

VEECO INSTRUMENTS INC
Form 10-K
February 24, 2011

**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, 2010

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

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

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

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

Indicate by check mark whether the Registrant is a large accelerated filer, an accelerated filer, 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 27, 2010 as reported on The Nasdaq National Market, was \$1,566,934,944. Shares of common stock held by each officer and director and by each person who owns 10% or more of the outstanding common stock have been excluded from this computation in that such persons may be deemed to be affiliates. This determination of affiliate status is not necessarily a conclusive determination for other purposes.

At February 22, 2011, the Registrant had 40,616,024 outstanding shares of common stock.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Registrant's Proxy Statement for the Annual Meeting of Stockholders to be held on May 19, 2011 are incorporated by reference into Part III of this Annual Report on Form 10-K.

SAFE HARBOR STATEMENT

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

Our 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 realize the benefits of the increased MOCVD order volume;

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

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

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

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

Negative worldwide economic conditions could result in a decrease in our net sales and an increase in our operating costs, which could adversely affect our business and operating results;

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 are exposed to risks associated with our entrance into the emerging solar industry;

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;

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

The cyclical nature of the industries we serve directly affects our business;

Our sales cycle is long and unpredictable;

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

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

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We are subject to foreign currency exchange risks;

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

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

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

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

We may not receive the escrowed proceeds from the sale of our Metrology business;

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

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

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

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

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

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

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

Item 1. Business

The Company

Veeco Instruments Inc. (together with its consolidated subsidiaries, "Veeco," the "Company" or "we") designs, manufactures and markets equipment to make light emitting diodes ("LEDs"), solar panels, hard-disk drives and other devices. We have leading technology positions in our two segments: Light Emitting Diode ("LED") & Solar and Data Storage.

In our LED & Solar segment, we design and manufacture metal organic chemical vapor deposition ("MOCVD") systems, molecular beam epitaxy ("MBE") systems, Copper, Indium, Gallium, Selenide ("CIGS") deposition systems and thermal deposition sources that we sell to manufacturers of high brightness LEDs ("HB LED") and solar panels, as well as to research customers.

In our Data Storage segment, we design and manufacture ion beam etch, ion beam deposition, diamond-like carbon, physical vapor deposition, chemical vapor deposition, and dicing and slicing systems that are primarily used to create thin film magnetic heads ("TFMHs") that read and write data on hard disk drives.

We support our customers through product development, manufacturing, and sales and service sites in the U.S., Korea, Taiwan, China, Singapore, Japan, Europe and other locations.

Veeco Instruments was organized as a Delaware corporation in 1989.

Our Strategy

Our strategy for growth and improved profitability focuses on the following key activities:

Focusing our efforts on those technologies in which we have a leading market share, providing differentiated technology solutions to address customers' next generation product development roadmaps;

Leveraging our research and development spending into end markets that we believe offer high-growth opportunities, such as our LED & Solar segment;

Improving our operational efficiency through better supply chain management, best cost manufacturing and other activities to lower costs and increase profitability, and;

Developing strategic relationships with worldwide technology leaders and offering these customers high-quality, differentiated products that support their cost of ownership requirements as well as service and applications support in order to improve their time-to-market on leading edge devices.

Business Overview and Industry Trends

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

Following the global recession, Veeco experienced a rapid improvement in business conditions in late 2009 and continuing into 2010. The combination of an improvement in capital spending by our global customers as well as our focus on high-growth end markets, particularly HB LED, and successful new product introduction enabled the Company to benefit from accelerated growth in 2010.

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

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LED & Solar Business Overview and Trends: We are a leading supplier of solutions used to create HB LEDs and solar cells. MOCVD and MBE technologies are used to grow compound semiconductor materials (such as GaAs (gallium arsenide), GaN (gallium nitride), As/P (arsenic phosphide) and InP (indium phosphide)) at the atomic scale. Epitaxy is the critical first step in compound semiconductor wafer fabrication and is considered to be the highest value added process, ultimately determining device functionality and performance.

We believe that the HB LED market, while cyclical, represents a high-growth opportunity for us due to the expanding applications for HB LEDs, such as backlighting for large screen flat panel TVs (LCD liquid crystal displays), laptop computers, automotive applications, and general illumination. In 2009 and 2010 the LED industry experienced significant growth as LEDs penetrated laptop and television backlighting applications. Strategies Unlimited, an LED industry research organization, forecasted in its June 2010 report that growth in these applications will continue, resulting in a compound annual growth rate ("CAGR") exceeding 80% from 2009 through 2014. LEDs are also starting to experience increased adoption for general lighting, with Strategies Unlimited forecasting a CAGR of 45.4% during that same time period. Overall, the market for HB LEDs is expected to grow from \$5.4 billion in 2009 to \$19.6 billion in 2014, for a CAGR of 29.5%.

In order to gain market share and capitalize on this growth opportunity, we have accelerated our R&D investments to introduce several generations of MOCVD tools, most recently our TurboDisc® K-Series and MaxBright MOCVD systems. By introducing new systems, we are focused on delivering better uniformity and repeatability, which helps our customers to make HB LEDs of consistent quality, ultimately with the goal to deliver more, high quality LEDs at a lower manufacturing cost. We intend to continue to invest heavily in research and development in order to deliver more advanced MOCVD solutions to our customers. A related application for us is in the solar market, since the same MOCVD tool that is critical to the LED manufacturing process can also be used to manufacture high-efficiency triple junction solar cells. The Company currently sells a small number of MOCVD systems each year for this concentrator solar (CPV) application and is also beginning to sell tools to an emerging growth market for power devices.

