

CVD EQUIPMENT CORP
Form S-1
July 03, 2007

As filed with the Securities and Exchange Commission on July 3, 2007
Registration Statement No. 333-[_____]

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549**

**FORM S-1
REGISTRATION STATEMENT UNDER THE
SECURITIES ACT OF 1933**

CVD EQUIPMENT CORPORATION
(Name of small business issuer in its charter)

New York
(State or jurisdiction of
incorporation or organization)

3559
(Primary Standard Industrial
Classification Code Number)

11-2621692
(I.R.S. Employer Identification
No.)

**1860 Smithtown Avenue
Ronkonkoma, New York 11779
(631) 981-7081**

(Address, including zip code, and telephone
number, including area code, of registrant's
principal executive offices and principal place
of business)

**Glen Charles
Chief Financial Officer
1860 Smithtown Avenue
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(Name, address, including zip code, and
telephone number, including area code, of
agent for service)

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Approximate date of commencement of proposed sale to public: As soon as practicable after the effective date of this registration statement.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box.

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. o

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. o

CALCULATION OF REGISTRATION FEE

| Title of Each Class of Securities to be Registered | Amount to be Registered | Proposed | | |
|---|--------------------------------|--|--|--------------------------------------|
| | | Maximum Offering Price Per Share(2) | Proposed Maximum Aggregate Offering Price | Amount of Registration Fee(2) |
| Common Stock, (par value \$0.01 per share) | 2,875,000 shares(1) | \$5.29 | \$15,208,750 | \$466.91 |

- (1) Includes 375,000 shares of common stock that may be purchased by the underwriter from certain officers and directors to cover over-allotments, if any.
- (2) Estimated solely for the purpose of computing the registration fee pursuant to Rule 457(c) under the Securities Act of 1933, as amended on the basis of the average high and low prices of the Registrant’s common stock on June 28, 2007, as reported by the American Stock Exchange.

The Registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act or until this registration statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

THE INFORMATION IN THIS PROSPECTUS IS NOT COMPLETE AND MAY BE CHANGED. THIS PROSPECTUS IS INCLUDED IN THE REGISTRATION STATEMENT THAT WAS FILED BY CVD EQUIPMENT CORPORATION WITH THE SECURITIES AND EXCHANGE COMMISSION. WE MAY NOT SELL THESE SECURITIES UNTIL THE REGISTRATION STATEMENT BECOMES EFFECTIVE. THIS PROSPECTUS IS NOT AN OFFER TO SELL THESE SECURITIES AND IS NOT SOLICITING AN OFFER TO BUY THESE SECURITIES IN ANY STATE WHERE THE OFFER OR SALE IS NOT PERMITTED.

SUBJECT TO COMPLETION, DATED _____, 2007

Preliminary Prospectus

**2,500,000 shares of common stock
\$_____ per share**

We are selling 2,500,000 shares of common stock.

Our common stock currently trades on the American Stock Exchange under the symbol "CVV." On _____, 2007, the closing price of one share of our common stock was \$.

Investing in our common stock involves a high degree of risk. See "Risk Factors" beginning on page 7. The selling shareholders identified in this prospectus have granted the underwriters the right to purchase up to an additional 375,000 shares of common stock at the public offering price, less the underwriting discount and commissions, solely to cover over-allotment of shares. We will not receive any of the proceeds from the sale of these shares by the selling shareholders.

| | Per Share | Total |
|--|------------------|--------------|
| Public offering price | \$ | \$ |
| Underwriting discounts and commissions | \$ | \$ |
| Proceeds, to us (before expenses) | \$ | \$ |

The underwriter expects to deliver the shares of common stock to purchasers on or about _____, 2007.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.

C.E. UNTERBERG, TOWBIN

The date of this prospectus is _____, 2007.

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You should rely only on the information contained in this prospectus. We have not, and the underwriter has not, authorized anyone to provide you with information different from or in addition to that contained in this prospectus. If anyone provides you with different or inconsistent information, you should not rely on it. We are offering to sell, and are seeking offers to buy, shares of common stock only in jurisdictions where offers and sales are permitted. The information contained in this prospectus is accurate only as of the date of this prospectus, regardless of the time of delivery of this prospectus or of any sale of the common stock. Our business, financial conditions, results of operations and prospects may have changed since that date.

