess, among other factors, whether the contracts or agreements are negotiated or executed within a short time frame of each other or if there are indicators that the contracts are negotiated in contemplation of each other. When we have separate units of accounting, we allocate revenue to each element based on the following selling price hierarchy: vendor-specific objective evidence (“VSOE”) if available; third party evidence (“TPE”) if VSOE is not available; or our best estimate of selling price (“BESP”) if neither VSOE nor TPE is available. We utilize BESP for the majority of the elements in our arrangements. The accounting guidance for selling price hierarchy did not include BESP for arrangements entered into prior to January 1, 2011, and as such we recognized revenue for those arrangements as described below.

We consider many facts when evaluating each of our sales arrangements to determine the timing of revenue recognition, including the contractual obligations, the customer’s creditworthiness and the nature of the customer’s post-delivery acceptance provisions. Our system sales arrangements, including certain upgrades, generally include field acceptance provisions that may include functional or mechanical test procedures. For the majority of our arrangements, 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 to the agreed upon specifications prior to delivery. Historically, such source inspection or test data replicates the field acceptance provisions that will be performed at the customer’s site prior to final acceptance of the system. As such, we objectively demonstrate that the criteria specified in the contractual acceptance provisions are achieved prior to delivery and, therefore, we recognize revenue upon delivery since there is no substantive contingency remaining related to the acceptance provisions at that date, subject to the retention amount constraint described below. For new products, new applications of existing products or for products with substantive customer acceptance provisions where we cannot objectively demonstrate that the criteria specified in the contractual acceptance provisions have been achieved prior to delivery, revenue and the associated costs are deferred and fully recognized upon the receipt of final customer acceptance, assuming all other revenue recognition criteria have been met.

Our system sales arrangements, including certain upgrades, generally 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, we defer all revenue until such rights expire. In many cases our products are sold with a billing retention, typically 10% of the sales price (the “retention amount”), which is typically payable by the customer when field acceptance provisions are completed. The amount of revenue recognized upon delivery of a system or upgrade, if any, is limited to the lower of i) the amount billed that is not contingent upon acceptance provisions or ii) the value of the arrangement consideration allocated to the delivered elements, if such sale is part of a multiple-element arrangement.

For transactions entered into prior to January 1, 2011, under the accounting rules for multiple-element arrangements in place at that time, we deferred the greater of the retention amount or the relative fair value of the undelivered elements based on VSOE. When we could not establish VSOE or TPE for all undelivered elements of an arrangement, revenue on the entire arrangement was deferred until the earlier of the point when we did have VSOE for all undelivered elements or the delivery of all elements of the arrangement.

Our sales arrangements, including certain upgrades, generally include installation. The installation process is not deemed essential to the functionality of the equipment since it is not complex; that is, it does not require significant changes to the features or capabilities of the equipment or involve building elaborate interfaces or connections subsequent to factory acceptance. We have a demonstrated history of consistently completing installations in a timely manner and can reliably estimate the costs of such activities. Most customers engage us to perform the installation services, although there are other third-party providers with sufficient knowledge who could complete these services. Based on these factors, we deem the installation of our systems to be inconsequential or perfunctory relative to the system as a whole, and as a result, do not consider such services to be a separate element of the arrangement. As such, we accrue the cost of the installation at the time of revenue recognition for the system.

In Japan, where our contractual terms with customers generally specify title and risk and rewards of ownership transfer upon customer acceptance, revenue is recognized and the customer is billed upon the receipt of written customer acceptance. During the fourth quarter of fiscal 2013, we began using a distributor for almost all of our product and service sales to customers in Japan. Title and risk and rewards of ownership of our system sales still transfer to our end-customers upon their acceptance. As such, there is no impact to our policy of recognizing revenue upon receipt of written acceptance from the end customer.

Revenue related to maintenance and service contracts is recognized ratably over the applicable contract term. Component and spare part revenue are recognized at the time of 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 U.S. treasuries and government agency securities with maturities of greater than three months. 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).

Inventory Valuation: Inventories are stated at the lower of cost (principally first-in, first-out method) or market. On a quarterly basis, management assesses the valuation and recoverability of all inventories, classified as materials (which include raw materials, spare parts and service inventory), work-in-process and finished goods.

Materials inventory is used primarily to support the installed tool base and spare parts sales and is reviewed for excess quantities or obsolescence by comparing on-hand balances to historical usage, and adjusted for current economic conditions and other qualitative factors. Historically, the variability of such estimates has been impacted by customer demand and tool utilization rates.

The work-in-process and finished goods inventory is principally used to support system sales and is reviewed for recoverability by considering whether on hand inventory would be utilized to fulfill the related backlog. As we typically receive deposits for our orders, the variability of this estimate is reduced as customers have a vested interest in the orders they place with us. Recoverability of such inventory is evaluated by monitoring customer demand, current sales trends and product gross margins. Management also considers qualitative factors such as future product demand based on market outlook, which is based principally upon production requirements resulting from customer purchase orders received with a customer-confirmed shipment date within the next twelve months. Historically, the variability of these estimates of future product demand has been impacted by backlog cancellations or modifications resulting from unanticipated changes in technology or customer demand.

Following identification of potential excess or obsolete inventory, management evaluates the need to write down inventory balances 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 potential excess inventory. Unanticipated changes in demand for our products may require a write down of inventory that could materially affect our operating results.

Goodwill and Indefinite-Lived Intangible Asset Impairment: Goodwill represents the excess of the cost of an acquisition over the fair value of the net assets acquired. We account for goodwill and intangible assets with indefinite useful lives in accordance with relevant accounting guidance related to goodwill and other intangible assets, which states that goodwill and intangible assets with indefinite useful lives should not be amortized, but instead tested 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.

The guidance provides an option for an entity to first assess qualitative factors to determine whether the existence of events or circumstances leads to a determination that it is more likely than not (that is, a likelihood of more than 50%) that the fair value of a reporting unit is less than its carrying amount. If, after assessing the totality of events or circumstances, an entity determines it is not more likely than not that the fair value of a reporting unit is less than its carrying amount, then performing the two-step impairment test is unnecessary.

If we determine the two-step impairment test is necessary, we are required to determine if it is appropriate to use the operating segment, as defined under guidance for segment reporting, as the reporting unit, or one level below the operating segment, depending on whether certain criteria are met. We have identified five reporting units that are required to be reviewed for impairment. The five reporting units are aggregated into two segments: the VIBE and Mechanical reporting units which are reported in our Data Storage segment; and the MOCVD, MBE and ALD reporting units which are reported in our LED & Solar segment. 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 our 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: Definite-lived 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, covenants not-to-compete and software licenses that are obtained in an acquisition are initially recorded at fair value. Other 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 exceeds the fair value of the asset.

Accounting for Acquisitions: Our growth strategy has included the acquisition of businesses. The purchase price of these acquisitions has been determined after due diligence of the acquired business, market research, strategic planning, and the forecasting of expected future results and synergies. Estimated future results and expected synergies are subject to judgment as we integrate each acquisition and attempt to leverage resources.

The accounting for the acquisitions we have made requires that the assets and liabilities acquired, as well as any contingent consideration that may be part of the agreement, be recorded at their respective fair values at the date of acquisition. This requires management to make significant estimates in determining the fair values, especially with respect to intangible assets, including estimates of expected cash flows, expected cost savings and the appropriate weighted average cost of capital. As a result of these significant judgments to be made we often obtain the assistance of independent valuation firms. We complete these assessments as soon as practical after the closing dates. Any excess of the purchase price over the estimated fair values of the identifiable net assets acquired is recorded as goodwill.

Fair Value Measurements: Accounting guidance requires that we disclose the type of inputs we use to value our assets and liabilities that are required to be measured at fair value, 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 we have the ability to access at the measurement date. Level 2 inputs are 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, cost method investment and intangible assets. We use Level 3 inputs to value all of such assets. We primarily apply the market approach for recurring fair value measurements.

Warranty Costs: Our warranties are typically valid for one year from the date of final acceptance. 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: 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 financial reporting 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 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: We grant equity-based awards, such as stock options and restricted stock or restricted stock units, to certain key employees to create a clear and meaningful alignment between compensation and shareholder return and to enable the employees to develop and maintain a stock ownership position. While the majority of our equity awards feature time-based vesting, performance-based equity awards, which are awarded from time to time to certain key Company executives, vest as a function of performance, and may also be subject to the recipient's continued employment which also acts as a significant retention incentive.

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 our historical and future expectation of dividend payouts. While the risk-free interest rate and dividend yield are less subjective assumptions, typically based on objective 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, and utilization of 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 option 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.

We settle the exercise of stock options with newly issued shares.

With respect to grants of performance based awards, we assess the probability that such performance criteria will be met in order to determine the compensation expense. Consequently, the compensation expense is recognized straight-line over the vesting period. If that assessment of the probability of the performance condition being met changes, we would recognize the impact of the change in estimate in the period of the change. As with the use of any estimate, and owing to the significant judgment used to derive those estimates, actual results may vary.

We have elected to treat awards with only service conditions and with graded vesting as one award. Consequently, the total compensation expense is recognized straight-line over the entire vesting period, so long as the compensation cost recognized at any date at least equals the portion of the grant date fair value of the award that is vested at that date.

Recent Accounting Pronouncements

Presentation of an Unrecognized Tax Benefit When a Net Operating Loss Carryforward, a Similar Tax Loss, or Tax Credit Carryforward Exists: In July 2013, the FASB issued ASU No. 2013-11, *Presentation of an Unrecognized Tax Benefit When a Net Operating Loss Carryforward, a Similar Tax Loss, or Tax Credit Carryforward Exists*. ASU 2013-11 requires entities to present an unrecognized tax benefit, or a portion of an unrecognized tax benefit, as a reduction to a deferred tax asset for a net operating loss carryforward, a similar tax loss, or a tax credit carryforward when settlement in this manner is available under the tax law. This ASU is effective prospectively for fiscal years, and interim periods within those years, beginning after December 15, 2013. We are evaluating the potential impact of this adoption on our consolidated financial statements.

Presentation of Financial Statements: In April 2013, the FASB issued ASU No. 2013-07, “Presentation of Financial Statements (Topic 205): Liquidation Basis of Accounting.” The objective of ASU 2013-07 is to clarify when an entity should apply the liquidation basis of accounting. The update provides principles for the recognition and measurement of assets and liabilities and requirements for financial statements prepared using the liquidation basis of accounting. This ASU is effective prospectively for fiscal years, and interim periods within those years, beginning after December 15, 2013. We do not anticipate that the adoption of this standard will have a material impact on our consolidated financial statements, absent any indications that liquidation is imminent.

Parent’s Accounting for the Cumulative Translation Adjustment: In March 2013, the FASB issued ASU No. 2013-05, *Parent’s Accounting for the Cumulative Translation Adjustment upon Derecognition of Certain Subsidiaries or Groups of Assets within a Foreign Entity or of an Investment in a Foreign Entity*. This new standard is intended to resolve diversity in practice regarding the release into net income of a cumulative translation adjustment (“CTA”) upon derecognition of a subsidiary or group of assets within a foreign entity. ASU No. 2013-05 is effective prospectively for fiscal years (and interim reporting periods within those years) beginning after December 15, 2013. We currently anticipate that its adoption could have an impact on our consolidated financial statements, in the event of derecognition of a foreign subsidiary in 2014 or subsequently. We cannot estimate the amount of CTA to be released into income from any potential derecognition.

Obligations Resulting from Joint and Several Liability Arrangements for Which the Total Amount of the Obligation Is Fixed at the Reporting Date: In February 2013, the FASB issued Accounting Standards Update No. 2013-04, “*Obligations Resulting from Joint and Several Liability Arrangements for Which the Total Amount of the Obligation Is Fixed at the Reporting Date*”. ASU No. 2013-04 provides guidance for the recognition, measurement, and disclosure of obligations resulting from joint and several liability arrangements for which the total amount of the obligation within the scope of the guidance is fixed at the reporting date, as the sum of the amount the reporting entity agreed to pay on the basis of its arrangement among its co-obligors and any additional amount the reporting entity expects to pay on behalf of its co-obligors. In addition, ASU No. 2013-04 requires an entity to disclose the nature and amount of the obligation, as well as other information about the obligations. ASU No. 2013-04 is effective for interim and annual periods beginning after December 15, 2013 and is to be applied retrospectively. We do not anticipate that the adoption of this standard will have a material impact on our 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 \$281.5 million as of December 31, 2013. These securities are subject to interest rate risk and will decline in value if interest rates increase. Based on our investment portfolio as of December 31, 2013, an immediate 100 basis point increase in interest rates may result in a decrease in the fair value of the portfolio of approximately \$2.0 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 Statements 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 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 83%, 84% and 90% of our total net sales in 2013, 2012 and 2011, 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 4%, 4% and 3% of total net sales in 2013, 2012 and 2011, respectively.

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 foreign currency that has the largest impact on translating our international operating profit (loss) is the Japanese Yen. 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 it does not take into account any governmental actions or changes in either customer purchasing patterns or our financing and operating strategies.

As of December 31, 2013				
(in thousands)	Component of	Fair Value	Maturity Dates	Notional Amount
Not Designated as Hedges under ASC 815				
Foreign currency exchange forwards	Prepaid and other current assets	1	January 2014	4,700
Foreign currency collar	Prepaid and other current assets	906	October 2014	34,069
Total Derivative Instruments		<u>\$ 907</u>		<u>\$ 38,769</u>

As of December 31, 2012				
(in thousands)	Component of	Fair Value	Maturity Dates	Notional Amount
Not Designated as Hedges under ASC 815				
Foreign currency exchange forwards	Prepaid and other current assets	248	January 2013	9,590
Total Derivative Instruments		<u>\$ 248</u>		<u>\$ 9,590</u>

(in thousands)	Location of realized net gain (loss) and changes in the fair value of derivatives	Amount of realized net gain (loss) and changes in the fair value of derivatives for the year ended December 31,		
		2013	2012	2011
		Foreign currency exchange forwards	Other, net	\$ 248
Foreign currency collar	Other, net	\$ 906	\$ —	\$ —

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.

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

None.

Item 9A. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

Our management, under the supervision and with the participation of our Chief Executive Officer and Chief Financial Officer, carried out an evaluation of the effectiveness of the design and operation of our disclosure controls and procedures as of December 31, 2013 (the "Evaluation"). Based upon the Evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures (as defined in Rule 13a-15(e) of the Securities Exchange Act of 1934) are effective.

Management's Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate "internal control over financial reporting" (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)). Management evaluates the effectiveness of our internal control over financial reporting using the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (1992 framework). Management, under the supervision and with the participation of our Chief Executive Officer and Chief Financial Officer, assessed the effectiveness of our internal control over financial reporting as of December 31, 2013, and concluded that it is effective.

We acquired Synos during the quarter ended December 31, 2013, which is included in our 2013 consolidated financial statements and constituted 14.6 percent and 17.0 percent of total and net assets, respectively, as of December 31, 2013 and 0.1 percent and 15.3 percent of our consolidated net sales and net loss, respectively, for the year ended December 31, 2013. We have excluded Synos from our annual assessment of and conclusion on the effectiveness of our internal control over financial reporting.

Our independent registered public accounting firm, Ernst & Young LLP, has audited the effectiveness of our internal control over financial reporting as of December 31, 2013, as stated in their report, which is included herein.

Changes in Internal Control Over Financial Reporting

We monitor and evaluate, on an ongoing basis, our disclosure controls and procedures in order to improve their overall effectiveness. In the course of these evaluations, we modify and refine our internal processes as conditions warrant. As required by Rule 13a-15(d), our management including the Chief Executive Officer and the Chief Financial Officer, also conducted an evaluation of our internal control over financial reporting to determine whether any changes occurred during the quarter ended December 31, 2013 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting. We implemented a material change in internal control over financial reporting during the quarter ended December 31, 2013. The change related to the remediation of internal controls of revenue recognition and related costs. Specifically, we completed the implementation of redesigned processes and increased the level of review of work performed by our personnel and third-party professionals in the identification and calculation of revenue and cost of revenue. We have completed our testing of the additional control processes outlined above and conclude that our previously reported material weakness has been satisfactorily remediated as of December 31, 2013.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Board of Directors and Shareholders
Veeco Instruments Inc.