Veeco has also identified the thin film solar cell market as offering significant growth opportunities. The global energy dilemma has triggered a significant amount of new research and spending in solar technologies as an alternative energy solution, since it is non-polluting and has the potential to supply the world with high energy efficiency at low cost. While many of today's solar panels are based upon silicon technologies, thin film CIGS solar cells offer the potential for lower manufacturing costs, and have the highest efficiency of the thin film technologies. According to an October 2010 report released by Greentech Media Research ("GTM"), CIGS module manufacturing costs are projected to be lower than those associated with silicon wafer-based modules. CIGS solar panels have broad-based end market applications for solar farms, commercial and residential rooftops, building integrated and building applied PV (BIPV/BAPV) and portable devices.

Since PV manufacturers often build their own equipment, there is a market opportunity emerging for equipment suppliers such as Veeco. In its October 2010 report, GTM forecasted that CIGS global module capacity will have a CAGR of 49% from 2010 to 2013 with capacity reaching 3.4GW in 2013. We plan to expand our deposition product line to create "best of breed" deposition systems that can deposit materials on flexible (stainless steel) or rigid (glass) substrates. Today Veeco supplies thermal evaporation components to over 50% of CIGS companies worldwide and has begun to penetrate CIGS customers with our deposition system solutions. We are shipping our FastFlex Web Coating Systems for the front and back contact and absorber layer CIGS deposition. These new systems are capable of processing up to 1m web widths that will enable PV manufacturers to continue lowering their cost of ownership. We intend to increase our research and development spending in CIGS technology for both the rigid and flexible substrate market since we believe it offers a significant growth opportunity over the next several years.

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Data Storage Business Overview and Trends: Worldwide storage demand continues to increase, driven by proliferation of laptop and netbook PC's, intelligent internet storage, e-mail, external storage devices, and new consumer applications (e.g. digital video recorders) now reaching higher volume. While much has been written about the competition hard disk drives ("HDDs") face from flash memory, we believe that HDDs will continue to provide the best value for mass storage and will remain at the forefront of large capacity storage applications. In fact, the use of disk drives in many types of consumer applications has resulted in growth in the number of hard drive units shipped, which is expected to continue. According to data storage research firm TrendFocus' February 2011 report, consumer electronic applications of HDDs are forecasted to grow at a CAGR of 9.4% from 2010 to 2015.

While technology change continues in data storage, the industry has gone through a period of maturation, including vertical integration and consolidation. Veeco is focused on remaining a valued equipment supplier to the data storage industry and is well-aligned to the industry's technology requirements and demand for lower cost of ownership tools. Veeco has restructured and refocused its Data Storage business around core technologies where we have a leadership position and utilize a flexible manufacturing strategy. A recovery in capital spending by our key Data Storage customers, combined with the successful introduction of several new deposition tools to advance areal density technologies, enabled Veeco to report a strong growth year in 2010. Going forward, Veeco's product development team has begun to identify non-hard drive market applications (such as LED) for our key Data Storage technologies.

Our Products

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

	Year ended December 31,		
	2010	2009	2008
	(Dollars in millions)		
LED & Solar	\$ 797.9	\$ 205.2	\$ 165.8
% of net sales	85.5%	72.7%	52.7%
Data Storage	\$ 135.3	\$ 77.2	\$ 149.1
% of net sales	14.5%	27.3%	47.3%
Total net sales	\$ 933.2	\$ 282.4	\$ 314.9

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

LED & Solar

Metal Organic Chemical Vapor Deposition Systems: We are one of the world's leading suppliers of MOCVD technology. MOCVD production systems are used to make GaN-based devices (green and blue HB LEDs) and As/P-based devices (red, orange, and yellow HB LEDs), which are used today in television and laptop backlighting, general illumination, large area signage, specialty illumination and many other applications. Our As/P MOCVD Systems also are used to make high-efficiency concentrator solar cells.

Molecular Beam Epitaxy Systems: MBE is the process of precisely depositing epitaxially aligned atomically thin crystal layers, or epilayers, of elemental materials onto a substrate in an ultra-high vacuum environment. For many compound semiconductors, MBE is the critical first step of the fabrication process, ultimately determining device functionality and performance. We provide a broad

array of MBE components and systems for research and production applications and thermal evaporation sources for the CIGS solar industry.

Web and Glass Coaters for Thin Film Solar Cells: We are a manufacturer of web deposition equipment used to make CIGS solar cells. We have expanded our product line to include "best of breed" solutions that perform the critical CIGS deposition steps on flexible and rigid (glass) substrates. We believe that our FastFlex and FastLine systems offer high throughput and excellent performance for thin film solar cell production, contributing to a lower cost of ownership for our customers.

Data Storage

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

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, introduced to the market in 2008, deposit conformal films for advanced TFMH applications.