SPECIAL NOTE REGARDING FORWARD-LOOKING INFORMATION

The prospectus and any prospectus supplement contain forward-looking statements within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended (the “Exchange Act”) and Section 27A of the Securities Act of 1933, as amended (the “Securities Act”). Forward-looking statements include those regarding our goals, beliefs, plans or current expectations and other statements regarding matters that are not historical facts. For example, when we use words such as “project,” “believe,” “anticipate,” “plan,” “expect,” “estimate,” “intend,” “should,” “would,” “could,” or “may,” that convey uncertainty of future events or outcome, we are making forward-looking statements. Our forward-looking statements are subject to risks and uncertainties. You should note that many important factors, some of which are discussed elsewhere in this prospectus, could affect us in the future and could cause our results to differ materially from those expressed in our forward-looking statements. You should read these factors, including the information under “*Risk Factors*” beginning on page 7, and the other cautionary statements made in this prospectus as being applicable to all related forward-looking statements wherever they appear in this prospectus. Further, forward-looking statements speak only as of the date they are made, and unless required by law, we expressly disclaim any obligation or undertaking to update publicly any of them in light of new information or future events.

PROSPECTUS SUMMARY

This summary contains basic information about us and this offering. Because it is a summary, it does not contain all of the information that may be important to you. You should read the entire prospectus carefully, including the section entitled "Risk Factors" and our consolidated financial statements and the related notes to those statements included in this prospectus. This prospectus contains certain forward-looking statements. The cautionary statements made in this prospectus should be read as being applicable to all related forward-looking statements wherever they appear in this prospectus. Our actual results could differ materially from those discussed in this prospectus. See "Special Note Regarding Forward-Looking Statements." Please read "Glossary of Industry Terms" included in this prospectus for definitions of certain terms that are commonly used in our industry.

OUR BUSINESS

We design and manufacture customized state-of-the-art equipment used in the development, design and manufacture of advanced electronic components, materials and coatings for research and industrial applications. We offer a broad range of chemical vapor deposition, gas control and other equipment that is used by our customers to research, design and manufacture semiconductors, solar cells, carbon nanotubes, nanowires, LEDs and MEMS, and industrial coatings, as well as equipment for surface mounting of components onto printed circuit boards. Our proprietary products are generally customized to meet the particular specifications of individual customers. We also offer a number of standardized products that are based on the expertise and know how we have developed in designing and manufacturing our customized products.

Based on our 25 years of industry experience, we provide leading-edge design and manufacturing solutions to our customers. We use our engineering, design and manufacturing expertise to provide technologically advanced equipment that enables laboratory and research scientists to develop the precise processes for the manufacture of next generation semiconductors and other electronic components. We also develop and manufacture production equipment based on our designs. We have built a significant library of design expertise, know-how and innovative solutions to assist our customers in developing these intricate processes. This library of solutions, along with our vertically integrated manufacturing facilities, allows us to provide superior design and manufacturing solutions to our customers on a cost effective basis.

For the three-year period 2004 through 2006, our revenues increased from \$9.9 million to \$13.4 million, while our net pretax income increased from \$196,000 to \$897,000. We plan to continue building on this growth through our expanded product offerings, increased marketing efforts, increased foreign sales and through current and expected product developments in our research laboratory.

In the fourth quarter of 2006, we began implementing a strategy to target opportunities in the research and development market, with a focus on higher-growth applications such as carbon nanotubes, nanowires, MEMS and LEDs. To expand our penetration into this market, we are introducing a line of proprietary standardized products and systems initially targeted at this market. Historically, we have manufactured our products for this market on a custom one-at-a-time basis to meet our individual customer's specific research requirements. Our new proprietary systems leverage the technological expertise that we have developed through designing these custom systems onto a standardized basic core. This core can be easily adapted through a broad array of available add-on options to meet the diverse product and budgetary requirements of the research community. By manufacturing the basic core of these systems in higher volumes, we are able to reduce both the cost and delivery time for our systems. These systems, which we market and sell under the "EasyTube" product line, are sold to researchers at universities and laboratories in the United States and throughout the world.