We have audited Veeco Instruments Inc.'s (the "Company") internal control over financial reporting as of December 31, 2013, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (1992 framework) (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.

As indicated in the accompanying Management's Report on Internal Control Over Financial Reporting, management's assessment of and conclusion on the effectiveness of internal control over financial reporting did not include the internal controls of Synos Technology, Inc. which is included in the 2013 consolidated financial statements of Veeco Instruments Inc. and constituted 14.6 percent and 17.0 percent of total and net assets, respectively, as of December 31, 2013 and 0.1 percent and 15.3 percent of net sales and net loss, respectively, for the year then ended. Our audit of internal control over financial reporting of the Company also did not include an evaluation of the internal control over financial reporting of Synos Technology, Inc.

In our opinion, Veeco Instruments Inc. maintained, in all material respects, effective internal control over financial reporting as of December 31, 2013, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of Veeco Instruments Inc. as of December 31, 2013 and 2012, and the related consolidated statements of operations, comprehensive income (loss), equity, and cash flows for each of the three years in the period ended December 31, 2013 and our report dated February 28, 2014 expressed an unqualified opinion thereon.

/s/ ERNST & YOUNG LLP

New York, New York
February 28, 2014

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 2014 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, 2013. See our footnote *Equity Compensation Plans and Equity* in the notes 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 (1) (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	2,870,301	\$ 28.17	2,775,167
Equity compensation plans not approved by security holders (2)	210,800	\$ 37.70	—
Total	<u>3,081,101</u>		<u>2,775,167</u>

- (1) The calculation of the weighted average exercise price includes only stock options and does not include the outstanding restricted stock units which do not have an exercise price.
- (2) In connection with our acquisition of Synos on October 1, 2013, equity awards were granted to Synos' employees, pursuant to our 2013 Inducement Stock Incentive Plan, in order to create a retention incentive for those employees. Shares issued in connection with this

equity award may be granted under the Veeco Instruments, Inc. 2010 Stock Incentive Plan. There are no awards available for future grant under the Inducement Plan.

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 Statements and Schedule

- (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	Exhibit	Incorporated by Reference to the Following Documents
2.1	Agreement and Plan of Merger, dated September 18, 2013, by and among Veeco, Veeco Wyoming Inc., Synos Technology, Inc. certain stockholders of Synos Technology, Inc., and Shareholder Representative Services LLC	Filed herewith
3.1	Amended and Restated Certificate of Incorporation of Veeco dated December 1, 1994, as amended June 2, 1997 and July 25, 1997.	Quarterly Report on Form 10-Q for the quarter ended 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
10.2	Amendment to Loan Documents effective as of September 17, 2001 between Applied Epi, Inc. and Jackson National Life Insurance Company (executed in June 2002).	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

Number	Exhibit	Incorporated by Reference to the Following Documents
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 Amended and Restated 2010 Stock Incentive Plan, effective May 14, 2010	Proxy Statement on Schedule 14A, filed November 4, 2013, Appendix A
10.11*	Form of 2010 Stock Incentive Plan Stock Option Agreement (2012 rev.)	Quarterly Report on Form 10-Q for the quarter ended June 30, 2012, Exhibit 10.2
10.12*	Form of 2010 Stock Incentive Plan Restricted Stock Agreement (2012 rev.)	Quarterly Report on Form 10-Q for the quarter ended June 30, 2012, Exhibit 10.3
10.13*	Form of 2010 Stock Incentive Plan Restricted Stock Unit Agreement (2012 rev.)	Quarterly Report on Form 10-Q for the quarter ended June 30, 2012, Exhibit 10.4
10.14*	Form of 2010 Stock Incentive Plan Restricted Stock Agreement (Non-Employee Director) (2011 rev.)	Quarterly Report on Form 10-Q for the quarter ended June 30, 2012, Exhibit 10.5
10.15*	Form of 2010 Stock Incentive Plan Restricted Stock Agreement (Performance Based) (2012 rev.)	Quarterly Report on Form 10-Q for the quarter ended June 30, 2012, Exhibit 10.6
10.16*	Veeco 2013 Inducement Stock Incentive Plan, effective September 26, 2013	Quarterly Report on Form 10-Q for the quarter ended September 30, 2012, Exhibit 10.1
10.17*	Form of 2013 Inducement Stock Incentive Plan Stock Option Agreement	Quarterly Report on Form 10-Q for the quarter ended September 30, 2012, Exhibit 10.2
10.18*	Form of 2013 Inducement Stock Incentive Plan Restricted Stock Unit Agreement	Quarterly Report on Form 10-Q for the quarter ended September 30, 2012, Exhibit 10.3
10.19*	Veeco Performance-Based Restricted Stock 2010	Quarterly Report on Form 10-Q for the quarter ended June 30, 2010, Exhibit 10.2
10.20*	Senior Executive Change in Control Policy effective as of September 12, 2008	Quarterly Report on Form 10-Q for the quarter ended September 30, 2008, Exhibit 10.3
10.21*	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
10.22*	Veeco Amended and Restated Senior Executive Change in Control Policy, effective as of January 1, 2014	Filed herewith
10.23*	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
10.24*	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
10.25*	Third Amendment effective April 27, 2012 to Employment Agreement between Veeco and John R. Peeler	Quarterly Report on Form 10-Q for the quarter ended March 31, 2012, Exhibit 10.2
10.26*	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

Number	Exhibit	Incorporated by Reference to the Following Documents
10.27*	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
10.28*	Amendment effective June 9, 2006 to Letter Agreement between Veeco and John P. Kiernan	Quarterly Report on Form 10-Q for the quarter ended June 30, 2006, Exhibit 10.3
10.29*	Amendment effective December 31, 2008 to Letter Agreement between Veeco and John P. Kiernan	Annual Report on Form 10-K for the year ended December 31, 2008, Exhibit 10.40
10.30*	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
10.31*	Letter agreement effective as of January 4, 2010 between Veeco and Peter Collingwood	Quarterly Report on Form 10-Q for the quarter ended March 31, 2012, Exhibit 10.1
10.32*	Letter Agreement dated January 30, 2012 between Veeco and Dr. William J. Miller	Annual Report on Form 10-K for the year ended December 31, 2011, Exhibit 10.30
21.1	Subsidiaries of the Registrant.	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

INDEX TO 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	Exhibit	Incorporated by Reference to the Following Documents
2.1	Agreement and Plan of Merger, dated September 18, 2013, by and among Veeco, Veeco Wyoming Inc., Synos Technology, Inc. certain stockholders of Synos Technology, Inc., and Shareholder Representative Services LLC	Filed herewith
3.1	Amended and Restated Certificate of Incorporation of Veeco dated December 1, 1994, as amended June 2, 1997 and July 25, 1997.	Quarterly Report on Form 10-Q for the quarter ended 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
10.2	Amendment to Loan Documents effective as of September 17, 2001 between Applied Epi, Inc. and Jackson National Life Insurance Company (executed in June 2002).	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

Number	Exhibit	Incorporated by Reference to the Following Documents
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 Amended and Restated 2010 Stock Incentive Plan, effective May 14, 2010	Proxy Statement on Schedule 14A, filed November 4, 2013, Appendix A
10.11*	Form of 2010 Stock Incentive Plan Stock Option Agreement (2012 rev.)	Quarterly Report on Form 10-Q for the quarter ended June 30, 2012, Exhibit 10.2
10.12*	Form of 2010 Stock Incentive Plan Restricted Stock Agreement (2012 rev.)	Quarterly Report on Form 10-Q for the quarter ended June 30, 2012, Exhibit 10.3
10.13*	Form of 2010 Stock Incentive Plan Restricted Stock Unit Agreement (2012 rev.)	Quarterly Report on Form 10-Q for the quarter ended June 30, 2012, Exhibit 10.4
10.14*	Form of 2010 Stock Incentive Plan Restricted Stock Agreement (Non-Employee Director) (2011 rev.)	Quarterly Report on Form 10-Q for the quarter ended June 30, 2012, Exhibit 10.5
10.15*	Form of 2010 Stock Incentive Plan Restricted Stock Agreement (Performance Based) (2012 rev.)	Quarterly Report on Form 10-Q for the quarter ended June 30, 2012, Exhibit 10.6
10.16*	Veeco 2013 Inducement Stock Incentive Plan, effective September 26, 2013	Quarterly Report on Form 10-Q for the quarter ended September 30, 2012, Exhibit 10.1
10.17*	Form of 2013 Inducement Stock Incentive Plan Stock Option Agreement	Quarterly Report on Form 10-Q for the quarter ended September 30, 2012, Exhibit 10.2
10.18*	Form of 2013 Inducement Stock Incentive Plan Restricted Stock Unit Agreement	Quarterly Report on Form 10-Q for the quarter ended September 30, 2012, Exhibit 10.3
10.19*	Veeco Performance-Based Restricted Stock 2010	Quarterly Report on Form 10-Q for the quarter ended June 30, 2010, Exhibit 10.2
10.20*	Senior Executive Change in Control Policy effective as of September 12, 2008	Quarterly Report on Form 10-Q for the quarter ended September 30, 2008, Exhibit 10.3
10.21*	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
10.22*	Veeco Amended and Restated Senior Executive Change in Control Policy, effective as of January 1, 2014	Filed herewith
10.23*	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
10.24*	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
10.25*	Third Amendment effective April 27, 2012 to Employment Agreement between Veeco and John R. Peeler	Quarterly Report on Form 10-Q for the quarter ended March 31, 2012, Exhibit 10.2
10.26*	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
10.27*	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

Number	Exhibit	Incorporated by Reference to the Following Documents
10.28*	Amendment effective June 9, 2006 to Letter Agreement between Veeco and John P. Kiernan	Quarterly Report on Form 10-Q for the quarter ended June 30, 2006, Exhibit 10.3
10.29*	Amendment effective December 31, 2008 to Letter Agreement between Veeco and John P. Kiernan	Annual Report on Form 10-K for the year ended December 31, 2008, Exhibit 10.40
10.30*	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
10.31*	Letter agreement effective as of January 4, 2010 between Veeco and Peter Collingwood	Quarterly Report on Form 10-Q for the quarter ended March 31, 2012, Exhibit 10.1
10.32*	Letter Agreement dated January 30, 2012 between Veeco and Dr. William J. Miller	Annual Report on Form 10-K for the year ended December 31, 2011, Exhibit 10.30
21.1	Subsidiaries of the Registrant.	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

Veeco Instruments Inc. and Subsidiaries

Index to Consolidated Financial Statements and Financial Statement Schedule

	<u>Page</u>
Report of Independent Registered Public Accounting Firm on Financial Statements	F-2
Consolidated Balance Sheets as of December 31, 2013 and 2012.....	F-3
Consolidated Statements of Operations for the years ended December 31, 2013, 2012 and 2011	F-4
Consolidated Statements of Comprehensive Income (Loss) for the years ended December 31, 2013, 2012 and 2011.....	F-5
Consolidated Statements of Equity for the years ended December 31, 2013, 2012 and 2011	F-6
Consolidated Statements of Cash Flows for the years ended December 31, 2013, 2012 and 2011	F-7
Notes to Consolidated Financial Statements	F-8
Schedule II—Valuation and Qualifying Accounts.....	S-1

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Board of Directors and Shareholders
Veeco Instruments Inc.

We have audited the accompanying consolidated balance sheets of Veeco Instruments Inc. (the “Company”) as of December 31, 2013 and 2012 and the related consolidated statements of operations, comprehensive income (loss), equity, and cash flows for each of the three years in the period ended December 31, 2013. Our audits also included the financial statement schedule listed in the Index at Item 15(a). These financial statements and the schedule are the responsibility of the Company’s management. Our responsibility is to express an opinion on these financial statements and schedule 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 financial statements referred to above present fairly, in all material respects, the consolidated financial position of Veeco Instruments Inc. at December 31, 2013 and 2012, and the consolidated results of its operations and its cash flows for each of the three years in the period ended December 31, 2013, 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), Veeco Instruments Inc.’s internal control over financial reporting as of December 31, 2013, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (1992 framework) and our report dated February 28, 2014 expressed an unqualified opinion thereon.

/s/ ERNST & YOUNG LLP

New York, New York
February 28, 2014

Veeco Instruments Inc. and Subsidiaries
Consolidated Balance Sheets
(in thousands, except share data)

	December 31,	
	2013	2012
Assets		
Current assets:		
Cash and cash equivalents	\$ 210,799	\$ 384,557
Short-term investments	281,538	192,234
Restricted cash	2,738	2,017
Accounts receivable, net	23,823	63,169
Inventories	59,726	59,807
Deferred cost of goods sold	724	1,797
Prepaid expenses and other current assets	22,579	30,358
Deferred income taxes	11,716	10,545
Total current assets	613,643	744,484
Property, plant and equipment at cost, net	89,139	98,302
Goodwill	91,348	55,828
Intangible assets, net	114,716	20,974
Other assets	38,726	16,781
Deferred income taxes	397	935
Total assets	\$ 947,969	\$ 937,304
Liabilities and equity		
Current liabilities:		
Accounts payable	\$ 35,755	\$ 26,087
Accrued expenses and other current liabilities	51,084	41,401
Customer deposits and deferred revenue	34,754	42,099
Income taxes payable	6,149	2,292
Deferred income taxes	159	140
Current portion of long-term debt	290	268
Total current liabilities	128,191	112,287
Deferred income taxes	28,052	7,137
Long-term debt	1,847	2,138
Other liabilities	9,649	4,530
Total liabilities	167,739	126,092
Equity:		
Preferred stock, 500,000 shares authorized; no shares issued and outstanding	—	—
Common stock; \$.01 par value; authorized 120,000,000 shares; 39,666,195 shares issued and outstanding in 2013; and 39,328,503 shares issued and outstanding in 2012	397	393
Additional paid-in capital	721,352	708,723
Retained earnings	53,860	96,123
Accumulated other comprehensive income	4,621	5,973
Total equity	780,230	811,212
Total liabilities and equity	\$ 947,969	\$ 937,304

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)

	For the year ended December 31,		
	2013	2012	2011
Net sales	\$ 331,749	\$ 516,020	\$ 979,135
Cost of sales	228,607	300,887	504,801
Gross profit	<u>103,142</u>	<u>215,133</u>	<u>474,334</u>
Operating expenses:			
Selling, general and administrative	85,486	73,110	95,134
Research and development	81,424	95,153	96,596
Amortization	5,527	4,908	4,734
Restructuring	1,485	3,813	1,288
Asset impairment	1,220	1,335	584
Total operating expenses	<u>175,142</u>	<u>178,319</u>	<u>198,336</u>
Other, net	(1,017)	(398)	(261)
Changes in contingent consideration	829	—	—
Operating income (loss)	<u>(71,812)</u>	<u>37,212</u>	<u>276,259</u>
Interest income	1,200	2,476	3,776
Interest expense	(598)	(1,502)	(4,600)
Interest income (expense), net	602	974	(824)
Loss on extinguishment of debt	—	—	(3,349)
Income (loss) from continuing operations before income taxes	(71,210)	38,186	272,086
Income tax provision (benefit)	(28,947)	11,657	81,584
Income (loss) from continuing operations	<u>(42,263)</u>	<u>26,529</u>	<u>190,502</u>
Discontinued operations:			
Income (loss) from discontinued operations before income taxes	—	6,269	(91,885)
Income tax provision (benefit)	—	1,870	(29,370)
Income (loss) from discontinued operations	<u>—</u>	<u>4,399</u>	<u>(62,515)</u>
Net income (loss)	<u>\$ (42,263)</u>	<u>\$ 30,928</u>	<u>\$ 127,987</u>
Net Income (loss) per common share:			
Basic:			
Continuing operations	\$ (1.09)	\$ 0.69	\$ 4.80
Discontinued operations	—	0.11	(1.57)
Income (loss)	<u>\$ (1.09)</u>	<u>\$ 0.80</u>	<u>\$ 3.23</u>
Diluted :			
Continuing operations	\$ (1.09)	\$ 0.68	\$ 4.63
Discontinued operations	—	0.11	(1.52)
Income (loss)	<u>\$ (1.09)</u>	<u>\$ 0.79</u>	<u>\$ 3.11</u>
Weighted average shares outstanding:			
Basic	38,807	38,477	39,658
Diluted	38,807	39,051	41,155