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

Service and Sales

We sell our products and services worldwide through various strategically located sales and service facilities in the U.S., Europe and Asia Pacific, and we believe that our customer service organization is a significant factor in our success. We provide service and support on a warranty, service contract or an individual service-call basis. We offer enhanced warranty coverage and services, including preventative maintenance plans, on-call and on-site service plans and other comprehensive service arrangements, product and application training, consultation services, and a 24-hour hotline service for certain products. We believe that offering timely support creates stronger relationships with customers and provides us with a significant competitive advantage. Revenues from the sale of parts, service and support represented approximately 7%, 16% and 21% of our net sales for the years ended December 31, 2010, 2009 and 2008, respectively. Parts sales represented approximately 5%, 9% and 14% of our net sales for those years, respectively, and service and support sales were 2%, 7% and 7%, respectively.

Customers

We sell our products to many of the world's major HB LED, solar and hard drive manufacturers as well as to customers in other industries, research centers, and universities. We rely on certain principal customers for a significant portion of our sales. Sales to LG Innotek Co. Ltd. and Seoul OptoDevice Co. Ltd. each accounted for more than 10% of Veeco's total net sales in 2010, LG Innotek Co. Ltd. and Seagate Technology, Inc. each accounted more than 10% of Veeco's total net sales in 2009 and sales to Seagate Technology, Inc. accounted for 10% or more of Veeco's total net sales in 2008. 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

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

Our research and development expenses were approximately \$71.4 million, \$43.5 million and \$39.6 million, or approximately 8%, 15% and 13% of net sales for the years ended December 31, 2010, 2009 and 2008, respectively. These expenses consisted primarily of salaries, project material 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, solar deposition systems and ion sources. We primarily rely on several suppliers for the manufacturing of these systems. We plan to maintain internal manufacturing capability for these systems at least until such time as we have qualified one or more alternate suppliers to perform this manufacturing. 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.

Product Development, Marketing and Operations

Our principal activities, which consist of product development, integration, test operations and assembly, are organized by product and take place at our facilities in Plainview and Clifton Park, New York; Camarillo, California; Ft. Collins, Colorado; Somerset, New Jersey; St. Paul, Minnesota; and Lowell, Massachusetts.

Our sales, marketing, manufacturing and research and development functions are organized by product families. We believe that this organizational structure allows each product family manager to more closely monitor the products for which he is responsible, resulting in more efficient sales, marketing, manufacturing and research and development. We emphasize customer responsiveness, customer service, high-quality products and an interactive management style. By implementing these

management philosophies, we believe that we have increased our competitiveness and are well-positioned for future growth.

Backlog

Our backlog increased to \$555.0 million as of December 31, 2010 from \$377.3 million as of December 31, 2009. During the year ended December 31, 2010, we experienced net backlog adjustments of approximately \$10.7 million, consisting of \$12.5 million for order adjustments (\$10.2 million is related to our Solar and MBE businesses) offset by \$1.8 million of adjustments related to foreign currency translation.

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

Competition

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

We compete with manufacturers such as Aixtron, Anelva, Applied Materials, Centrotherm, Nippon Sanso, Oerlikon 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, 2010, we had 900 employees, of which there were 192 in manufacturing and testing, 109 in sales and marketing, 153 in service, 33 in product support, 274 in engineering, research and development and 139 in information technology, general administration and finance. In addition,

we also had 123 temporary employees, which support our variable cost strategy. The success of our future operations depends in large part on our ability to recruit and retain engineers, technicians and other highly-skilled professionals who are in considerable demand. We feel that we have adequate programs in place to attract, motivate and retain our employees. We plan to monitor industry practices to make sure that our compensation and employee benefits remain competitive. However, there can be no assurance that we will be successful in recruiting or retaining key personnel. We believe that our relations with our employees are good.

Available Information

We file annual, quarterly and current reports, information statements and other information with the Securities and Exchange Commission (the "SEC"). The public may obtain information by calling the SEC at 1-800-SEC-0330. The SEC also maintains an Internet site that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC. The address of that site is www.sec.gov.

Internet Address

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

Item 1A. Risk Factors

Risk Factors That May Impact Future Results

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

Our 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 realize the benefits of the increased MOCVD order volume.

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, solar deposition systems and ion sources. In addition, to supplement our current staffing and our planned hiring to meet the increased MOCVD order volume, we rely heavily on our outsourcing partners and utilize technical staffing firms and contractors to assist with certain aspects of MOCVD system installation at customer sites. In order to meet the substantial increase in MOCVD system orders, we are relying heavily on our outsourcing partners. Dependence on contract manufacturing and outsourcing may adversely affect our ability to satisfy the recent strong demand for our MOCVD equipment and to bring other new products to market. If our outsourcing partners do not perform successfully, our results of operations may be adversely affected and we could suffer damage to our reputation. Although we attempt to select reputable providers, it is possible that one or more of these providers could fail to perform as we expect. In addition, the expanded role of third party providers has required and will continue to require us to implement changes to our existing operations and adopt new procedures and processes for retaining and managing these providers 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 the increase in MOCVD order volume or gross margin or 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 reduction or elimination of foreign government subsidies and economic incentives may adversely affect the future order rate for our MOCVD equipment.