We also intend to continue growing the sales of our proprietary standard and custom systems by building on the success of our installed customer base of approximately 200 customers to whom we have sold systems within the last

three years. Our customer base includes several Fortune 500 companies. Historically, revenues have grown primarily through sales to existing customers with additional capacity needs or other new requirements, as well as to new customers. During the year ended December 31, 2006, over 65% of our revenues were derived from sales to repeat customers. We have generally gained new customers through word of mouth, the movement of personnel from one company to another, and limited print advertising and trade show attendance. We are now increasing the awareness of our company in the marketplace with results from our internal research laboratory, which we established in the third quarter of 2006, as well as improved sales contacts from increased participation in trade shows. We are also in the process of implementing a new Internet advertising strategy, and plan to increase the size of our sales force.

The core competencies we have developed in equipment and software design, as well as in systems manufacturing, are used to engineer our finished products. Our proprietary Windows-based, real-time, software application allows for rapid configuration, and provides our customers with powerful tools to understand, optimize and repeatedly control their processes. Our vertically integrated structure allows us to control the manufacturing process, from bringing raw metal and components into our manufacturing facilities to shipping out finished products. These factors significantly reduce our costs, improve our quality and reduce the time it takes from customer order to shipment of our products.

OUR COMPETITIVE STRENGTHS

We believe we are a leader in the markets we serve as a result of the following competitive strengths:

Technical Expertise. We have been designing and manufacturing state-of-the-art, innovative and proprietary standard and custom chemical vapor deposition, gas control and related systems for 25 years. We maintain a highly trained team of experienced mechanical, chemical, electrical and software engineers, as well as manufacturing, testing and support personnel. Our engineering group possesses core competencies in product applications, software, system controls, chemical vapor deposition, vacuum systems, ultra-high purity gas and chemical delivery, product heating and process chamber design. We believe this expertise enables us to provide high quality, technically advanced, integrated and innovative solutions to our customers, many of whom are on the leading edge of technology, research and production.

Leveraging our Experience. We have significantly enhanced our design and manufacturing expertise over the years through the process of responding to customer requests for creative and often unique equipment solutions. The equipment we design and manufacture in response to these customer requests, and the engineering solutions we devise in doing so, remain proprietary to us. We use this equipment and these engineering solutions to improve existing products, develop new products for other customers and as building blocks for our future equipment designs.

Experienced Management Team. We are led by a highly experienced management team. Our CEO has over 40 years of industry experience, including 25 years with our company. Our three division managers have an average of over 16 years of process and equipment design experience and an average of 12 years with our company or companies whose assets we have acquired.

Vertical Integration. We employ a vertically integrated structure in our operations, from the design and manufacture of many of the sophisticated components used in our products, to the final assembly of our systems. For example, our machine shop fabricates the frame, sheet metal and machined components that are incorporated into our chemical vapor deposition, gas control systems and reflow ovens. We also manufacture the quartzware utilized in our chemical vapor deposition systems, as well as the quartzware we sell for other customer requirements. All painting, electrical and mechanical assembly and product testing is done by our personnel. Our software engineers and programmers develop the software that runs our products. This vertically integrated structure enables us to customize systems to customer requirements, reduce delivery times of our products, maintain a high level of quality control, reduce the effect of supplier disruptions and deliver a better and lower cost product.

Established and Diversified Customer Base. We have long-standing relationships with many of our largest customers. In 2006, over 65% of our revenues resulted from sales to repeat customers. We sell to a geographically diverse base of customers across a variety of markets, including leading semiconductor and wafer manufacturers, research laboratories, universities and industrial manufacturers. In 2006, our largest customer accounted for approximately 9% of our revenue and in 2005, no single customer accounted for more than 12% of our revenue. No other customer represented more than 6.8% or 6.5% of our total revenue in 2005 or 2006, respectively. Our largest customer was different in each of these years. We believe that our diverse customer base helps to minimize our exposure to fluctuations in any one geographic location or market.

Proven Acquisition Record. Over the past eight years, we have developed a successful acquisition program designed to enhance our core competencies and expand our markets and product offerings. To date, we have completed and integrated four acquisitions.

GROWTH STRATEGY

We intend to leverage our competitive strengths with a combination of internal and external growth strategies.