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

Veeco Instruments Inc. and Subsidiaries
Consolidated Statements of Comprehensive Income (Loss)
(Dollars in thousands)

	For the year ended		
	December 31,		
	2013	2012	2011
Net income (loss)	\$ (42,263)	\$ 30,928	\$ 127,987
Other comprehensive income (loss), net of tax			
Available-for-sale securities			
Unrealized gain (loss) on available-for-sale securities	34	(118)	393
Benefit (provision) for income taxes	11	50	(79)
Less: Reclassification adjustments for gains included in net income (loss)	(61)	(24)	(271)
Net unrealized gain (loss) on available-for-sale securities	(16)	(92)	43
Minimum pension liability			
Minimum pension liability	125	(216)	(73)
Benefit (provision) for income taxes	(86)	79	30
Net minimum pension liability	39	(137)	(43)
Foreign currency translation			
Foreign currency translation	(1,322)	(1,071)	1,228
Benefit (provision) for income taxes	(53)	683	(434)
Net foreign currency translation	(1,375)	(388)	794
Other comprehensive income (loss), net of tax	(1,352)	(617)	794
Comprehensive income (loss)	\$ (43,615)	\$ 30,311	\$ 128,781

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

Veeco Instruments Inc. and Subsidiaries
Consolidated Statements of Equity
(Dollars in thousands)

	Common Stock		Treasury Stock	Additional Paid-in Capital	Retained Earnings	Accumulated Other Comprehensive Income	Total Equity
	Shares	Amount					
Balance as of January 1, 2011	40,337,950	\$ 409	\$ (38,098)	\$ 656,969	\$ 137,436	\$ 5,796	\$ 762,512
Exercise of stock options	688,105	7	—	10,707	—	—	10,714
Equity-based compensation expense-continuing operations	—	—	—	12,807	—	—	12,807
Equity-based compensation expense-discontinued operations	—	—	—	689	—	—	689
Issuance, vesting and cancellation of restricted stock	131,196	1	—	(3,175)	—	—	(3,174)
Treasury stock	(4,160,228)	—	(162,077)	—	—	—	(162,077)
Debt Conversion	1,771,413	18	—	(50)	—	—	(32)
Excess tax benefits from stock option exercises	—	—	—	10,406	—	—	10,406
Other comprehensive income (loss), net of tax	—	—	—	—	(106)	794	688
Net income (loss)	—	—	—	—	127,987	—	127,987
Balance as of December 31, 2011	38,768,436	435	(200,175)	688,353	265,317	6,590	760,520
Exercise of stock options	351,436	4	—	5,405	—	—	5,409
Equity-based compensation expense-continuing operations	—	—	—	14,268	—	—	14,268
Issuance, vesting and cancellation of restricted stock	208,631	7	—	(1,732)	—	—	(1,725)
Treasury stock	—	(53)	200,175	—	(200,122)	—	—
Prior period debt conversion adjustment	—	—	—	310	—	—	310
Excess tax benefits from stock option exercises	—	—	—	2,119	—	—	2,119
Other comprehensive income (loss), net of tax	—	—	—	—	—	(617)	(617)
Net income (loss)	—	—	—	—	30,928	—	30,928
Balance as of December 31, 2012	39,328,503	393	—	708,723	96,123	5,973	811,212
Exercise of stock options	149,170	2	—	2,197	—	—	2,199
Equity-based compensation expense-continuing operations	—	—	—	13,130	—	—	13,130
Issuance, vesting and cancellation of restricted stock	188,522	2	—	(2,698)	—	—	(2,696)
Other comprehensive income (loss), net of tax	—	—	—	—	—	(1,352)	(1,352)
Net income (loss)	—	—	—	—	(42,263)	—	(42,263)
Balance as of December 31, 2013	39,666,195	\$ 397	\$ —	\$ 721,352	\$ 53,860	\$ 4,621	\$ 780,230

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

Veeco Instruments Inc. and Subsidiaries
Consolidated Statements of Cash Flows
(Dollars in thousands)

	Year ended December 31,		
	2013	2012	2011
Cash Flows from Operating Activities			
Net income (loss)	\$ (42,263)	\$ 30,928	\$ 127,987
Adjustments to reconcile net income (loss) to net cash provided by (used in) operating activities:			
Depreciation and amortization	18,425	16,192	12,892
Amortization of debt discount	—	—	1,260
Non-cash equity-based compensation	13,130	14,268	12,807
Non-cash asset impairment	1,220	1,335	584
Loss on extinguishment of debt	—	—	3,349
Deferred income taxes	(12,264)	(340)	11,276
Gain on disposal of segment	—	(4,112)	—
Gain on sale of lab tools	(767)	—	—
Excess tax benefits from stock option exercises	—	(2,119)	(10,406)
Change in contingent consideration	829	—	—
Other, net	1,971	262	(31)
Non-cash items from discontinued operations	—	(706)	44,381
Changes in operating assets and liabilities:			
Accounts receivable	38,844	31,215	56,843
Inventories	2,753	53,937	(18,627)
Prepaid expenses and other current assets	842	8,524	(13,087)
Income taxes receivable	(12,604)	654	(9,076)
Accounts payable	7,542	(12,106)	8,098
Accrued expenses, customer deposits, deferred revenue and other current liabilities	(17,329)	(34,227)	(72,723)
Income taxes payable	(130)	1,199	(42,204)
Transfers to restricted cash	(721)	(1,440)	—
Other, net	1,249	10,431	2,119
Discontinued operations	—	(1,932)	—
Net cash provided by (used in) operating activities	<u>727</u>	<u>111,963</u>	<u>115,442</u>
Cash Flows from Investing Activities			
Capital expenditures	(9,174)	(24,994)	(60,364)
Payments for net assets of businesses acquired	(71,488)	—	(28,273)
Payment for purchase of cost method investment	(2,391)	(10,341)	—
Transfers from (to) restricted cash related to discontinued operations	—	—	75,540
Proceeds from short-term investments	499,645	244,929	707,649
Payments for purchases of short-term investments	(589,099)	(165,080)	(588,453)
Proceeds from the sale of lab tools	4,440	—	—
Other	11	49	195
Proceeds from sale of assets from discontinued segment	—	3,758	—
Net cash provided by (used in) investing activities	<u>(168,056)</u>	<u>48,321</u>	<u>106,294</u>
Cash Flows from Financing Activities			
Proceeds from stock option exercises	2,199	5,409	10,714
Contingent consideration payments	(5,000)	—	—
Restricted stock tax withholdings	(2,696)	(1,725)	(3,173)
Excess tax benefits from stock option exercises	—	2,119	10,406
Purchases of treasury stock	—	—	(162,077)
Repayments of long-term debt	(269)	(248)	(105,803)
Other	—	—	(2)
Net cash provided by (used in) financing activities	<u>(5,766)</u>	<u>5,555</u>	<u>(249,935)</u>
Effect of exchange rate changes on cash and cash equivalents	(663)	796	989
Net increase (decrease) in cash and cash equivalents	<u>(173,758)</u>	<u>166,635</u>	<u>(27,210)</u>
Cash and cash equivalents as of beginning of year	384,557	217,922	245,132
Cash and cash equivalents as of end of year	<u>\$ 210,799</u>	<u>\$ 384,557</u>	<u>\$ 217,922</u>
Supplemental disclosure of cash flow information			
Interest paid	\$ 357	\$ 209	\$ 1,393
Income taxes paid	8,001	11,566	89,745
Non-cash investing and financing activities			
Accrual of fair value of contingent consideration	\$ 33,539	\$ —	\$ —
Merger consideration adjustment	2,695	—	—

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

Veeco Instruments Inc. and Subsidiaries
Notes to Consolidated Financial Statements
December 31, 2013

1. Description of Business and Significant Accounting Policies

Business

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 (“LED”s) and hard-disk drives, as well as for emerging applications such as concentrator photovoltaics, power semiconductors, wireless components, micro-electromechanical systems (“MEMS”), and other next-generation devices.

Our *LED & Solar segment* designs and manufactures metal organic chemical vapor deposition (“MOCVD”) and molecular beam epitaxy (“MBE”) systems as well as newly acquired atomic layer deposition (“ALD”) technology. Our MOCVD and MBE systems are sold to manufacturers of LEDs, wireless devices, power semiconductors, and concentrator photovoltaics, as well as for R&D applications. Our ALD technology is used by the manufacturers of OLED displays and has further applications in the semiconductor and solar markets. In 2011 we discontinued the sale of our products related to Copper, Indium, Gallium, Selenide (“CIGS”) solar systems technology.

Our *Data Storage segment* designs and manufactures systems used to create thin film magnetic heads (“TFMH”s) that read and write data on hard disk drives. These include ion beam etch, ion beam deposition, diamond-like carbon, physical vapor deposition, chemical vapor deposition, and slicing, dicing and lapping systems. While our systems are primarily sold to hard drive customers, they also have applications in optical coatings, micro-electro mechanical systems (“MEMS”) and magnetic sensors, and extreme ultraviolet (“EUV”) lithography.

Basis of Presentation

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 2013 interim quarter ends were March 31, June 30 and September 29. The 2012 interim quarter ends were April 1, July 1 and September 30. The 2011 interim quarter ends were April 3, July 3 and October 2. For ease of reference, we report these interim quarter ends as March 31, June 30 and September 30 in our interim consolidated financial statements. We have reclassified certain amounts previously reported in our financial statements to conform to the current presentation, including amounts related to discontinued operations.

Use of Estimates

The preparation of financial statements in conformity with generally accepted accounting principles in the United States (“U.S. GAAP”) requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Significant estimates made by management include: the best estimate of selling price for our products and services; allowance for doubtful accounts; inventory obsolescence; recoverability and useful lives of property, plant and equipment and identifiable intangible assets; investment valuations; fair value of derivatives; recoverability of goodwill and long lived assets; recoverability of deferred tax assets; liabilities for product warranty; accounting for acquisitions; accruals for contingencies; equity-based payments, including forfeitures and performance based vesting; and liabilities for tax uncertainties. Actual results could differ from those estimates.

Principles of Consolidation

The accompanying Consolidated Financial Statements include the accounts of Veeco and its subsidiaries. Intercompany items and transactions have been eliminated in consolidation.

Revenue Recognition

We recognize revenue when all of the following criteria have been met: persuasive evidence of an arrangement exists with a customer; delivery of the specified products has occurred or services have been rendered; prices are contractually fixed or determinable; and collectability is reasonably assured. Revenue is recorded including shipping and handling costs and

Veeco Instruments Inc. and Subsidiaries
Notes to Consolidated Financial Statements (continued)
December 31, 2013

excluding applicable taxes related to sales. A significant portion of our revenue is derived from contractual arrangements with customers that have multiple elements, such as systems, upgrades, components, spare parts, maintenance and service plans. For sales arrangements that contain multiple elements, we split the arrangement into separate units of accounting if the individually delivered elements have value to the customer on a standalone basis. We also evaluate whether multiple transactions with the same customer or related party should be considered part of a multiple element arrangement, whereby we assess, among other factors, whether the contracts or agreements are negotiated or executed within a short time frame of each other or if there are indicators that the contracts are negotiated in contemplation of each other. When we have separate units of accounting, we allocate revenue to each element based on the following selling price hierarchy: vendor-specific objective evidence (“VSOE”) if available; third party evidence (“TPE”) if VSOE is not available; or our best estimate of selling price (“BESP”) if neither VSOE nor TPE is available. We utilize BESP for the majority of the elements in our arrangements. The accounting guidance for selling price hierarchy did not include BESP for arrangements entered into prior to January 1, 2011, and as such we recognized revenue for those arrangements as described below.

We consider many facts when evaluating each of our sales arrangements to determine the timing of revenue recognition, including the contractual obligations, the customer’s creditworthiness and the nature of the customer’s post-delivery acceptance provisions. Our system sales arrangements, including certain upgrades, generally include field acceptance provisions that may include functional or mechanical test procedures. For the majority of our arrangements, 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 to the agreed upon specifications prior to delivery. Historically, such source inspection or test data replicates the field acceptance provisions that will be performed at the customer’s site prior to final acceptance of the system. As such, we objectively demonstrate that the criteria specified in the contractual acceptance provisions are achieved prior to delivery and, therefore, we recognize revenue upon delivery since there is no substantive contingency remaining related to the acceptance provisions at that date, subject to the retention amount constraint described below. For new products, new applications of existing products or for products with substantive customer acceptance provisions where we cannot objectively demonstrate that the criteria specified in the contractual acceptance provisions have been achieved prior to delivery, revenue and the associated costs are deferred and fully recognized upon the receipt of final customer acceptance, assuming all other revenue recognition criteria have been met.

Our system sales arrangements, including certain upgrades, generally 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, we defer all revenue until such rights expire. In many cases our products are sold with a billing retention, typically 10% of the sales price (the “retention amount”), which is typically payable by the customer when field acceptance provisions are completed. The amount of revenue recognized upon delivery of a system or upgrade, if any, is limited to the lower of i) the amount billed that is not contingent upon acceptance provisions or ii) the value of the arrangement consideration allocated to the delivered elements, if such sale is part of a multiple-element arrangement.

For transactions entered into prior to January 1, 2011, under the accounting rules for multiple-element arrangements in place at that time, we deferred the greater of the retention amount or the relative fair value of the undelivered elements based on VSOE. When we could not establish VSOE or TPE for all undelivered elements of an arrangement, revenue on the entire arrangement was deferred until the earlier of the point when we did have VSOE for all undelivered elements or the delivery of all elements of the arrangement.

Our sales arrangements, including certain upgrades, generally include installation. The installation process is not deemed essential to the functionality of the equipment since it is not complex; that is, it does not require significant changes to the features or capabilities of the equipment or involve building elaborate interfaces or connections subsequent to factory acceptance. We have a demonstrated history of consistently completing installations in a timely manner and can reliably estimate the costs of such activities. Most customers engage us to perform the installation services, although there are other third-party providers with sufficient knowledge who could complete these services. Based on these factors, we deem the installation of our systems to be inconsequential or perfunctory relative to the system as a whole, and as a result, do not consider such services to be a separate element of the arrangement. As such, we accrue the cost of the installation at the time of revenue recognition for the system.

Veeco Instruments Inc. and Subsidiaries
Notes to Consolidated Financial Statements (continued)
December 31, 2013

In Japan, where our contractual terms with customers generally specify title and risk and rewards of ownership transfer upon customer acceptance, revenue is recognized and the customer is billed upon the receipt of written customer acceptance. During the fourth quarter of fiscal 2013, we began using a distributor for almost all of our product and service sales to customers in Japan. Title and risk and rewards of ownership of our system sales still transfer to our end-customers upon their acceptance. As such, there is no impact to our policy of recognizing revenue upon receipt of written acceptance from the end customer.

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

Cash and Cash Equivalents

Cash and cash equivalents include cash and certain highly liquid investments. Highly liquid investments with maturities of three months or less when purchased may be classified as cash equivalents. Such items may include liquid money market accounts, U.S. treasuries, government agency securities and corporate debt. The investments that are classified as cash equivalents are carried at cost, which approximates fair value.

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 U.S. treasuries and government agency securities with maturities of greater than three months when purchased. 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).

Accounts Receivable, Net

Accounts receivable are presented net of allowance for doubtful accounts of \$2.4 million and \$0.5 million as of December 31, 2013 and 2012, respectively. We evaluate the collectability of accounts receivable based on a combination of factors. In cases where we become aware of circumstances that may impair a customer's ability to meet its financial obligations subsequent to the original sale, we will record an allowance against amounts due, and thereby reduce the net recognized receivable to the amount the we reasonably believes will be collected. For all other customers, we recognize an allowance for doubtful accounts based on the length of time the receivables are past due and consideration of other factors such as industry conditions, the current business environment and its historical experience.

Concentration of Credit Risk

Financial instruments, which potentially subject us to concentrations of credit risk, consist primarily of accounts receivable, short-term investments and cash and cash equivalents. We perform ongoing credit evaluations of our customers and, where appropriate, require that letters of credit be provided on certain foreign sales arrangements. We maintain allowances for potential credit losses and make investments with strong, higher credit quality issuers and continuously monitor the amount of credit exposure to any one issuer.

Inventories

Inventories are stated at the lower of cost (principally first-in, first-out method) or market. On a quarterly basis, management assesses the valuation and recoverability of all inventories, classified as materials (which include raw materials, spare parts and service inventory), work-in-process and finished goods.