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 are expected to decline over time and may end or be reduced at some point in the future. The reduction or elimination of these incentives may result in a 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 are using the 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, and other related issues pertaining to customer readiness, could adversely impact the timing of our revenue recognition and have other negative effects on our financial condition and operating results.

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

Our business depends on our ability to 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. 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, 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, our need to rapidly increase our business and manufacturing capacity to meet unanticipated increases in demand 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. Moreover, 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. The volatility of demand for capital equipment increases capital, technical and other risks for companies in the supply chain. Any or all of these factors could materially and adversely affect our business, financial condition and results of operations.

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, solar deposition systems and ion sources. We primarily rely on several suppliers for the manufacturing of these systems. We plan to maintain internal manufacturing capability for these systems at least until such time as we have qualified one or more alternate suppliers to perform this manufacturing. 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 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, generally with limited or no penalties. Often, we have incurred expenses prior to such cancellation without adequate monetary compensation. During the year ended December 31, 2010, we experienced net backlog adjustments of approximately \$10.7 million, consisting of \$12.5 million for order adjustments (\$10.2 million is related to our Solar and MBE businesses), offset by \$1.8 million of adjustments related to foreign currency translation. With our current high backlog, a downturn in one or more of our served markets could result in a significant increase in cancellations and/or rescheduling.

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

The demand for HB LEDs and hard disk drives is highly dependent on sales of consumer electronics, such as flat-panel televisions and computer monitors, computers, digital video recorders, camcorders, MP3/4 players and cell phones. Our sales to HB LED manufacturers are also highly dependent on end market adoption of LED technology into general illumination applications, including

residential, commercial and street lighting markets. Manufacturers of HB LEDs and hard disk drives are among our largest customers and have accounted for a substantial portion of our revenues for the past several years. Factors that could influence the levels of spending on consumer electronic products include consumer confidence, access to credit, volatility in fuel and other energy costs, conditions in the residential real estate and mortgage markets, labor and healthcare costs and other macroeconomic factors affecting consumer spending behavior. These and other economic factors could 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, if manufacturers of HB LEDs have overestimated their potential market share growth, we may experience cancellations of orders in backlog, postponement of customer deliveries, obsolete inventory and/or liabilities to our suppliers for products no longer needed.

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

Negative worldwide economic conditions could result in a decrease in our net sales and an increase in our operating costs, which could adversely affect our business and operating results.

As a global company with worldwide operations, we are subject to volatility and adverse consequences associated with worldwide economic downturns. 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. Our results of operations would be further adversely affected if we were to experience lower than anticipated order levels, cancellations of orders in backlog, postponement of customer deliveries, or pricing pressure as a result of a prolonged slowdown.

In addition, negative worldwide economic conditions and market instability make it increasingly difficult for us, our customers and our suppliers to accurately forecast future product demand, which could result in obsolete inventory and/or liabilities to our suppliers for products no longer needed.

Furthermore, 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.

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

Approximately 90% of our 2010 net sales, 79% of our 2009 net sales and 58% of our 2008 net sales were generated from sales outside of the United States. We expect sales from non-U.S. markets to continue to represent a significant, and possibly increasing, portion of our sales in the future. Our

non-U.S. sales and operations are subject to risks inherent in conducting business abroad, many of which are outside our control, including:

difficulties in managing a global enterprise, including staffing, managing distributors and representatives, and repatriation of earnings,

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

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

longer sales cycles and difficulty in collecting accounts receivable,

multiple, conflicting, and changing governmental laws and regulations, including import/export controls and other trade barriers,

the need to provide sufficient levels of technical support in different locations, and

different customs and ways of doing business.

Many of these challenges are present in China, which accounted for approximately 30% of our total 2010 revenues. These conditions in China and other foreign economies may continue and recur again in the future, which could have a material adverse effect on our business. In addition, political instability, terrorism, acts of war or epidemics in regions where we operate may adversely affect or disrupt our business and results of operations.

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

We are exposed to risks associated with our entrance into the emerging solar industry.

An increasing strategic focus for Veeco is to supply equipment to the solar industry. In addition to the other risk factors described herein, the solar industry is characterized by other specific risks, including:

changes in demand for solar photovoltaic ("PV") products arising from, among other things, the cost and performance of solar PV technology compared to other energy sources, such as oil, coal, wind, hydroelectric and nuclear;

the adequacy of or changes in government energy policies, including the availability and amount of government subsidies or incentives for solar power;

whether thin film solar technologies, in particular Copper Indium Gallium Selenide ("CIGS") technology, will be broadly adopted as a viable solar technology over various other intensely competitive alternatives; and

customers' and end-users' access to affordable financial capital.

If we do not successfully manage the risks resulting from these and other changes occurring in the solar industry, its business, financial condition and results of operations could be materially and adversely affected.

In addition, solar is a relatively new market for us and poses the following additional challenges:

the need to attract, motivate and retain employees with skills and expertise in this new area;

new and more diverse customers and suppliers, including some with limited operating histories, uncertain and/or limited funding and/or evolving business models;

different customer service requirements;

new and/or different competitors with potentially more financial or other resources and industry experience; and

third parties' intellectual property rights and our ability to secure necessary intellectual property rights with respect to our emerging technologies.

If we do not successfully manage the risks resulting from its entry into the solar market, our business, financial condition and results of operations could be materially and adversely affected.