Veeco Instruments Inc. and Subsidiaries
Notes to Consolidated Financial Statements (continued)
December 31, 2013

Materials inventory is used primarily to support the installed tool base and spare parts sales and is reviewed for excess quantities or obsolescence by comparing on-hand balances to historical usage, and adjusted for current economic conditions and other qualitative factors. Historically, the variability of such estimates has been impacted by customer demand and tool utilization rates.

The work-in-process and finished goods inventory is principally used to support system sales and is reviewed for recoverability by considering whether on hand inventory would be utilized to fulfill the related backlog. As we typically receive deposits for our orders, the variability of this estimate is reduced as customers have a vested interest in the orders they place with us. Recoverability of such inventory is evaluated by monitoring customer demand, current sales trends and product gross margins. Management also considers qualitative factors such as future product demand based on market outlook, which is based principally upon production requirements resulting from customer purchase orders received with a customer-confirmed shipment date within the next twelve months. Historically, the variability of these estimates of future product demand has been impacted by backlog cancellations or modifications resulting from unanticipated changes in technology or customer demand.

Following identification of potential excess or obsolete inventory, management evaluates the need to write down inventory balances 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 potential excess inventory. Unanticipated changes in demand for our products may require a write down of inventory that could materially affect our operating results.

Goodwill and Indefinite-Lived Intangibles

Goodwill represents the excess of the cost of an acquisition over the fair value of the net assets acquired. We account for goodwill and intangible assets with indefinite useful lives in accordance with relevant accounting guidance related to goodwill and other intangible assets, which states that goodwill and intangible assets with indefinite useful lives should not be amortized, but instead tested 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.

The guidance provides an option for an entity to first assess qualitative factors to determine whether the existence of events or circumstances leads to a determination that it is more likely than not (that is, a likelihood of more than 50%) that the fair value of a reporting unit is less than its carrying amount. If, after assessing the totality of events or circumstances, an entity determines it is not more likely than not that the fair value of a reporting unit is less than its carrying amount, then performing the two-step impairment test is unnecessary.

If we determine the two-step impairment test is necessary, we are required to determine if it is appropriate to use the operating segment, as defined under guidance for segment reporting, as the reporting unit, or one level below the operating segment, depending on whether certain criteria are met. We have identified five reporting units that are required to be reviewed for impairment. The five reporting units are aggregated into two segments: the VIBE and Mechanical reporting units which are reported in our Data Storage segment; and the MOCVD, MBE and ALD reporting units which are reported in our LED & Solar segment. 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.

Veeco Instruments Inc. and Subsidiaries
Notes to Consolidated Financial Statements (continued)
December 31, 2013

If required, 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 our 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

Definite-lived 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, covenants not-to-compete and software licenses that are obtained in an acquisition are initially recorded at fair value. Other 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 up 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 exceeds the fair value of the asset.

Accounting for Acquisitions

Our growth strategy has included the acquisition of businesses. The purchase price of these acquisitions has been determined after due diligence of the acquired business, market research, strategic planning, and the forecasting of expected future results and synergies. Estimated future results and expected synergies are subject to judgment as we integrate each acquisition and attempt to leverage resources.

Veeco Instruments Inc. and Subsidiaries
Notes to Consolidated Financial Statements (continued)
December 31, 2013

The accounting for the acquisitions we have made requires that the assets and liabilities acquired, as well as any contingent consideration that may be part of the agreement, be recorded at their respective fair values at the date of acquisition. This requires management to make significant estimates in determining the fair values, especially with respect to intangible assets, including estimates of expected cash flows, expected cost savings and the appropriate weighted average cost of capital. As a result of these significant judgments to be made we often obtain the assistance of independent valuation firms. We complete these assessments as soon as practical after the closing dates. Any excess of the purchase price over the estimated fair values of the identifiable net assets acquired is recorded as goodwill. Please see our footnote *Business Combinations* in these Notes to Consolidated Financial Statements.

Cost Method of Accounting for Investments

Investee companies not accounted for under the consolidation or the equity method of accounting are accounted for under the cost method of accounting. Under this method, our share of the earnings or losses of such investee companies are not included in the Consolidated Balance Sheet or Statements of Operations. However, impairment charges are recognized in the Consolidated Statements of Operations. If circumstances suggest that the value of the investee company has subsequently recovered, such recovery is not recorded.

Fair Value of Financial Instruments

We believe the carrying amounts of our financial instruments, including cash and cash equivalents, accounts receivable, accounts payable and accrued expenses, reflected in the consolidated financial statements approximate fair value due to their short-term maturities. The fair value of our debt, including current maturities, is estimated using a discounted cash flow analysis, based on the estimated current incremental borrowing rates for similar types of securities.

Translation of Foreign Currencies

Certain of our international subsidiaries operate using local functional currencies. Foreign currency denominated assets and liabilities are translated into U.S. dollars at exchange rates in effect at the balance sheet date, and income and expense accounts and cash flow items are translated at average monthly exchange rates during the respective periods. Net exchange gains or losses resulting from the translation of foreign financial statements and the effect of exchange rates on intercompany transactions of a long-term investment nature are recorded as a separate component of equity in accumulated other comprehensive income. Any foreign currency gains or losses related to transactions are included in operating results.

Environmental Compliance and Remediation

Environmental compliance costs include ongoing maintenance, monitoring and similar costs. Such costs are expensed as incurred. Environmental remediation costs are accrued when environmental assessments and/or remedial efforts are probable and the cost can be reasonably estimated.

Research and Development Costs

Research and development costs are charged to expense as incurred and include expenses for the development of new technology and the transition of technology into new products or services.

Warranty Costs

Our warranties are typically valid for one year from the date of final acceptance. We estimate the costs that may be incurred under the warranty that we provide for our products. We 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.

Veeco Instruments Inc. and Subsidiaries
Notes to Consolidated Financial Statements (continued)
December 31, 2013

Income Taxes

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 financial reporting 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 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.

Advertising Expense

The cost of advertising is expensed as of the first showing of each advertisement. We incurred \$0.5 million, \$0.8 million and \$1.4 million in advertising expenses during 2013, 2012 and 2011, respectively.

Shipping and Handling Costs

Shipping and handling costs are costs that are incurred to move, package and prepare our products for shipment and then to move the products to the customer's designated location. These costs are generally comprised of payments to third-party shippers. Shipping and handling costs are included in cost of sales in our Consolidated Statements of Operations.

Equity-Based Compensation

We grant equity-based awards, such as stock options and restricted stock or restricted stock units, to certain key employees to create a clear and meaningful alignment between compensation and shareholder return and to enable the employees to develop and maintain a stock ownership position. While the majority of our equity awards feature time-based vesting, performance-based equity awards, which are awarded from time to time to certain of our key executives, vest as a function of performance, and may also be subject to the recipient's continued employment which also acts as a significant retention incentive.

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 our historical and future expectation of dividend payouts. While the risk-free interest rate and dividend yield are less subjective assumptions, typically based on objective data derived from public sources, the expected stock-price volatility and option life assumptions require a level of judgment which results in more subjective accounting estimates.

Veeco Instruments Inc. and Subsidiaries
Notes to Consolidated Financial Statements (continued)
December 31, 2013

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 which utilizes 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 option 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.

We settle the exercise of stock options with newly issued shares.

With respect to grants of performance based awards, we assess the probability that such performance criteria will be met in order to determine the compensation expense. Consequently, the compensation expense is recognized straight-line over the vesting period. If that assessment of the probability of the performance condition being met changes, we would recognize the impact of the change in estimate in the period of the change. As with the use of any estimate, and due to the significant judgment used to derive those estimates, actual results may vary.

We have elected to treat awards with only service conditions and with graded vesting as one award. Consequently, the total compensation expense is recognized straight-line over the entire vesting period, so long as the compensation cost recognized at any date at least equals the portion of the grant date fair value of the award that is vested at that date.

Negotiable Letters of Credit

For certain transactions, we request that our customers provide us with a negotiable irrevocable letter of credit drawn on a reputable financial institution. These irrevocable letters of credit are typically issued to mature, on average, for 0 to 90 days post documentation requirements, but occasionally for longer. For a fee, one of our banks confirms the reputation of the issuing institution and, at our option, monetizes these letters of credit on a non-recourse basis soon after they become negotiable. Once we monetize the letter of credit with the confirming bank, we have no further obligations or interest in the letter of credit and they are not included in our consolidated balance sheets. The fees that we pay are included in selling, general and administrative expense and are not material.

Recent Accounting Pronouncements

Presentation of an Unrecognized Tax Benefit When a Net Operating Loss Carryforward, a Similar Tax Loss, or Tax Credit Carryforward Exists: In July 2013, the FASB issued ASU No. 2013-11. ASU 2013-11 requires entities to present an unrecognized tax benefit, or a portion of an unrecognized tax benefit, as a reduction to a deferred tax asset for a net operating loss carryforward, a similar tax loss, or a tax credit carryforward when settlement in this manner is available under the tax law. This ASU is effective prospectively for fiscal years, and interim periods within those years, beginning after December 15, 2013. We are evaluating the potential impact of this adoption on our consolidated financial statements.

Presentation of Financial Statements: In April 2013, the FASB issued ASU No. 2013-07, "Presentation of Financial Statements (Topic 205): Liquidation Basis of Accounting." The objective of ASU 2013-07 is to clarify when an entity should apply the liquidation basis of accounting. The update provides principles for the recognition and measurement of assets and liabilities and requirements for financial statements prepared using the liquidation basis of accounting. This ASU is effective prospectively for fiscal years, and interim periods within those years, beginning after December 15, 2013. We do not anticipate that the adoption of this standard will have a material impact on our consolidated financial statements, absent any indications that liquidation is imminent.

Veeco Instruments Inc. and Subsidiaries
Notes to Consolidated Financial Statements (continued)
December 31, 2013

Parent's Accounting for the Cumulative Translation Adjustment: In March 2013, the FASB issued ASU No. 2013-05, *Parent's Accounting for the Cumulative Translation Adjustment upon Derecognition of Certain Subsidiaries or Groups of Assets within a Foreign Entity or of an Investment in a Foreign Entity*. This new standard is intended to resolve diversity in practice regarding the release into net income of a cumulative translation adjustment ("CTA") upon derecognition of a subsidiary or group of assets within a foreign entity. ASU No. 2013-05 is effective prospectively for fiscal years (and interim reporting periods within those years) beginning after December 15, 2013. We currently anticipate that its adoption could have an impact on our consolidated financial statements, in the event of derecognition of a foreign subsidiary in 2014 or subsequently. We cannot estimate the amount of CTA to be released into income from any potential derecognition.

Obligations Resulting from Joint and Several Liability Arrangements for Which the Total Amount of the Obligation Is Fixed at the Reporting Date: In February 2013, the FASB issued Accounting Standards Update No. 2013-04, "*Obligations Resulting from Joint and Several Liability Arrangements for Which the Total Amount of the Obligation Is Fixed at the Reporting Date*". ASU No. 2013-04 provides guidance for the recognition, measurement, and disclosure of obligations resulting from joint and several liability arrangements for which the total amount of the obligation within the scope of the guidance is fixed at the reporting date, as the sum of the amount the reporting entity agreed to pay on the basis of its arrangement among its co-obligors and any additional amount the reporting entity expects to pay on behalf of its co-obligors. In addition, ASU No. 2013-04 requires an entity to disclose the nature and amount of the obligation, as well as other information about the obligations. ASU No. 2013-04 is effective for interim and annual periods beginning after December 15, 2013 and is to be applied retrospectively. We do not anticipate that the adoption of this standard will have a material impact on our consolidated financial statements.

2. Income (Loss) Per Common Share

The following table sets forth basic and diluted net income (loss) per common share and the basic weighted average shares outstanding and diluted weighted average shares outstanding (*in thousands, except per share data*):

	Year ended December 31,		
	2013	2012	2011
Net income (loss)	\$ (42,263)	\$ 30,928	\$ 127,987
Net income (loss) per common share:			
Basic	\$ (1.09)	\$ 0.80	\$ 3.23
Diluted	\$ (1.09)	\$ 0.79	\$ 3.11
Basic weighted average shares outstanding	38,807	38,477	39,658
Dilutive effect of stock options, restricted stock awards and units and convertible debt	—	574	1,497
Diluted weighted average shares outstanding	38,807	39,051	41,155

Basic income (loss) per common share is computed using the basic weighted average number of common shares outstanding during the period. Diluted income (loss) per common share is computed using the basic weighted average number of common shares and common equivalent shares outstanding during the period. For the year ended December 31, 2013, the effect of approximately 0.6 million common equivalent shares were excluded from the calculation of diluted net loss per share because their inclusion would have been anti-dilutive due to the net loss sustained during the period. Potentially dilutive securities attributable to outstanding stock options and restricted stock of approximately 1.3 million, 1.3 million and 0.7 million common equivalent shares during the years ended December 31, 2013, 2012 and 2011 were excluded from the calculation of diluted net income (loss) per share because their inclusion would have been anti-dilutive.

During the second quarter of 2011 the entire outstanding principal balance of our convertible debt was converted, with the principal amount paid in cash and the conversion premium paid in shares. The convertible notes met the criteria for determining the effect of the assumed conversion using the treasury stock method of accounting, since we had settled the principal amount of the notes in cash. Using the treasury stock method, it was determined that the impact of the assumed conversion for the years ended December 31, 2011 had a dilutive effect of 0.6 million shares.

Veeco Instruments Inc. and Subsidiaries
Notes to Consolidated Financial Statements (continued)
December 31, 2013

3. Discontinued Operations

CIGS Solar Systems Business

On July 28, 2011, we announced a plan to discontinue our CIGS solar systems business. The results of operations for the CIGS solar systems business have been recorded as discontinued operations for all periods presented. During the year ended December 31, 2011, total discontinued operations related to the discontinued CIGS business 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.

Metrology

On August 15, 2010, we signed a definitive agreement to sell our Metrology business to Bruker. The results of operations for the Metrology business have been recorded as discontinued operations for all periods presented. The sale 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. During 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. We recognized into income the pre-tax deferred gain of \$5.4 million during 2012 related to the completion of the sale of the assets in China to Bruker. We also recognized a \$1.4 million gain (\$1.1 million net of taxes) on the sale of assets of this discontinued segment that were previously held for sale and sold during 2012.

Summary information related to discontinued operations is as follows (*in thousands*):

	2012			2011		
	Solar Systems	Metrology	Total	Solar Systems	Metrology	Total
Net sales	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —
Net income (loss) from discontinued operations	\$ (62)	\$ 4,461	\$ 4,399	\$ (61,453)	\$ (1,062)	\$ (62,515)

4. Fair Value Measurements

We have categorized our assets and liabilities recorded at fair value based upon the fair value hierarchy. The levels of fair value hierarchy are as follows:

- Level 1 inputs utilize quoted prices (unadjusted) in active markets for identical assets or liabilities that we have the ability to access.
- Level 2 inputs utilize other-than-quoted prices that are observable, either directly or indirectly. Level 2 inputs include quoted prices for similar assets and liabilities in active markets, and inputs such as interest rates and yield curves that are observable at commonly quoted intervals.
- Level 3 inputs are unobservable and are typically based on our own assumptions, including situations where there is little, if any, market activity.

In certain cases, the inputs used to measure fair value may fall into different levels of the fair value hierarchy. In such cases, we categorize such assets or liabilities based on the lowest level input that is significant to the fair value measurement in its entirety. Our assessment of the significance of a particular input to the fair value measurement in its entirety requires judgment and considers factors specific to the asset.

Veeco Instruments Inc. and Subsidiaries
Notes to Consolidated Financial Statements (continued)
December 31, 2013

Both observable and unobservable inputs may be used to determine the fair value of positions that are classified within the Level 3 category. As a result, the unrealized gains and losses for assets within the Level 3 category presented below may include changes in fair value that were attributable to both observable (e.g. changes in market interest rates) and unobservable (e.g. changes in historical company data) inputs.

The major categories of assets and liabilities measured on a recurring basis, at fair value, as of December 31, 2013 and 2012 are as follows (*in thousands*):

	December 31, 2013			
	Level 1	Level 2	Level 3	Total
U.S. treasuries	\$ 130,977	\$ —	\$ —	\$ 130,977
Corporate debt	—	77,601	—	77,601
Government agency securities	—	61,013	—	61,013
Commercial paper	—	11,947	—	11,947
Derivative instrument	—	907	—	907
Contingent consideration	—	—	(29,368)	(29,368)

	December 31, 2012 (1)			
	Level 1	Level 2	Level 3	Total
U.S. treasuries	\$ 278,698	\$ —	\$ —	\$ 278,698
Government agency securities	—	123,054	—	123,054
Derivative instrument	—	248	—	248

(1) December 31, 2012 table has been conformed to present year presentation.

Highly liquid investments with maturities of three months or less when purchased may be classified as cash equivalents. Such items may include liquid money market accounts, U.S. treasuries, government agency securities and corporate debt. The investments that are classified as cash equivalents are carried at cost, which approximates fair value. Accordingly, no gains or losses (realized/unrealized) have been incurred for cash equivalents. All investments classified as available-for-sale are recorded at fair value within short-term investments in the Consolidated Balance Sheets.

In determining the fair value of our investments and levels, through a third-party service provider, we use pricing information from pricing services that value securities based on quoted market prices in active markets and matrix pricing. Matrix pricing is a mathematical valuation technique that does not rely exclusively on quoted prices of specific investments, but on the investment's relationship to other benchmarked quoted securities. We have a process in place for investment valuations to facilitate identification and resolution of potentially erroneous prices. We review the information provided by the third-party service provider to record the fair value of its portfolio.

Consistent with Level 1 measurement principles, U.S. treasuries are priced using active market prices of identical securities. Consistent with Level 2 measurement principles, corporate debt, government agency securities, commercial paper, and derivative instruments are priced with matrix pricing.

Veeco Instruments Inc. and Subsidiaries
Notes to Consolidated Financial Statements (continued)
December 31, 2013

A reconciliation of the amount in Level 3 is as follows (*in thousands*):

	Level 3
Balance at December 31, 2012	\$ —
Addition of contingent consideration	(33,539)
Payment on contingent consideration	5,000
Fair value adjustment of contingent consideration	(829)
Balance at December 31, 2013	<u>\$ (29,368)</u>

We estimated the fair value of the contingent consideration by applying various probabilities and discount factors to each of the various performance milestones as further discussed in note *Business Combinations*. These fair value measurements are based on significant inputs not observable in the market and thus represent a Level 3 measurement as defined in ASC 820. The discount rates used ranged from 3.6% to 13.0% for the purchase order related contingent payments and from 15.5% to 30.5% for the revenue and gross margin related contingent payments. These rates were determined based on the nature of the milestone, the risks and uncertainties involved and the time period until the milestone was measured.

We measure certain assets for fair value on a non-recurring basis when there are indications of impairment.

In 2013 and 2012 we measured certain assets consistent with Level 3 measurement principles using an income approach based on a discounted cash flow model in order to determine the amount of impairment, if any. In 2013, we evaluated certain tangible assets in our LED & Solar segment for impairment. As a result of the evaluation we adjusted the carrying value by \$0.9 million related to tools that we had previously used in our laboratories held in Property, plant and equipment which we are holding for sale and by \$0.3 million related to an asset held in Other assets with \$1.2 million of adjustments recorded as impairment in 2013. In 2012, we evaluated an asset in our Data Storage segment for impairment. As a result of the evaluation we adjusted the carrying value of the asset carried in Other assets from \$1.4 million to \$0.1 million with the \$1.3 million adjustment recorded as impairment in 2012.

5. Business Combinations

On April 4, 2011, we purchased a privately-held company which supplies certain components to one of our businesses for \$28.3 million in cash. As a result of this purchase, we acquired \$16.4 million of definite-lived intangibles, of which \$13.6 million related to core technology, and \$14.7 million of goodwill. The financial results of this acquisition are included in our LED & Solar segment as of the acquisition date. We determined that this acquisition does not constitute a material business combination and therefore we have not included pro forma financial information in this report.

On October 1, 2013 (“the Acquisition Date”), Veeco acquired 100% of the outstanding common shares and voting interest of Synos Technology, Inc. (“Synos”). The results of Synos’ operations have been included in the consolidated financial statements since that date. Synos is an early stage manufacturer of fast array scanning atomic layer deposition (“FAST-ALD”) tools for OLED and other applications. As a result of the acquisition, the Company has entered the FAST-ALD market which is complimentary to the Company’s MOCVD LED offerings.

Veeco Instruments Inc. and Subsidiaries
Notes to Consolidated Financial Statements (continued)
December 31, 2013

The Acquisition Date fair value of the consideration totaled \$102.3 million, net of cash acquired, which consisted of the following (*in thousands*):

	Acquisition Date (October 1, 2013)
Cash (net of cash acquired)	\$ 71,488
Working capital adjustment	(2,695)
Contingent consideration	33,539
Total	<u>\$ 102,332</u>

As part of Veeco's acquisition of Synos, we may be obligated to pay to the selling shareholders of Synos certain contingent consideration. The aggregate fair value of the contingent consideration arrangement at the acquisition date was \$33.5 million. The contingency arrangements are generally as follows:

- Up to \$40.0 million based on defined milestones tied to the receipt of certain purchase orders from customers by certain dates through the first quarter of 2014. The Company determined the fair value of these contingent payments to be \$24.3 million. Of this amount, \$5.0 million was earned and paid in the fourth quarter of 2013. The second milestone pertaining to this contingency is to be measured by March 31, 2014 and could result in either no payment, a payment of \$17.5 million or a payment of \$35 million. The difference between the amount earned and the fair value recorded will be recorded in the statement of operations for the period ended March 31, 2014. The outcome is currently unknown.
- Up to \$75.0 million based on defined milestones tied to meeting certain revenue and gross margin thresholds based on full year 2014 results. The Company has determined the fair value of these contingent payments to be \$9.2 million. The fair value of this contingency will continued to be measured at each reporting period and changes in fair value will be recorded in the statement of operations.

We estimated the fair value of the contingent consideration by applying various probabilities and discount factors to each of the various performance milestones. These fair value measurements are based on significant inputs not observable in the market and thus represent a Level 3 measurement as defined in ASC 820. The discount rates used ranged from 3.6% to 13.0% for the purchase order related contingent payments and from 15.5% to 30.5% for the revenue and gross margin related contingent payments. These rates were determined based on the nature of the milestone, the risks and uncertainties involved and the time period until the milestone was measured. The determination of the various probabilities and discount factors are highly subjective and require significant judgment and are influenced by a number of factors, including the adoption of OLED technology and limited history. While the use of OLED is expected to grow in the near future, it is difficult to predict the rate at which OLED will be adopted by the market and thus would impact the sales of our equipment.

As of December 31, 2013, the first milestone was achieved and we paid the former shareholders of Synos \$5.0 million. In addition, the recognized amount for the contingencies increased by \$0.8 million as of December 31, 2013 as a result of changes in the fair value of contingent consideration.

The following table summarizes the estimated fair values of the assets acquired, net of the cash acquired, and liabilities assumed at the Acquisition Date. Veeco utilized third-party valuations of the tangible and intangible assets acquired as well as the contingent consideration. The amounts below are preliminary and are subject to change (*in thousands*):

	Acquisition Date (October 1, 2013)
Accounts receivable	\$ 1,523
Inventory	386
Other current assets	512
Property, plant, and equipment	1,917
Intangible assets	99,270
Total identifiable assets acquired	<u>103,608</u>
Current liabilities	4,370
Estimated deferred tax liability, net	32,426
Total liabilities assumed	<u>36,796</u>
Net identifiable assets acquired	66,812
Goodwill	35,520
Net assets acquired	<u>\$ 102,332</u>

Veeco Instruments Inc. and Subsidiaries
Notes to Consolidated Financial Statements (continued)
December 31, 2013

The \$35.5 million of goodwill was assigned to the LED & Solar segment. None of the goodwill is expected to be deductible for income tax purposes. As of December 31, 2013, there were no changes in the recognized amounts of goodwill resulting from the acquisition of Synos.

The classes of intangible assets acquired and the estimated weighted-average useful life of each class is presented in the table below (*in thousands*):

	Acquisition Date (October 1, 2013)	
	Amount	Average useful life
Technology	\$ 73,160	14 years
In-process research and development	5,070	To be determined
Customer relationship	20,630	8 years
Trademark and trade name	140	1 year
Non-compete agreement	270	3 years
Intangible assets acquired	<u>\$ 99,270</u>	

We determined the estimated fair value of the identifiable intangible assets based on various factors including: cost, discounted cash flow, income method, loss-of-revenue/income method and relief-from-royalty method in determining the purchase price allocation.

Technology is being amortized on an accelerated basis consistent with the timing of the cash flows it is expected to generate. Pursuant to the accounting guidance, acquired in-process research and development is not amortized until such time as it is completed or abandoned. Upon completion, we will amortize the acquired amount over its useful life. As noted earlier, the fair value of the acquired assets is provisional pending the final valuations for these assets.

We recognized \$1.0 million of acquisition related costs that were expensed in 2013. These costs are included in the Consolidated Statements of Operations in the line item entitled "Selling, general and administrative."

The amounts of revenue and income (loss) from continuing operations before income taxes of Synos included in the Company's consolidated statement of operations from the acquisition date (October 1, 2013) to the period ending December 31, 2013 are as follows (*in thousands*):

Revenue	<u>\$ 409</u>
Income (loss) from continuing operations before income taxes	<u>\$ (6,480)</u>

The following represents the pro forma Consolidated Statements of Operations as if Synos had been included in our consolidated results (*in thousands*):

	For the year ended December 31, (unaudited)	
	2013	2012
Revenue	<u>\$ 346,319</u>	<u>\$ 522,029</u>
Income (loss) from continuing operations before income taxes	<u>\$ (60,983)</u>	<u>\$ 16,840</u>

These amounts have been calculated after applying our accounting policies to material amounts and also adjusting the results of Synos to reflect the additional amortization that would have been expensed assuming the fair value adjustments to intangible assets had been applied on January 1, 2012.

Veeco Instruments Inc. and Subsidiaries
Notes to Consolidated Financial Statements (continued)
December 31, 2013

6. Balance Sheet Information

Short-Term Investments

Available-for-sale securities consist of the following (*in thousands*):

	December 31, 2013			
	Amortized Cost	Gains in Accumulated Other Comprehensive Income	Losses in Accumulated Other Comprehensive Income	Estimated Fair Value
U.S. treasuries	\$ 130,956	\$ 22	\$ (1)	\$ 130,977
Government agency securities	61,004	9	—	61,013
Corporate debt	77,582	55	(36)	77,601
Commercial paper	11,947	—	—	11,947
Total available-for-sale securities	<u>\$ 281,489</u>	<u>\$ 86</u>	<u>\$ (37)</u>	<u>\$ 281,538</u>

During the year ended December 31, 2013, sales and maturities of available-for-sale securities provided total proceeds of \$499.6 million. The gross realized gains on these sales were \$0.1 million for the year ended December 31, 2013. For purpose of determining gross realized gains, the cost of securities sold is based on specific identification. The change in the net unrealized holding gain on available-for-sale securities was minimal for the year ended December 31, 2013, and has been included in accumulated other comprehensive income. The tax impact on the unrealized gains, which is excluded from the table above, was less than \$0.1 million.

	December 31, 2012			
	Amortized Cost	Gains in Accumulated Other Comprehensive Income	Losses in Accumulated Other Comprehensive Income	Estimated Fair Value
U.S. treasuries	\$ 184,102	\$ 76	\$ —	\$ 184,178
Government agency securities	8,056	—	—	8,056
Total available-for-sale securities	<u>\$ 192,158</u>	<u>\$ 76</u>	<u>\$ —</u>	<u>\$ 192,234</u>

During the year ended December 31, 2012, sales and maturities of available-for-sale securities provided total proceeds of \$244.9 million. The gross realized gains on these sales were minimal for the year ended December 31, 2012. For purpose of determining gross realized gains, the cost of securities sold is based on specific identification. The change in the net unrealized holding gain on available-for-sale securities amounted to \$0.1 million for the year ended December 31, 2012, and has been included in accumulated other comprehensive income. The tax impact on the unrealized gains, which is excluded from the table above, was minimal.

Veeco Instruments Inc. and Subsidiaries
Notes to Consolidated Financial Statements (continued)
December 31, 2013

Available-for-sale securities in a loss position at December 31, 2013 are as follows (*in thousands*):

	Less than 12 months		Total	
	Fair value	Gross Unrealized Losses	Fair value	Gross Unrealized Losses
Corporate debt	\$ 37,654	\$ (36)	\$ 37,654	\$ (36)
U.S. treasuries	29,068	(1)	29,068	(1)
Total	\$ 66,722	\$ (37)	\$ 66,722	\$ (37)

As of December 31, 2013 we had \$66.7 million in short-term investments that had an aggregate unrealized fair value loss of less than \$0.1 million none of which had been in an unrealized loss position for 12 months or longer. As of December 31, 2012 we did not hold any short-term investments that were in a loss position.

Contractual maturities of available-for-sale securities as of December 31, 2013 are as follows (*in thousands*):

	Estimated Fair Value
Due in one year or less	\$ 196,015
Due in 1–2 years	64,156
Due in 2–3 years	21,367
Total investments in securities	\$ 281,538

Actual maturities may differ from contractual maturities because some borrowers have the right to call or prepay obligations with or without call or prepayment penalties.

Restricted Cash

As of December 31, 2013 and 2012, restricted cash consisted of \$2.7 million and \$2.0 million, respectively, which serves as collateral for bank guarantees that provide financial assurance that the Company will fulfill certain customer obligations. This cash is held in custody by the issuing bank, and is restricted as to withdrawal or use while the related bank guarantees are outstanding.

Accounts Receivable, Net

Accounts receivable are shown net of the allowance for doubtful accounts of \$2.4 million and \$0.5 million as of December 31, 2013 and 2012, respectively.

Veeco Instruments Inc. and Subsidiaries
Notes to Consolidated Financial Statements (continued)
December 31, 2013

Inventories (in thousands)

	December 31,	
	2013	2012
Materials	\$ 34,301	\$ 36,523
Work in process	12,900	13,363
Finished goods	12,525	9,921
	<u>\$ 59,726</u>	<u>\$ 59,807</u>

Property, Plant and Equipment (in thousands)

	December 31,		Estimated Useful Lives
	2013	2012	
Land	\$ 12,535	\$ 12,535	
Building and improvements	52,050	49,498	10-40 years
Machinery and equipment	110,228	110,150	3-10 years
Leasehold improvements	5,888	5,677	3-7 years
Gross property, plant and equipment at cost	180,701	177,860	
Less: accumulated depreciation and amortization	91,562	79,558	
Net property, plant and equipment	<u>\$ 89,139</u>	<u>\$ 98,302</u>	

For the years ended December 31, 2013, 2012 and 2011, depreciation expense was \$12.9 million, \$11.3 million and \$8.2 million, respectively.

As of December 31, 2013, we had \$7.2 million of tools that we previously used in our laboratories carried in machinery and equipment which we are holding for sale. These tools are the same type of tools we sell to our customers in the ordinary course of our business. In addition, during the year ended December 31, 2013, we converted and sold \$3.7 million of tools that we had previously used in our laboratories as Veeco Certified Equipment at an aggregate selling price of \$7.4 million which is included in revenue. During 2013, we recorded asset impairment charges in LED & Solar of \$0.9 million related to certain tools used in our laboratories carried in machinery and equipment which we are holding for sale.

Goodwill and Indefinite-Lived Intangible Assets

In accordance with the relevant accounting guidance related to goodwill and other intangible assets, we conducted our annual impairment test of goodwill and indefinite-lived intangible assets during the fourth quarters of 2013 and 2012, using October 1st as our measurement date as described in our footnote *Description of Business and Significant Accounting Policies*. Based upon the results of the qualitative assessment we determined that it was not more likely than not that goodwill or our indefinite-lived intangible assets were impaired. Therefore, we determined that no impairment of goodwill and indefinite-lived intangible asset existed as of October 1, 2013. In 2012, we determined not to perform the optional qualitative assessment and performed our step 1 assessment utilizing discounted future cash flows and a reconciliation to our market capitalization. Based on our assessment we determined that there was no impairment of our goodwill or our indefinite-lived assets as of October 1, 2012.