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

We derive a substantial portion of our net sales in any fiscal period from the sale of a relatively small number of high-priced systems. As a result, the timing of recognition of revenue for a single transaction could have a material effect on our sales and operating results for a particular fiscal period. As is typical in our industry, orders, shipments, and customer acceptances often occur during the last few weeks of a quarter. As a result, delay of only a week or two can often shift the related booking or sale into the next quarter, which could adversely affect our reported results for the prior quarter. Our quarterly results have fluctuated significantly in the past, and we expect this trend to continue. If our orders, shipments, net sales or operating results in a particular quarter do not meet expectations, our stock price may be adversely affected.

We operate in industries characterized by rapid technological change.

All of our businesses are subject to rapid technological change. Our ability to remain competitive depends on our ability to enhance existing products and develop and manufacture new products in a timely and cost effective manner and to accurately predict technology transitions. Because new product development commitments must be made well in advance of sales, we must anticipate the future demand for products in selecting which development programs to fund and pursue. Our financial results for 2011 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, using innovative technology to sell products into specialized markets. New product introductions or enhancements by our competitors could cause a decline in sales or loss of market acceptance of our existing products. Increased competitive pressure could also lead to intensified price competition resulting in lower margins. Our failure to compete successfully with these other companies would seriously harm our business.

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

Our customer base is and has been highly concentrated. Orders from a relatively limited number of customers have accounted for, and likely will continue to account for, a substantial portion of our net sales, which may lead customers to demand pricing and other terms less favorable to us. Based on net sales, our five largest customers accounted for 52%, 52% and 43% of our total net sales in 2010, 2009 and 2008, respectively.

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

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

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

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

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

Our sales cycle is long and unpredictable.

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

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

Our success depends upon our ability to attract, retain, and motivate key employees, including those in executive, managerial, engineering and marketing positions, as well as highly skilled and qualified technical personnel and personnel to implement and monitor our financial and managerial controls and reporting systems. Attracting, retaining, and motivating such qualified personnel may be difficult due to challenging industry conditions, competition for such personnel by other technology companies, consolidations and relocations of operations and workforce reductions. While we have entered into Employment Agreements with certain key personnel, our inability to attract, retain, and motivate key personnel could have a material adverse effect on our business, financial condition or operating results.

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

The stock market in general and the market for technology stocks in particular, has experienced volatility that has often been unrelated to the operating performance of companies. If these market or industry-based fluctuations continue, the trading price of our common shares could decline significantly

independent of our actual operating performance, and shareholders could lose all or a substantial part of their investment. The market price of our common shares could fluctuate significantly in response to several factors, including among others:

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

receipt of substantial orders or cancellations for our products;

actual or anticipated variations in our results of operations;

announcements of financial developments or technological innovations;

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

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

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

the occurrence of major catastrophic events.

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

We are subject to foreign currency exchange risks.

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

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 could result in uncompensated lost market and revenue opportunities. We cannot be certain that the steps we have taken will prevent the misappropriation or unauthorized use of our proprietary information and technologies, particularly in foreign countries where the laws may not protect our proprietary intellectual property rights as fully or as readily as United States laws.

Further, we cannot be certain that the laws and policies of any country, including the United States, with respect to intellectual property enforcement or licensing will not be changed in a way detrimental to the sale or use of our products or technology.

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

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

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

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

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

difficulties and increased costs in integrating the personnel, operations, technologies and products of acquired companies;

diversion of management's attention while evaluating, pursuing, and integrating the business to be acquired;

potential loss of key employees of acquired companies, especially if a relocation or change in responsibilities is involved;

difficulties in managing geographically dispersed operations in a cost-effective manner;

lack of synergy or inability to realize expected synergies;

unknown, underestimated and/or undisclosed commitments or liabilities;

increased amortization expense relating to intangible assets; and

the potential impairment and write-down of amounts capitalized as intangible assets and goodwill as part of the acquisition, as a result of technological advancements or worse-than-expected performance by the acquired company.

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

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

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

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.

At December 31, 2010, we had \$52.0 million of goodwill and \$59.2 million of intangible and long-lived assets, including \$42.3 million of property, plant and equipment. 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.

We may not receive the escrowed proceeds from the sale of our Metrology business.

In connection with the sale of our Metrology business to Bruker Corporation ("Bruker") on October 7, 2010, we agreed to indemnify Bruker, subject to certain limitations, for certain losses arising out of breaches of the representations, warranties and covenants that we made in the Stock Purchase Agreement and in certain related documents. To secure these indemnification obligations, we agreed to deposit into escrow \$22.9 million of the consideration paid to us by Bruker, such funds to remain in escrow for twelve months following the closing. In the event of any qualifying indemnification claims, and after following the procedures set forth in the escrow agreement, all or a portion of the escrowed amount may be released and returned to Bruker to satisfy such claims. This would result in a reduction in the purchase price received for the sale of our Metrology business, which could result in a material adverse effect on our financial condition.