Changes in our goodwill are as follows *(in thousands)*:

	December 31,	
	2013	2012
Beginning balance	\$ 55,828	\$ 55,828
Acquisition (see <i>Business Combinations</i>)	35,520	—
Ending balance	<u>\$ 91,348</u>	<u>\$ 55,828</u>

Veeco Instruments Inc. and Subsidiaries
Notes to Consolidated Financial Statements (continued)
December 31, 2013

Intangible Assets

As of December 31, 2013, we had \$8.0 million of indefinite-lived intangible assets consisting of trademarks, tradenames and in-process research and development (“IPR&D”). Pursuant to acquisition guidance, IPR&D is carried as an indefinite lived intangible until abandonment or completion. As of December 31, 2012, we had \$2.9 million of indefinite-lived intangible assets consisting of trademarks and tradenames. These intangibles are included in the accompanying Consolidated Balance Sheets in the caption intangible assets, net.

<u>(in thousands)</u>	December 31, 2013			December 31, 2012		
	Purchased technology	Other intangible assets	Total intangible assets	Purchased technology	Other intangible assets	Total intangible assets
Gross intangible assets	\$ 187,478	\$ 40,675	\$ 228,153	\$ 109,248	\$ 19,635	\$ 128,883
Less accumulated amortization	(97,524)	(15,913)	(113,437)	(93,436)	(14,473)	(107,909)
Intangible assets, net	\$ 89,954	\$ 24,762	\$ 114,716	\$ 15,812	\$ 5,162	\$ 20,974

The estimated aggregate amortization expense for intangible assets with definite useful lives for each of the next five fiscal years is as follows (*in thousands*):

2014	\$ 11,569
2015	19,376
2016	18,498
2017	15,876
2018	12,244

Other Assets

<u>(in thousands)</u>	December 31,	
	2013	2012
Cost method investment	\$ 16,884	\$ 14,494
Income taxes receivable	21,128	—
Other	714	2,287
	\$ 38,726	\$ 16,781

Cost Method Investment

On September 28, 2010, we completed a \$3 million investment in a rapidly developing organic light emitting diode (also known as OLED) equipment company (the “Investment”). We invested an additional \$10.3 million and \$1.2 million in the Investment during 2012 and 2011, respectively. In 2013, we invested an additional \$2.4 million in the Investment in the form of bridge notes bearing 4% interest. The bridge notes are payable in equity at the time of a liquidity event or a qualifying equity investment round, otherwise they are payable in cash in June 2014. As of December 31, 2013, we have a 15.4% ownership of the preferred shares, and effectively hold a 11.0% ownership interest of the total company. Since we do not exert significant influence on the Investment, this investment is treated under the cost method in accordance with applicable accounting guidance. This investment is recorded in other assets in our Consolidated Balance Sheets as of December 31, 2013 and 2012.

Veeco Instruments Inc. and Subsidiaries
Notes to Consolidated Financial Statements (continued)
December 31, 2013

Accrued Expenses and Other Current Liabilities

(in thousands)	December 31,	
	2013	2012
Payroll and related benefits	\$ 11,020	\$ 14,581
Sales, use and other taxes	5,402	6,480
Contingent consideration	20,098	—
Warranty	5,662	4,942
Restructuring liability	533	1,875
Other	8,369	13,523
	\$ 51,084	\$ 41,401

Customer deposits and deferred revenue

As of December 31, 2013 and 2012, we had customer deposits of \$27.5 million and \$32.7 million, respectively recorded as a component of customer deposits and deferred revenue.

Accrued Warranty

Typically, we provide our customers a one year manufacturer's warranty from the date of final acceptance on the products they purchase from us. We estimate the costs that may be incurred under the warranty we provide for our products and recognize a liability in the amount of such costs at the time the related revenue is recognized. Factors that affect our warranty liability include product failure rates, material usage and labor costs incurred in correcting product failures during the warranty period. Changes in our warranty liability during the year are as follows:

	December 31,	
	2013	2012
Balance as of the beginning of year	\$ 4,942	\$ 8,731
Warranties issued during the year	5,291	3,563
Settlements made during the year	(5,580)	(7,060)
Changes in estimate during the period	1,009	(292)
Balance as of the end of year	\$ 5,662	\$ 4,942

Other Liabilities

(in thousands)	December 31,	
	2013	2012
Contingent consideration	\$ 9,270	\$ —
Income taxes payable	—	3,986
Other	379	544
	\$ 9,649	\$ 4,530

Veeco Instruments Inc. and Subsidiaries
Notes to Consolidated Financial Statements (continued)
December 31, 2013

Accumulated Other Comprehensive Income

The components of accumulated other comprehensive income are:

As of December 31, 2013	Gross	Taxes	Net
Translation adjustments	\$ 5,718	\$ (392)	\$ 5,326
Minimum pension liability	(1,160)	424	(736)
Unrealized gain on available-for-sale securities	49	(18)	31
Accumulated other comprehensive income	<u>\$ 4,607</u>	<u>\$ 14</u>	<u>\$ 4,621</u>

As of December 31, 2012	Gross	Taxes	Net
Translation adjustments	\$ 7,040	\$ (339)	\$ 6,701
Minimum pension liability	(1,285)	510	(775)
Unrealized gain on available-for-sale securities	76	(29)	47
Accumulated other comprehensive income	<u>\$ 5,831</u>	<u>\$ 142</u>	<u>\$ 5,973</u>

7. Debt

Long-Term Debt

Long-term debt as of December 31, 2013, consists of a mortgage note payable, which is secured by certain land and buildings with carrying amounts aggregating approximately \$4.7 million and \$4.8 million as of December 31, 2013 and December 31, 2012, respectively. The mortgage note payable (\$2.1 million as of December 31, 2013 and \$2.4 million as of December 31, 2012) bears interest at an annual rate of 7.91%, with the final payment due on January 1, 2020. We estimate the fair market value of this note as of December 31, 2013 and 2012 was approximately \$2.3 million and \$2.6 million, respectively.

Maturity of Long-Term Debt

Long-term debt matures as follows (*in thousands*):

2014	\$ 290
2015	314
2016	340
2017	368
2018	398
Thereafter	427
	<u>2,137</u>
Less current portion	290
	<u>\$ 1,847</u>

Convertible Notes

In 2011, we retired our convertible notes which were initially convertible into 36.7277 shares of common stock per \$1,000 principal amount of notes (equivalent to a conversion price of \$27.23 per share or a premium of 38% over the closing market price for Veeco's common stock on April 16, 2007). We paid interest on these notes on April 15 and October 15 of each year. The notes were unsecured and were effectively subordinated to all of our senior and secured indebtedness and to all indebtedness and other liabilities of our subsidiaries.

Veeco Instruments Inc. and Subsidiaries
Notes to Consolidated Financial Statements (continued)
December 31, 2013

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 in a net share settlement. 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 outstanding principal balance of notes outstanding. As a result, 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. As a result, 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.

Certain accounting guidance requires a portion of convertible debt to be allocated to equity. This guidance requires issuers of convertible debt that can be settled in cash to separately account for (*i.e.* bifurcate) a portion of the debt associated with the conversion feature and reclassify this portion to equity. The liability portion, which represents the fair value of the debt without the conversion feature, is accreted to its face value over the life of the debt using the effective interest method by amortizing the discount between the face amount and the fair value. The amortization is recorded as interest expense. Our convertible notes were subject to this accounting guidance. This additional interest expense did not require the use of cash.

The components of interest expense recorded on the notes were as follows (*in thousands*):

	For the year ended December 31, 2011
Contractual interest	\$ 2,025
Accretion of the discount on the notes	1,260
Total interest expense on the notes	\$ 3,285
Effective interest rate	6.7%

8. Equity Compensation Plans and Equity

Stock Option and Restricted Stock Plans

We have several stock option and restricted stock plans. In connection with our acquisition of Synos Technology, Inc. on October 1, 2013, the Board of Directors granted equity awards to the Synos employees. Pursuant to Nasdaq Listing Rules, the equity awards were granted under our 2013 Inducement Stock Incentive Plan (the "Inducement Plan"), which the Board of Directors adopted to facilitate the granting of equity awards as an inducement to these employees to commence employment with us. We issued 124,500 stock options and 87,000 restricted stock units under this plan. The stock options will vest over a three year period and have a 10-year term and the restricted stock units will vest over a two or four year period. As of December 31, 2013, the Inducement Plan was effectively merged into the 2010 Stock Incentive Plan (as amended to date, the "2010 Plan"), and is therefore considered an inactive plan with no further shares available for future grant. As of December 31, 2013, there are 124,500 options outstanding under the Inducement Plan.

On April 1, 2010, our Board of Directors, and on May 14, 2010, our shareholders, approved the 2010 Plan. The 2010 Plan replaced the 2000 Stock Incentive Plan, as amended (the "2000 Plan"), as the Company's active stock plan. Our employees, directors and consultants are eligible to receive awards under the 2010 Plan. The 2010 Plan permits the granting of a variety of awards, including both non-qualified and incentive stock options, share appreciation rights, restricted shares, restricted share units and dividend equivalent rights. We are authorized to issue up to 6,750,000 shares under the 2010 Plan, including an additional 3,250,000 shares (including up to 2,995,000 shares of Common Stock available for issuance under the 2010 Plan and up to 255,000 shares underlying awards granted under the Inducement Plan) that were approved by the shareholders on December 10, 2013. Option awards are generally granted with an exercise price equal to the closing price of our stock on the trading day prior to the date of grant; those option awards generally vest over a 3 year period and have a 7 or 10-year term. Restricted share awards generally vest over 1-5 years. Certain option and share awards provide for accelerated vesting if there is a change in control, as defined in the 2010 Plan. As of December 31, 2013, there are 1,746,092 options outstanding under the 2010 Plan.

Veeco Instruments Inc. and Subsidiaries
Notes to Consolidated Financial Statements (continued)
December 31, 2013

The 2000 Plan was approved by our Board of Directors and shareholders in May 2000. The 2000 Plan provides for the grant to officers and key employees of stock awards, either in the form of options to purchase shares of our common stock or restricted stock awards. Stock awards granted pursuant to the 2000 Plan expire after seven years and generally vest over a two-year to five-year period following the grant date. In addition, the 2000 Plan provides for automatic annual grants of restricted stock to each member of our Board of Directors who is not an employee. As of December 31, 2013, there are 727,552 options outstanding under the 2000 Plan.

Equity-Based Compensation Expense, Stock Option and Restricted Stock Activity

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. We recorded equity compensation expense of \$13.1 million, \$14.3 million and \$12.8 million for the years ended December 31, 2013, 2012 and 2011, respectively. We did not capitalize any equity compensation in the years ended December 31, 2013, 2012 and 2011.

During the year ended December 31, 2011, we discontinued our CIGS solar systems business and as a result the equity-based compensation expense related to each CIGS solar systems business employee has been classified as discontinued operations in determining the consolidated results of operations for the years ended December 31, 2011. For the year ended December 31, 2011 discontinued operations included compensation expense of \$0.7 million.

As of December 31, 2013, the total unrecognized compensation cost related to nonvested stock awards and option awards expected to vest is \$33.2 million and \$12.3 million, respectively, and the related weighted average period over which it is expected that such unrecognized compensation costs will be recognized is approximately 3.1 years and 2.2 years for the nonvested stock awards and for option awards, respectively.

The fair value of each option granted during the years ended December 31, 2013, 2012 and 2011, was estimated on the date of grant using the Black-Scholes option-pricing model with the following assumptions:

	For the year ended December 31,		
	2013	2012	2011
Weighted-average expected stock-price volatility	48%	59%	55%
Weighted-average expected option life	5 years	5 years	4 years
Average risk-free interest rate	1.27%	0.70%	1.40%
Average dividend yield	0%	0%	0%

A summary of our restricted stock awards including restricted stock units as of December 31, 2013 is presented below:

	Shares (000's)	Weighted- Average Grant-Date Fair Value
Nonvested as of December 31, 2012	693	\$ 36.11
Granted	798	33.16
Vested	(207)	32.44
Forfeited (including cancelled awards)	(126)	34.33
Nonvested as of December 31, 2013	<u>1,158</u>	<u>\$ 34.93</u>

Veeco Instruments Inc. and Subsidiaries
Notes to Consolidated Financial Statements (continued)
December 31, 2013

During the year ended December 31, 2013, we granted 797,583 shares of restricted common stock and restricted stock units to key employees, which generally vest over a four year period. Included in this grant were 16,165 shares of restricted common stock granted to the non-employee members of the Board of Directors, which vest over the lesser of one year or at the time of the next annual meeting. The vested shares include the impact of 71,342 shares of restricted stock which were cancelled in 2013 due to employees electing to receive fewer shares in lieu of paying withholding taxes. The total fair value of shares that vested during the years ended December 31, 2013, 2012 and 2011 was \$7.9 million, \$5.4 million and \$9.7 million, respectively.

A summary of our stock option plans as of the year ended December 31, 2013 is presented below:

	Shares (000's)	Weighted- Average Exercise Price	Aggregate Intrinsic Value (000's)	Weighted- Average Remaining Contractual Life (in years)
Outstanding as of December 31, 2012	2,322	\$ 28.63		
Granted	539	32.68		
Exercised	(149)	14.74		
Forfeited (including cancelled options)	(114)	35.22		
Outstanding as of December 31, 2013	2,598	\$ 29.98	\$ 14,277	6.5
Options exercisable as of December 31, 2013	1,567	\$ 27.19	\$ 13,208	4.7

The weighted-average grant date fair value of stock options granted for the years ended December 31, 2013, 2012 and 2011 was \$13.47, \$15.56 and \$21.90 per option, respectively. The total intrinsic value of stock options exercised during the years ended December 31, 2013, 2012 and 2011 was \$2.5 million, \$6.8 million and \$22.8 million, respectively.

The following table summarizes information about stock options outstanding as of December 31, 2013:

Range of Exercise Prices	Options Outstanding			Options Exercisable	
	Number Outstanding at December 31, 2013 (000s)	Weighted-Average Remaining Contractual Life (in years)	Weighted- Average Exercise Price	Number Exercisable at December 31, 2013 (000s)	Weighted- Average Exercise Price
\$8.82 - 16.37	432	2.4	\$ 10.98	432	\$ 10.98
17.48 - 26.69	296	2.2	19.85	278	19.55
28.60 - 42.96	1,601	8.2	33.43	674	34.27
44.09 - 51.70	269	7.4	51.02	183	50.96
	2,598	6.5	\$ 29.98	1,567	\$ 27.19

Shares Reserved for Future Issuance

As of December 31, 2013, we have 5,856,268 shares reserved for future issuance upon exercise of stock options and grants of restricted stock.

Preferred Stock

Our Board of Directors has authority under our Certificate of Incorporation to issue shares of preferred stock with voting and economic rights to be determined by the Board of Directors.

Veeco Instruments Inc. and Subsidiaries
Notes to Consolidated Financial Statements (continued)
December 31, 2013

Treasury Stock

On August 24, 2010, our Board of Directors authorized the repurchase of up to \$200 million of our common stock. All funds for this repurchase program were exhausted as of August 19, 2011. Repurchases were made from time to time on the open market in accordance with applicable federal securities laws. During 2011, we purchased 4,160,228 shares for \$162 million (including transaction costs) under the program at an average cost of \$38.96 per share. During 2010, we purchased 1,118,600 shares for \$38 million (including transaction costs) under the program at an average cost of \$34.06 per share. This stock repurchase is included as treasury stock in the Consolidated Balance Sheet as of December 31, 2011. During the year ended December 31, 2012, we cancelled and retired the 5,278,828 shares of treasury stock we purchased under this repurchase program. As a result of this transaction, we recorded a reduction in treasury stock of \$200.2 million and a corresponding reduction of \$200.1 million and \$0.1 million in retained earnings and common stock, respectively.

9. Income Taxes

Our income (loss) from continuing operations before income taxes in the accompanying Consolidated Statements of Operations consists of (*in thousands*):

	Year ended December 31,		
	2013	2012	2011
Domestic	\$ (84,942)	\$ 5,811	\$ 230,204
Foreign	13,732	32,375	41,882
	<u>\$ (71,210)</u>	<u>\$ 38,186</u>	<u>\$ 272,086</u>

Significant components of the provision (benefit) for income taxes from continuing operations are presented below (*in thousands*):

	Year ended December 31,		
	2013	2012	2011
Current:			
Federal	\$ (21,022)	\$ 2,515	\$ 59,921
Foreign	3,921	7,576	10,714
State and local	148	(317)	805
Total current provision (benefit) for income taxes	<u>(16,953)</u>	<u>9,774</u>	<u>71,440</u>
Deferred:			
Federal	(11,589)	(482)	10,454
Foreign	(462)	727	(1,073)
State and local	57	1,638	763
Total deferred provision (benefit) for income taxes	<u>(11,994)</u>	<u>1,883</u>	<u>10,144</u>
Total provision (benefit) for income taxes	<u>\$ (28,947)</u>	<u>\$ 11,657</u>	<u>\$ 81,584</u>

The following is a reconciliation of the income tax provision (benefit) computed using the Federal statutory rate to our actual income tax provision (*in thousands*):

Veeco Instruments Inc. and Subsidiaries
Notes to Consolidated Financial Statements (continued)
December 31, 2013

	Year ended December 31,		
	2013	2012	2011
Income tax provision (benefit) at U.S. statutory rates	\$ (24,923)	\$ 13,366	\$ 95,231
State income tax expense (benefit), net of federal impact	(1,554)	(89)	1,616
Nondeductible expenses	195	622	(749)
Domestic production activities deduction	1,554	(489)	(4,581)
Nondeductible compensation	11	205	841
Research and development tax credit	(3,151)	(3,013)	(4,675)
Net change in valuation allowance	2,420	2,943	121
Change in accrual for unrecognized tax benefits	577	533	824
Foreign tax rate differential	(4,275)	(2,387)	(5,225)
Other	199	(34)	(1,819)
Total provision (benefit) for income taxes	\$ (28,947)	\$ 11,657	\$ 81,584

On January 2, 2013, the American Taxpayer Relief Act of 2012 was signed into law, and this legislation retroactively extended the research and development tax credit for 2 years, from January 1, 2012 through December 31, 2013. Income tax benefit for 2013 includes \$1.9 million for the entire benefit of the research and development tax credit attributable to 2012.

During the fourth quarter of 2012, we determined that we may not meet the criteria required to receive a certain incentive tax rate pursuant to a negotiated tax holiday in one foreign jurisdiction. Although we are continuing to negotiate the criteria for the incentive, for financial reporting purposes we have recorded additional tax provisions of \$0.9 million and \$4.0 million in 2013 and 2012, respectively, totaling \$4.9 million which represents the cumulative effect of calculating the tax provision using the incentive tax rate as compared to the foreign country's statutory rate. If we successfully renegotiate the incentive criteria, this additional tax provision could be reversed as a future benefit in the period in which the successful negotiations are finalized.

Deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes.

On October 1, 2013, we acquired 100% of Synos's total outstanding stock. In connection with the acquisition, we recorded a \$32.4 million deferred tax liability related to the difference between the financial reporting amount and the tax basis of the assets acquired.

During 2012, we recorded a current tax benefit of \$2.1 million related to equity-based compensation which was a credit to additional paid in capital. We did not record any tax benefits related to equity-based compensation during 2013. We will credit \$0.5 million to additional paid-in capital when the research and development credits are realized for financial reporting purposes.

Veeco Instruments Inc. and Subsidiaries
Notes to Consolidated Financial Statements (continued)
December 31, 2013

Significant components of our deferred tax assets and liabilities are as follows (*in thousands*):

	December 31,	
	2013	2012
Deferred tax assets:		
Inventory valuation	\$ 6,983	\$ 6,386
Domestic net operating loss carry forwards	5,585	1,144
Tax credit carry forwards	12,566	4,145
Foreign net operating loss carry forwards	821	—
Warranty and installation accruals	3,002	2,174
Equity compensation	10,638	9,114
Other accruals	2,556	3,270
Other	1,160	760
Total deferred tax assets	43,311	26,993
Valuation allowance	(7,753)	(4,708)
Net deferred tax assets	35,558	22,285
Deferred tax liabilities:		
Purchased intangible assets	45,208	9,973
Undistributed earnings	1,737	1,095
Depreciation	4,711	7,014
Total deferred tax liabilities	51,656	18,082
Net deferred taxes	\$ (16,098)	\$ 4,203

No provision has been made as of December 31, 2013 for United States or additional foreign withholding taxes on approximately \$101.0 million of undistributed earnings of our foreign subsidiaries because it is the present intention of management to permanently reinvest the undistributed earnings of our foreign subsidiaries in China, South Korea, Malaysia, Singapore and Taiwan. As it is our intention to reinvest those earnings permanently, it is not practicable to estimate the amount of tax that might be payable if they were remitted. In the fourth quarter of 2013, we changed our assertion relating to Japan and such earnings will no longer be permanently reinvested based on the future liquidation of our Japanese entity. We have provided deferred income taxes and future withholding taxes on the earnings that we anticipate will be remitted.

As of December 31, 2013, we have credit carry forwards of approximately \$12.6 million for financial reporting purposes, consisting primarily of foreign tax credits, which expire between 2022 and 2023, federal research and development credits which expire between 2031 and 2033, and various state tax credits which expire at various dates through 2028.

Our valuation allowance of approximately \$7.8 million as of December 31, 2013 increased by approximately \$3.0 million during the year then ended. The increase relates primarily to state and local deferred tax assets of \$1.6 million and foreign tax attributes of \$1.4 million for which we could not conclude were realizable on a more-likely-than-not basis.

Veeco Instruments Inc. and Subsidiaries
Notes to Consolidated Financial Statements (continued)
December 31, 2013

A reconciliation of the beginning and ending amount of unrecognized tax benefits is as follows (*in thousands*):

	December 31,	
	2013	2012
Beginning balance as of December 31	\$ 5,818	\$ 4,748
Additions for tax positions related to current year	324	435
Reductions for tax positions related to current year	—	—
Additions for tax positions related to prior years	477	742
Reductions for tax positions related to prior years	(224)	(59)
Reductions due to the lapse of the applicable statute of limitations	—	(48)
Settlements	(167)	—
Ending balance as of December 31	<u>\$ 6,228</u>	<u>\$ 5,818</u>

We do not anticipate that our uncertain tax position will change significantly within the next twelve months subject to the completion of our ongoing federal tax audit and any resultant settlement.

Of the amounts reflected in the table above as of December 31, 2013, the entire amount if recognized would reduce our effective tax rate. It is our policy to recognize interest and penalties related to income tax matters in income tax expense. The total accrual for interest and penalties related to unrecognized tax benefits was approximately \$0.8 million and \$0.5 million as of December 31, 2013 and 2012, respectively.

We or one of our subsidiaries file income tax returns in the United States federal jurisdiction and various state, local and foreign jurisdictions. All material federal income tax matters have been concluded for years through 2006 subject to subsequent utilization of net operating losses generated in such years. Our 2010 federal tax return is currently under examination. All material state and local income tax matters have been reviewed through 2008 with one state jurisdiction currently under examination for open tax years between 2007 and 2011. The majority of our foreign jurisdictions have been reviewed through 2009. Principally all of our foreign jurisdictions remain open with respect to the 2010 through 2013 tax years.

10. Commitments and Contingencies and Other Matters

Restructuring and Other Charges

During 2011 through 2013, in response to challenging business conditions, we initiated activities to reduce and contain spending, including reducing our workforce, consultants and discretionary expenses.

In conjunction with these activities, we recognized restructuring charges of approximately \$1.5 million, \$3.8 million and \$1.3 million during the years ended December 31, 2013, 2012 and 2011, respectively. During the years ended December 31, 2012 and 2011, we also recorded inventory write-offs of \$1.0 million related to a discontinued product line in our Data Storage segment and \$0.8 million related to a discontinued product line in our LED & Solar segment, respectively. These inventory write-offs are included in cost of sales in the accompanying Consolidated Statements of Operations.

Restructuring expense for the years ended December 31, 2013, 2012 and 2011 are as follows (*in thousands*):

	Year ended December 31,		
	2013	2012	2011
Personnel severance and related costs	\$ 1,485	\$ 3,040	\$ 1,288
Equity compensation and related costs	—	414	—
Lease-related and other	—	359	—
	<u>\$ 1,485</u>	<u>\$ 3,813</u>	<u>\$ 1,288</u>

Veeco Instruments Inc. and Subsidiaries
Notes to Consolidated Financial Statements (continued)
December 31, 2013

Personnel Severance and Related Costs

During 2013, we recorded \$1.5 million in personnel severance and related costs resulting from the restructuring of one of our international sales offices and the consolidation of certain sales, business and administrative functions. During 2012, we recorded \$3.0 million in personnel severance and related costs resulting from a headcount reduction of 52 employees. During 2011, we recorded \$1.3 million in personnel severance and related costs related to a companywide reorganization resulting in a headcount reduction of 65 employees. These reductions in workforce included executives, management, administration, sales and service personnel and manufacturing employees' companywide.

Lease-Related and Other

During 2012, we recorded \$0.4 million in other associated costs resulting from a headcount reduction of 52 employees. These charges primarily consist of job placement services, consulting and relocation expenses, as well as duplicate wages incurred during the transition period.

The following is a reconciliation of the liability for the 2013, 2012 and 2011 restructuring charges through December 31, 2013 (*in thousands*):

	<u>LED & Solar</u>	<u>Data Storage</u>	<u>Unallocated</u>	<u>Total</u>
<u>Short-term liability</u>				
Balance as of January 1, 2011	\$ —	\$ 178	\$ 536	\$ 714
Personnel severance and related costs 2011	672	51	311	1,034
Personnel severance and related costs 2012	874	1,684	135	2,693
Personnel severance and related costs 2013	1,017	410	58	1,485
Short-term/long-term reclassification 2011	—	58	—	58
Cash payments 2011	(138)	(159)	(553)	(850)
Cash payments 2012	(960)	(504)	(310)	(1,774)
Cash payments 2013	(1,282)	(1,368)	(177)	(2,827)
Balance as of December 31, 2013	<u>\$ 183</u>	<u>\$ 350</u>	<u>\$ —</u>	<u>\$ 533</u>
<u>Long-term liability</u>				
Balance as of January 1, 2011	\$ —	\$ 58	\$ —	\$ 58
Short-term/long-term reclassification 2011	—	(58)	—	(58)
Balance as of December 31, 2011	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>

Minimum Lease Commitments

Minimum lease commitments as of December 31, 2013 for property and equipment under operating lease agreements (exclusive of renewal options) are payable as follows (*in thousands*):

2014	\$ 3,076
2015	2,091
2016	1,327
2017	1,052
2018	536
	<u>\$ 8,082</u>

Rent amounted to \$2.9 million, \$3.5 million and \$2.7 million in 2013, 2012 and 2011, respectively. In addition, we are obligated under such leases for certain other expenses, including real estate taxes and insurance.

Veeco Instruments Inc. and Subsidiaries
Notes to Consolidated Financial Statements (continued)
December 31, 2013

Environmental Remediation

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 (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 indemnification as part of the sale.

Litigation

Veeco and certain other parties were named as defendants in a lawsuit filed on April 25, 2013 in the Superior Court of California, County of Sonoma. The plaintiff in the lawsuit, Patrick Colbus, seeks unspecified damages and asserts claims that he suffered burns and other injuries while he was cleaning a molecular beam epitaxy system alleged to have been manufactured by Veeco. The lawsuit alleges, among other things, that the molecular beam epitaxy system was defective and that Veeco failed to adequately warn of the potential risks of the system. Veeco believes this lawsuit is without merit and intends to defend vigorously against the claims. Veeco is unable to predict the outcome of this action or to reasonably estimate the possible loss or range of loss, if any, arising from the claims asserted therein. The Company believes that, in the event of any recovery by the plaintiff from Veeco, such recovery would be fully covered by Veeco's insurance.

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.

Concentrations of Credit Risk

Our business depends in large part upon the capital expenditures of our top ten customers, which accounted for 69% and 77% of total accounts receivable as of December 31, 2013 and 2012, respectively. Of such, LED & Solar and Data Storage customers accounted for approximately 30% and 39%, and 56% and 21%, respectively, of total accounts receivable as of December 31, 2013 and 2012.

Customers who accounted for more than 10% of our aggregate accounts receivable or net sales are as follows:

Customer	Segment	Accounts Receivable December 31,		Net Sales for the year ended December 31,		
		2013	2012	2013	2012	2011
Customer A	Data Storage	23%	16%	*	14%	*
Customer B	Data Storage	11%	*	*	*	*
Customer C	LED & Solar	10%	16%	14%	*	*
Customer D	LED & Solar	*	*	*	*	11%
Customer E	LED & Solar	*	*	*	*	12%

* Less than 10% of aggregate accounts receivable or net sales.

Veeco Instruments Inc. and Subsidiaries
Notes to Consolidated Financial Statements (continued)
December 31, 2013

We manufacture and sell our products to companies in different geographic locations. In certain instances, we require deposits for a portion of the sales price in advance of shipment. We perform periodic credit evaluations of our customers' financial condition and, where appropriate, require that letters of credit be provided on certain foreign sales arrangements. Receivables generally are due within 30-90 days, other than receivables generated from customers in Japan where payment terms generally range from 60-150 days. Our net accounts receivable balance is concentrated in the following geographic locations (*in thousands*):

	December 31,	
	2013	2012
China	\$ 4,845	\$ 28,132
Singapore	3,192	7,266
Taiwan	553	6,390
Other	6,162	3,853
Asia Pacific	14,752	45,641
Americas	7,526	13,917
Europe, Middle East and Africa	1,545	3,611
	<u>\$ 23,823</u>	<u>\$ 63,169</u>

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. 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.

Purchase Commitments

As of December 31, 2013, we had purchase commitments totaling \$60.3 million all of which come due within one year. We have \$9.4 million of offsetting supplier deposits against these purchase commitments as of December 31, 2013.

Lines of Credit and Guarantees

As of December 31, 2013, we had letter of credit and bank guarantees issued by a bank on our behalf as needed. We had letters of credit outstanding of \$0.6 million and bank guarantees outstanding of \$5.9 million, of which, \$2.7 million is collateralized against cash that is restricted from use. As of December 31, 2013, we had \$40.4 million of unused lines of credit available. The line of credit is available to draw upon to cover performance bonds as required by our customers.

11. Foreign Operations, Geographic Area and Product Segment Information

Net sales which are attributed to the geographic location in which the customer facility is located and long-lived tangible assets related to operations in the United States and other foreign countries as of and for the years ended December 31, 2013, 2012 and 2011 are as follows (*in thousands*):

Veeco Instruments Inc. and Subsidiaries
Notes to Consolidated Financial Statements (continued)
December 31, 2013

	Net Sales to Unaffiliated			Long-Lived Tangible Assets		
	Customers					
	2013	2012	2011	2013	2012	2011
Americas (1)	\$ 57,609	\$ 83,317	\$ 100,635	\$ 66,002	\$ 74,497	\$ 67,788
Europe, Middle East and Africa (1)	21,941	41,708	57,617	95	36	203
Asia Pacific (1)	252,199	390,995	820,883	23,042	23,769	20,417
	<u>\$ 331,749</u>	<u>\$ 516,020</u>	<u>\$ 979,135</u>	<u>\$ 89,139</u>	<u>\$ 98,302</u>	<u>\$ 88,408</u>

(1) For the year ended December 31, 2013, net sales to customers in China were 44.8% of total net sales. For the year ended December 31, 2012, net sales to customers in China and Taiwan were 42.0% and 11.4% of total net sales, respectively. For the year ended December 31, 2011, net sales to customers in China were 66.4% of total net sales. No other country in Europe, Middle East, and Africa (“EMEA”) and Asia Pacific (“APAC”) accounted for more than 10% of our net sales for the years presented. A minimal amount, less than 1%, of sales included within the Americas caption above have been derived from other regions outside of the United States.