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

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

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

Pursuant to Section 404 of the Sarbanes-Oxley Act of 2002, we must include in our Annual Report on Form 10-K a report of management on the effectiveness of our internal control over financial reporting. Ongoing compliance with this requirement is complex, costly and time-consuming. Although our assessment, testing, and evaluation resulted in our conclusion that, as of December 31, 2010, our

internal controls over financial reporting were effective, we cannot predict the outcome of our testing in future periods. If our internal controls are ineffective in future periods, or if our management does not timely assess the adequacy of such internal controls, we could be subject to regulatory sanctions, the public's perception of our Company may decline and our financial results or the market price of our shares could be adversely affected.

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

We are subject to environmental, health and safety regulations in connection with our business operations, including but not limited to regulations related to the development, manufacture, and use of our products. Failure or inability to comply with existing or future environmental and safety regulations could result in significant remediation liabilities, the imposition of fines and/or the suspension or termination of development, manufacture, or use of certain of our products, each of which could have a material adverse effect on our business, financial condition, and results of operations.

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

Our operations in the U.S., the Asia-Pacific region and in other areas could be subject to natural disasters or other significant disruptions, including earthquakes, 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 that a holder of our common stock might not consider in its best interest. These measures include:

"blank check" preferred stock;

classified board of directors;

shareholder rights plan or "poison pill;" and

certain certificate of incorporation and bylaws provisions.

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

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

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

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

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

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

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

Owned Facilities Location	Approximate Size (sq. ft.)	Mortgaged	Use
Plainview, NY	80,000	No	Data Storage and LED & Solar and Corporate Headquarters
Somerset, NJ	80,000	No	LED & Solar
St. Paul, MN(1)	125,000	Yes	LED & Solar
Tucson, AZ(2)	110,000	No	Former Metrology Site

Leased Facilities Location	Approximate Size (sq. ft.)	Lease Expires	Use
Camarillo, CA(3)	26,000	2012	Data Storage and partially held for sublease
Fort Collins, CO	26,000	2011	Data Storage
Clifton Park, NY	18,000	2014	LED & Solar
Clifton Park, NY	8,000	2011	LED & Solar
Lowell, MA	28,000	2012	LED & Solar
Somerset, NJ	14,500	2011	LED & Solar
Somerset, NJ	9,500	2012	LED & Solar
Shanghai, China	17,400	2012	Customer Training Center
Woodbury, NY(4)	32,000	2011	Former Corporate Headquarters

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

(2) We vacated this facility during the fourth quarter of 2010 in conjunction with the sale of our Metrology segment to Bruker. We are currently leasing this office to Bruker in accordance with a transition services agreement which will expire on October 6, 2011.

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

(4) We vacated our former Woodbury headquarters during the first quarter of 2008 and consolidated our operations into our Plainview manufacturing facility.

The St. Paul, Minnesota facility is subject to a mortgage, which at December 31, 2010, had an outstanding balance of \$2.9 million. We also lease small offices in Santa Clara, California, Chelmsford, Massachusetts and Edina, Minnesota for sales and service. Our foreign subsidiaries lease office space in England, France, Germany, Japan, Korea, Malaysia, Singapore, Thailand, China and Taiwan. We believe our facilities are adequate to meet our current needs.

Item 3. Legal Proceedings

Environmental

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

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

The former owner of the land and building in Santa Barbara, California in which our former Metrology operations were located (which business was sold to Bruker on October 7, 2010), has disclosed that there are hazardous substances present in the ground under the building. Management believes that the comprehensive indemnification clause that was part of the purchase contract relating to the purchase of such land provides adequate protection against any environmental issues that may arise. We have provided Bruker with similar indemnification as part of the sale.

Non-Environmental

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

Item 4. (Removed and Reserved).

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 2010 and 2009 high and low closing bid prices by quarter are as follows:

	2010		2009	
	High	Low	High	Low
First Quarter	\$ 43.72	\$ 30.42	\$ 7.16	\$ 3.96
Second Quarter	51.61	31.79	12.99	6.19
Third Quarter	45.52	31.02	23.49	11.36
Fourth Quarter	49.97	33.71	34.35	21.90

On February 22, 2011, the closing bid price for our common stock on the NASDAQ National Market was \$47.04 and we had 144 shareholders of record.

As of December 31, 2010 we had convertible notes of \$105.6 million. The notes accrue interest at 4.125% per annum and mature on April 15, 2012. The notes meet the criteria for determining the effect of the assumed conversion using the treasury stock method of accounting, since we have the ability and the intent to settle the principal amount of the notes in cash. Under the terms of the notes, we may pay the principal amount of converted notes in cash or in shares of common stock. We intend to pay such amounts in cash. Holders may convert the notes at any time during the period beginning on January 15, 2012 through the close of business on the second day prior to April 15, 2012 and earlier upon the occurrence of certain events including our common stock trading at prices equal to or above 130% of the conversion price for at least 20 trading days during the final 30 trading days of the immediately preceding fiscal quarter. At the end of the fourth quarter of 2010, our common stock was trading at prices equal to or above 130% of the conversion price for the specified period and, as a result, the convertible notes are convertible during the first quarter of 2011. Accordingly, the balance of the convertible notes at December 31, 2010 has been classified as current in our Consolidated Balance Sheet. On February 14, 2011, at the option of the holder, \$7.5 million of notes were tendered for conversion at a price of \$45.95 per share in a net share settlement. As a result, we paid the principal amount of \$7.5 million in cash and issued 111,318 shares of our common stock. Accordingly, in the first quarter of 2011 we will take a charge for the related unamortized debt discount totaling \$0.3 million. We pay interest on these notes on April 15 and October 15 of each year.