We have five identified reporting units that we aggregate into two reportable segments: the VIBE and Mechanical reporting units which are reported in our Data Storage segment; and the MOCVD, MBE and ALD reporting units are reported in our LED & Solar segment. We manage the business, review operating results and assess performance, as well as allocate resources, based upon our reporting units that reflect the market focus of each business. The LED & Solar segment consists of metal organic chemical vapor deposition (“MOCVD”) systems, molecular beam epitaxy (“MBE”) systems, thermal deposition sources and other types of deposition systems as well as newly acquired atomic layer deposition (“ALD”) technology. These systems are primarily sold to customers in the LED, OLED and solar industries, as well as to scientific research customers. This segment has product development and marketing sites in Somerset, New Jersey, Poughkeepsie, New York, St. Paul, Minnesota, Fremont, California, and Korea. During 2011 we discontinued our CIGS solar systems business, located in Tewksbury, Massachusetts and Clifton Park, New York. The Data Storage segment consists of the ion beam etch, ion beam deposition, diamond-like carbon, physical vapor deposition, and dicing and slicing products sold primarily to customers in the data storage industry. This segment has product development and marketing sites in Plainview, New York, Ft. Collins, Colorado and Camarillo, California.

We evaluate the performance of our reportable segments based on income (loss) from operations before interest, income taxes, amortization and certain items (“segment profit (loss)”), which is the primary indicator used to plan and forecast future periods. The presentation of this financial measure facilitates meaningful comparison with prior periods, as management believes segment profit (loss) reports baseline performance and thus provides useful information. Certain items include restructuring expenses, asset impairment charges, inventory write-offs, equity-based compensation expense and other non-recurring items. The accounting policies of the reportable segments are the same as those described in the summary of critical accounting policies.

The following tables present certain data pertaining to our reportable product segments and a reconciliation of segment profit (loss) to income (loss) from continuing operations, before income taxes for the years ended December 31, 2013, 2012 and 2011, and goodwill and total assets as of December 31, 2013 and 2012 (in thousands):

Veeco Instruments Inc. and Subsidiaries
Notes to Consolidated Financial Statements (continued)
December 31, 2013

	LED & Solar	Data Storage	Unallocated	Total
Year ended December 31, 2013				
Net sales	\$ 249,742	\$ 82,007	\$ —	\$ 331,749
Segment loss	\$ (26,362)	\$ (671)	\$ (22,588)	\$ (49,621)
Interest income (expense), net	—	—	602	602
Amortization	(4,233)	(1,294)	—	(5,527)
Equity-based compensation	(5,126)	(1,703)	(6,301)	(13,130)
Restructuring	(1,017)	(410)	(58)	(1,485)
Asset impairment charge	(1,174)	(46)	—	(1,220)
Changes in contingent consideration	(829)	—	—	(829)
Income (loss) from continuing operations before income taxes	<u>\$ (38,741)</u>	<u>\$ (4,124)</u>	<u>\$ (28,345)</u>	<u>\$ (71,210)</u>
Year ended December 31, 2012				
Net sales	\$ 363,181	\$ 152,839	\$ —	\$ 516,020
Segment profit (loss)	\$ 41,603	\$ 25,414	\$ (4,919)	\$ 62,098
Interest income (expense), net	—	—	974	974
Amortization	(3,586)	(1,322)	—	(4,908)
Equity-based compensation	(5,400)	(1,920)	(6,534)	(13,854)
Restructuring	(1,233)	(2,521)	(59)	(3,813)
Asset impairment charge	—	(1,335)	—	(1,335)
Other	—	(976)	—	(976)
Income (loss) from continuing operations before income taxes	<u>\$ 31,384</u>	<u>\$ 17,340</u>	<u>\$ (10,538)</u>	<u>\$ 38,186</u>
Year ended December 31, 2011				
Net sales	\$ 827,797	\$ 151,338	\$ —	\$ 979,135
Segment profit (loss)	\$ 267,059	\$ 38,358	\$ (8,987)	\$ 296,430
Interest income (expense), net	—	—	(824)	(824)
Amortization	(3,227)	(1,424)	(83)	(4,734)
Equity-based compensation	(3,473)	(1,458)	(7,876)	(12,807)
Restructuring	(204)	(12)	(1,072)	(1,288)
Asset impairment charge	(584)	—	—	(584)
Other	(758)	—	—	(758)
Loss on extinguishment of debt	—	—	(3,349)	(3,349)
Income (loss) from continuing operations before income taxes	<u>\$ 258,813</u>	<u>\$ 35,464</u>	<u>\$ (22,191)</u>	<u>\$ 272,086</u>

Unallocated assets are comprised principally of cash and cash equivalents and short-term investments as of December 31, 2013 and 2012.

Veeco Instruments Inc. and Subsidiaries
Notes to Consolidated Financial Statements (continued)
December 31, 2013

	LED & Solar	Data Storage	Unallocated	Total
As of December 31, 2013				
Goodwill	\$ 91,348	\$ —	\$ —	\$ 91,348
Total assets	\$ 359,464	\$ 37,910	\$ 550,595	\$ 947,969
As of December 31, 2012				
Goodwill	\$ 55,828	\$ —	\$ —	\$ 55,828
Total assets	\$ 276,352	\$ 38,664	\$ 622,288	\$ 937,304

Other Segment Data (*in thousands*):

	Year ended December 31,		
	2013	2012	2011
Depreciation and amortization expense:			
LED & Solar	\$ 14,365	\$ 12,020	\$ 8,320
Data Storage	2,907	3,008	3,245
Unallocated	1,153	1,164	1,327
Total depreciation and amortization expense	<u>\$ 18,425</u>	<u>\$ 16,192</u>	<u>\$ 12,892</u>
Expenditures for long-lived assets:			
LED & Solar	\$ 6,796	\$ 20,279	\$ 56,141
Data Storage	1,271	3,341	2,703
Unallocated	1,108	1,374	1,520
Total expenditures for long-lived assets	<u>\$ 9,175</u>	<u>\$ 24,994</u>	<u>\$ 60,364</u>

12. Derivative Financial Instruments

We use derivative financial instruments to minimize the impact of foreign exchange rate changes on earnings and cash flows. In the normal course of business, our operations are exposed to fluctuations in foreign exchange rates. In order to reduce the effect of fluctuating foreign currencies on short-term foreign currency-denominated intercompany transactions and other known foreign currency exposures, we enter into monthly forward contracts. We do not use derivative financial instruments for trading or speculative purposes. Our forward contracts are not expected to subject us to material risks due to exchange rate movements because gains and losses on these contracts are intended to offset exchange gains and losses on the underlying assets and liabilities. The forward contracts are marked-to-market through earnings. We conduct our derivative transactions with highly rated financial institutions in an effort to mitigate any material counterparty risk.

As of December 31, 2013				
(in thousands)	Component of	Fair Value	Maturity Dates	Notional Amount
<u>Not Designated as Hedges under ASC 815</u>				
Foreign currency exchange forwards	Prepaid and other current assets	1	January 2014	4,700
Foreign currency collar	Prepaid and other current assets	906	October 2014	34,069
Total Derivative Instruments		<u>\$ 907</u>		<u>\$ 38,769</u>
As of December 31, 2012				
(in thousands)	Component of	Fair Value	Maturity Dates	Notional Amount
<u>Not Designated as Hedges under ASC 815</u>				
Foreign currency exchange forwards	Prepaid and other current assets	248	January 2013	9,590
Total Derivative Instruments		<u>\$ 248</u>		<u>\$ 9,590</u>

Veeco Instruments Inc. and Subsidiaries
Notes to Consolidated Financial Statements (continued)
December 31, 2013

(in thousands)	Location of realized net gain (loss) and changes in the fair value of derivatives	Amount of realized net gain (loss) and changes in the fair value of derivatives for the year ended December 31,		
		2013	2012	2011
Foreign currency exchange forwards	Other, net	\$ 248	\$ 333	\$ 553
Foreign currency collar	Other, net	\$ 906	\$ —	\$ —

These contracts were valued using market quotes in the secondary market for similar instruments (fair value Level 2, please see our footnote *Fair Value Measurements*).

The weighted average notional amount of derivative contracts outstanding during the year ended December 31, 2013 and 2012 was approximately \$5.2 million and \$3.5 million, respectively

13. Retirement Plans

We maintain a defined contribution benefit plan under Section 401(k) of the Internal Revenue Code. Almost all of our domestic full-time employees are eligible to participate in this plan. Under the plan during 2011, we provided matching contributions of fifty cents for every dollar employees contribute up to a maximum of \$3,000. During 2012, we provided matching contributions of fifty cents for every dollar employees contribute, up to the lesser of 3% of the employee's eligible compensation or \$7,500. During 2013, we provided a matching contributions of fifty cents for every dollar employees contribute, up to the lesser of 3% of the employee's eligible compensation or \$7,650. Generally, the plan calls for vesting of Company contributions over the initial five years of a participant's employment. We maintain a similar type of contribution plan at one of our foreign subsidiaries. Our contributions to these plans in 2013, 2012 and 2011 were \$2.3 million, \$2.5 million and \$2.1 million, respectively.

We acquired a defined benefit plan on May 5, 2000 that had been frozen as of September 30, 1991. No further benefits since September 30, 1991 accrued to any participant. The benefit that participants are entitled to receive as of their normal retirement date is their accrued benefit as of September 30, 1991. In connection with the freezing of the Plan as of September 30, 1991, all participants became fully vested in their benefit. The Plan is subject to the provisions of the Employee Retirement Income Security Act of 1974 ("ERISA"). This plan has a plan year end of September 30. There are 110 participants in the plan as of September 30, 2013. The plan is funded in accordance with ERISA guidelines and has \$1.6 million in contract assets as of September 30, 2013.

14. Selected Quarterly Financial Information (unaudited)

The following table presents selected unaudited financial data for each fiscal quarter of 2013 and 2012. 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.

Veeco Instruments Inc. and Subsidiaries
Notes to Consolidated Financial Statements (continued)
December 31, 2013

(in thousands, except per share data)	Fiscal 2013 (unaudited)				Fiscal 2012 (unaudited)			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Net sales	\$ 61,781	\$ 97,435	\$ 99,324	\$ 73,209	\$ 139,909	\$ 136,547	\$ 132,715	\$ 106,849
Gross profit	22,552	34,640	30,308	15,642	65,268	61,254	49,884	38,727
Income (loss) from continuing operations, net of income taxes	(10,071)	(4,081)	(6,026)	(22,085)	16,462	11,011	7,698	(8,642)
Income (loss) from discontinued operations, net of income taxes	—	—	—	—	(50)	807	4,055	(413)
Net income (loss)	<u>\$ (10,071)</u>	<u>\$ (4,081)</u>	<u>\$ (6,026)</u>	<u>\$ (22,085)</u>	<u>\$ 16,412</u>	<u>\$ 11,818</u>	<u>\$ 11,753</u>	<u>\$ (9,055)</u>
Income (loss) per common share:								
Basic:								
Continuing operations	\$ (0.26)	\$ (0.11)	\$ (0.16)	\$ (0.57)	\$ 0.43	\$ 0.29	\$ 0.20	\$ (0.22)
Discontinued operations	—	—	—	—	—	0.02	0.10	(0.01)
Income (loss)	<u>\$ (0.26)</u>	<u>\$ (0.11)</u>	<u>\$ (0.16)</u>	<u>\$ (0.57)</u>	<u>\$ 0.43</u>	<u>\$ 0.31</u>	<u>\$ 0.30</u>	<u>\$ (0.23)</u>
Diluted :								
Continuing operations	\$ (0.26)	\$ (0.11)	\$ (0.16)	\$ (0.57)	\$ 0.42	\$ 0.28	\$ 0.20	\$ (0.22)
Discontinued operations	—	—	—	—	—	0.02	0.10	(0.01)
Income (loss)	<u>\$ (0.26)</u>	<u>\$ (0.11)</u>	<u>\$ (0.16)</u>	<u>\$ (0.57)</u>	<u>\$ 0.42</u>	<u>\$ 0.30</u>	<u>\$ 0.30</u>	<u>\$ (0.23)</u>
Weighted average shares outstanding:								
Basic	38,716	38,764	38,841	38,904	38,261	38,370	38,577	38,698
Diluted	38,716	38,764	38,841	38,904	38,863	38,988	39,169	38,698

A variety of factors influence the level of our net sales in a particular quarter including economic conditions in the 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, interpretation and application of accounting principles, 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 with a selling price of up to \$8.0 million. 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.

Synos Acquisition

On October 1, 2013 (“the Acquisition Date”), Veeco acquired 100% of the outstanding common shares and voting interest of Synos. The results of Synos’ operations have been included in the consolidated financial statements since that date. Synos is an early stage manufacturer of fast array scanning atomic layer deposition (“FAST-ALD”) tools for OLED and other applications. As a result of the acquisition, the Company has entered the FAST-ALD market which is complimentary to the Company’s MOCVD LED offerings.

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 sale 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,

Veeco Instruments Inc. and Subsidiaries
Notes to Consolidated Financial Statements (continued)
December 31, 2013

\$22.9 million of proceeds was held in escrow and was restricted from use for one year following 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 banking 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. We recognized into income the pre-tax deferred gain of \$5.4 million during the third quarter of 2012 related to the completion of the sale of the assets in China to Bruker.

Other Quarterly Items

During the fourth quarter of 2013, we recorded asset impairment charges in LED & Solar of \$0.9 million related to certain tools previously used in our laboratories carried in property, plant and equipment which we are holding for sale and \$0.3 million related to another asset carried in other assets. During the fourth quarter of 2012, we recorded an asset impairment charge of \$1.3 million related to a particular asset in our Data Storage segment.

During 2012, we took measures to improve profitability, including a reduction in discretionary expenses, realignment of our senior management team and consolidation of certain sales, business and administrative functions. As a result of these actions, we recorded a \$3.8 million restructuring charge consisting of \$3.0 million in personnel severance and related costs, \$0.4 million in equity compensation and related costs and \$0.4 million in other severance costs resulting from a headcount reduction of 52 employees. We recorded \$2.0 million of these charges in the third quarter of 2012 and \$1.8 million of these charges in the fourth quarter of 2012 with the balance recorded in the first quarter of 2012.

As a result of the delay in filing our Form 10-Q for September 30, 2012 ("Q3 10-Q"), we were required to evaluate the impact of events and circumstances occurring through the date of the filing of the Q3 10-Q. After considering declines in systems shipments and parts usage occurring through the date of the filing of the Q3 10-Q, we determined that an increase in our reserve for slow moving and obsolete inventory was warranted and resulted in us recording a total charge of \$7.2 million to cost of sales in the third quarter of 2012. The evaluation resulted in relatively lower provisions for inventory reserves over the first three quarters of 2013. We recorded a \$1.8 million charge to cost of sales for inventory write downs in the fourth quarter of 2012 that related to a terminated program. The effect on the comparative statements above was to reduce gross profit for September 30, 2012 compared to all other periods presented.

Out of Period Adjustment

We identified net cumulative errors which overstated cumulative net income from continuing operations through December 31, 2011 by \$0.6 million and net cumulative errors that understated net income from continuing operations in the six month period ended June 30, 2012 by \$1.1 million. As a result, in the third quarter of 2012, we recorded adjustments to correct all prior periods resulting in an increase in income from continuing operations of \$0.5 million.

Schedule II—Valuation and Qualifying Accounts (in thousands)

COL. A	COL. B	COL. C		COL. D	COL. E
Description	Balance at Beginning of Period	Additions		Deductions	Balance at End of Period
		Charged to Costs and Expenses	Charged to Other Accounts		
Deducted from asset accounts:					
Year ended December 31, 2013					
Allowance for doubtful accounts	\$ 492	\$ 1,946	\$ —	\$ —	\$ 2,438
Valuation allowance in net deferred tax assets	4,708	2,420	625	—	7,753
	<u>\$ 5,200</u>	<u>\$ 4,366</u>	<u>\$ 625</u>	<u>\$ —</u>	<u>\$ 10,191</u>
Year ended December 31, 2012					
Allowance for doubtful accounts	\$ 468	\$ 198	\$ —	\$ (174)	\$ 492
Valuation allowance in net deferred tax assets	1,765	2,943	—	—	4,708
	<u>\$ 2,233</u>	<u>\$ 3,141</u>	<u>\$ —</u>	<u>\$ (174)</u>	<u>\$ 5,200</u>
Year ended December 31, 2011					
Allowance for doubtful accounts	\$ 512	\$ —	\$ —	\$ (44)	\$ 468
Valuation allowance in net deferred tax assets	1,644	—	—	121	1,765
	<u>\$ 2,156</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 77</u>	<u>\$ 2,233</u>