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 RDG MidCap Technology Index

*
\$100 invested on 12/31/05 in stock or index, including reinvestment of dividends.
Fiscal year ending December 31.

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**ASSUMES \$100 INVESTED ON DEC. 31, 2005
ASSUMES DIVIDENDS REINVESTED
FISCAL YEAR ENDING DEC. 31**

	2005	2006	2007	2008	2009	2010
Veeco Instruments Inc.	100.00	108.08	96.36	36.58	190.65	247.89
S&P Smallcap 600	100.00	115.12	114.78	79.11	99.34	125.47
PHLX Semiconductor	100.00	94.47	102.99	56.15	91.67	103.11
RDG MidCap Technology	100.00	111.34	110.83	56.91	90.56	114.02

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Treasury Stock

The following table contains the Company's stock repurchases of equity securities in the fourth quarter of 2010:

Period	Total Number of Shares Repurchased	Average Price Paid Per Share	Total Number of Shares Purchased as Part of Publicly Announced Program(1)	Approximate Dollar Value of Shares that May Yet Be Purchased Under the Program(1)
Fiscal month of October 2010 (September 27, 2010 - October 24, 2010)(2)	189,218	34.33	1,118,600	161,901,746

- (1) On August 24, 2010, we announced that our Board of Directors had authorized the repurchase of up to \$200 million of our common stock until August 26, 2011. The program does not obligate the Company to acquire any particular amount of common stock and may be modified or suspended at any time at the Company's discretion.
- (2) We had no repurchases in the fiscal months of November and December 2010.

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Item 6. Selected Consolidated Financial Data

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

	Year ended December 31,				
	2010(1)	2009(2)	2008(3)	2007(4)	2006(5)
	(In thousands, except per share data)				
Statement of Operations Data:					
Net sales	\$ 933,231	\$ 282,412	\$ 314,935	\$ 252,031	\$ 268,880
Operating income (loss) from continuing operations	277,575	(4,732)	(46,140)	(18,245)	(5,767)
Income (loss) from continuing operations, net of income taxes	260,531	(14,229)	(50,833)	(23,655)	(4,620)
Income (loss) from discontinued operations, net of income taxes	101,229	(1,403)	(24,588)	3,817	18,179
Net loss attributable to noncontrolling interest		(65)	(230)	(628)	(1,358)
Net income (loss) attributable to Veeco	\$ 361,760	\$ (15,567)	\$ (75,191)	\$ (19,210)	\$ 14,917
Income (loss) per common share attributable to Veeco:					
Basic:					
Continuing operations	\$ 6.60	\$ (0.44)	\$ (1.62)	\$ (0.74)	\$ (0.11)
Discontinued operations	2.56	(0.04)	(0.78)	0.12	0.60
Income (loss)	\$ 9.16	\$ (0.48)	\$ (2.40)	\$ (0.62)	\$ 0.49
Diluted :					
Continuing operations	\$ 6.13	\$ (0.44)	\$ (1.62)	\$ (0.74)	\$ (0.11)
Discontinued operations	2.38	(0.04)	(0.78)	0.12	0.60
Income (loss)	\$ 8.51	\$ (0.48)	\$ (2.40)	\$ (0.62)	\$ 0.49
Weighted average shares outstanding:					
Basic	39,499	32,628	31,347	31,020	30,492
Diluted	42,514	32,628	31,347	31,020	30,492

	December 31,				
	2010	2009	2008	2007	2006
	(In thousands)				
Balance Sheet Data:					
Cash and cash equivalents	\$ 245,132	\$ 148,500	\$ 102,521	\$ 116,875	\$ 146,880
Short-term investments	394,180	135,000			
Restricted cash	76,115				
Working capital	640,139	317,317	168,528	112,089	172,447
Goodwill	52,003	52,003	51,741	71,544	71,544
Total assets	1,148,034	605,372	429,541	529,334	589,600
Long-term debt (including current installments)	104,021	101,176	98,526	132,118	203,774
Total equity	762,512	359,059	225,026	288,144	281,751

(1)

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

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

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

- (2) Operating loss and net loss from continuing operations include restructuring expenses of \$4.8 million, as well as an asset impairment charge of \$0.3 million for property, plant and equipment no longer being utilized in our Data Storage segment and a \$1.5 million inventory write-off associated with Data Storage legacy products.
- (3) Operating loss and net loss from continuing operations include a \$51.4 million asset impairment charge of which \$30.4 million was related to goodwill and \$21.0 million was related to other long-lived assets, a restructuring charge of \$9.4 million consisting of lease-related commitments, the mutually agreed-upon termination of the employment agreement with our former CEO and personnel severance costs and \$1.5 million in cost of sales related to the required purchase accounting adjustment to write up inventory to fair value in connection with the purchase of Mill Lane Engineering. Net loss from continuing operations also reflects a net gain from the early extinguishment of debt in the amount of \$3.8 million.
- (4) Operating loss and net loss from continuing operations include restructuring expenses of \$4.8 million, as well as charges of \$1.1 million and \$4.8 million associated with the write-off of property and equipment and inventory, respectively, related to product lines discontinued as part of management's cost reduction plan. Net loss from continuing operations also reflects a net gain from the early extinguishment of debt in the amount of \$0.7 million.
- (5) Operating income and net loss from continuing operations are net of a write-off of \$1.2 million of in-process research and development projects related to the Fluens acquisition. Net loss from continuing operations also reflects a net gain from the early extinguishment of debt in the amount of \$0.3 million.

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

Executive Summary

We make equipment to develop and manufacture light emitting diodes ("LEDs"), solar panels, hard-disk drives and other devices. We have leading technology positions in our two segments: LED & Solar and Data Storage.

In our LED & Solar segment, we design and manufacture metal organic chemical vapor deposition ("MOCVD") systems, molecular beam epitaxy ("MBE") systems, Copper, Indium, Gallium, Selenide ("CIGS") deposition systems and thermal deposition sources which we sell to manufacturers of high brightness LEDs ("HB LED") and solar panels, as well as to scientific research customers.

In our Data Storage segment, we design and manufacture ion beam etch, ion beam deposition, diamond-like carbon, physical vapor deposition, chemical vapor deposition, and dicing and slicing systems primarily used to create thin film magnetic heads ("TFMHs") that read and write data on hard disk drives.

We support our customers through product development, manufacturing, sales and service sites in the U.S., Korea, Taiwan, China, Singapore, Japan, Europe and other locations.

Summary of Results for 2010

In 2010, Veeco reported the best year in its history in terms of revenue and profitability. Selected financial highlights include:

Revenue increased 231% to \$933.2 million in 2010 from \$282.4 million in 2009. LED & Solar revenues increased 289% to \$797.9 million from \$205.2 in 2009. Data Storage revenues increased 75% to \$135.3 million from \$77.2 million in 2009;

Orders were up 108% to \$1,121.6 million in 2010 compared to \$538.3 million in 2009;

Our gross margin increased to 48% for 2010 from 39% in 2009. Gross margins in LED & Solar increased to 47% from 40% in 2009, and Data Storage gross margins increased to 49% from 37% in 2009.

Our selling, general and administrative expenses increased to \$91.8 million from \$62.2 million in 2009. Selling general and administrative expenses were 10% of net sales in 2010, compared with 22% of net sales in 2009;

Our research and development expenses increased to \$71.4 million from \$43.5 million in 2009. Research and development expenses were 8% of net sales in 2010, compared with 15% in 2009;

Net income (loss) from continuing operations attributable to Veeco in 2010 was \$260.5 million compared (\$14.2) million in 2009;

Net income (loss) from continuing operations attributable to Veeco per share was \$6.13 compared to (\$0.44) in 2009; and

We generated net cash of \$96.6 million during 2010, principally due to \$45.2 million in proceeds from stock option exercises, \$23.3 million of excess tax benefits relating to stock option exercises, and cash provided by operations of \$194.2 million, partially offset by treasury stock repurchases of \$38.1 million and restricted stock tax withholdings of \$4.6 million and cash used in investing activities of \$121.6 million, which is net of \$225.2 million in net proceeds from the sale of our Metrology segment.

Business Highlights of 2010

Veeco's 2010 results were at record levels, with revenue of \$933 million and net income from continuing operations of \$261 million. These results were achieved through a combination of world-class products, a focus on high-growth market opportunities, operational excellence, our flexible manufacturing strategy, and a deep commitment to satisfying our global customers.

Veeco increased growth and profitability in our LED & Solar segment, which is also referred to as our "green" equipment business. In LED we penetrated new customers, significantly increased our market share, increased R&D investment, launched a next-generation MOCVD system and ramped our manufacturing capacity utilizing a scalable, outsourced model. In Solar we continued to improve the process development of our CIGS product line.

Veeco's Data Storage business delivered record levels of profitability over the last 5 years as a result of a turnaround in business conditions combined with our flexible manufacturing strategy.

Outlook

With starting backlog of \$555 million, and anticipating strong first half 2011 bookings, we currently forecast that Veeco's 2011 revenues will be greater than \$1 billion. We are optimistic about the future and believe that we are well positioned from a technology, product and operational standpoint to grow our LED & Solar and Data Storage businesses in 2011 and beyond.

As we look toward the future, we believe that the HB LED industry will continue its multi-year MOCVD tool investment cycle as HB LEDs increase their penetration in backlighting applications and general illumination. We are also seeing strong interest in our thermal deposition solutions for the manufacturing of CIGS solar cells, and believe that Veeco is well positioned to increase our business in this market. In addition, overall business conditions in our Data Storage segment appear to be continuing to improve and with a strong starting-year backlog, we are forecasting revenue growth in this business in 2011.

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, 2010 and 2009**

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

	Year ended December 31,				Dollar and Percentage Change Year to Year	
	2010		2009			
Net sales	\$ 933,231	100.0%	\$ 282,412	100.0%	\$ 650,819	230.5%
Cost of sales	489,406	52.4	171,177	60.6	318,229	185.9
Gross profit	443,825	47.6	111,235	39.4	332,590	299.0
Operating expenses (income):						
Selling, general and administrative	91,777	9.8	62,151	22.0	29,626	47.7
Research and development	71,390	7.6				