Internal Growth - Our strategy for internal growth includes the following:

Expand our growth opportunities in targeted research and development markets. With the globalization of the world economy and the establishment or expansion of government and corporate funded research and development laboratories and university research laboratories around the world, we believe that these markets will be a growing source of our revenues in the future.

Increase our revenues from sales of our proprietary standard and custom systems by leveraging our installed customer base. We presently have an installed customer base of approximately 200 customers to whom we have sold systems within the last three years. We intend to continue to leverage our relationships with our existing customers to maximize system, service and parts revenue from our installed customer base. We intend to accomplish this by meeting the needs of these customers for new and replacement systems as well as additional capacity. This will also include equipment and services needed in connection with customer expansions or relocations throughout the world.

Increase sales through expanded trade show participation, Internet advertising and direct sales contacts. In order to increase sales globally, we intend to increase the number of trade shows in which we display our products and services, to increase our advertising presence on the Internet and to increase the number of our sales personnel. We believe that a combination of these methods will stimulate awareness of our broad range of product offerings and capabilities.

Enhance customer awareness of the results generated by our research laboratory. Our research laboratory, together with a number of leading universities with whom we partner, conducts cutting-edge research on the growth of carbon nanotubes and nanowires. The results of this research could have far reaching implications concerning the use and manufacture of carbon nanotubes and nanowires for many markets. We intend to communicate the results of our research through trade shows, research publications and customer visits. By so communicating, we intend to increase awareness of our products and capabilities.

Partner with university research laboratories to capitalize on the emerging nanotechnology opportunity. The university research community is at the forefront of nanotechnology research, and we are focused on providing state-of-the-art systems to this market that will help bridge the gap between pioneering research and marketable products. To help accomplish this, we have established relationships with companies and research laboratories, such as the University of Cincinnati. Our intention is that together we will leverage our collective expertise in this field, which will allow us to capitalize on commercial opportunities in the future. This relationship has thus far produced leading edge results, including what we believe are the largest carbon nanotube clusters yet developed.

Expand the level of research currently being performed in our research laboratory for applications having near-term requirements. The research we are performing with carbon nanotubes and nanowires is cutting edge and, we believe, will enable carbon nanotubes and nanowires to be used in a myriad of applications in a production environment. While researchers have envisioned carbon nanotubes and nanowires having applications associated with technologies and products that have yet to be invented, there are many significant applications that are expected to be in use in the near future. For example, near term applications and uses for carbon nanotubes include: water purification systems; sporting goods, body and tank armor; hydrogen storage; sensors for biological and chemical systems; and batteries.

According to Dr. Clayton Teague, the director of the National Nanotechnology Coordination Office, the United States is the world leader in nanotechnology research and development with a total investment by the federal government of more than \$1.0 billion per year.

Increase our paid contract research for nanotechnology applications. The federal commitment to nanotechnology research alone is currently in excess of \$1.0 billion per year. We believe that contract research concerning carbon nanotubes and nanowires, as well as related semiconductor research for government, university and industry is a growing market that we can access. To accomplish this, we intend to leverage our contacts in this market as well as publicize our own laboratory results.

External Growth - We intend to continue to selectively seek strategic growth opportunities through acquisitions and joint ventures. In evaluating these opportunities, our prime objectives include enhancing our core competencies, providing complementary product offerings and technologies, expanding our geographic footprint, improving production efficiencies and increasing our customer base. Over the past eight years, we have developed an acquisition program to accomplish our goals, and have successfully completed and integrated four acquisitions.

4

THE OFFERING

| | |
|--|--|
| Common Stock Offered | 2,500,000 shares of common stock |
| Common Stock Outstanding After the Offering | 5,803,500 shares of common stock (1) |
| Use of Proceeds | We intend to use the net proceeds from the offering for working capital and other general corporate purposes, including for possible product or business acquisitions in connection with the planned expansion of our business. See “ <i>Use of Proceeds</i> ”. |
| Risk Factors | The securities offered involve a high degree of risk and immediate substantial dilution. You should read carefully the factors discussed under “ <i>Risk Factors</i> ” beginning on page 7 and the other information included in this prospectus before investing in our securities. |
| AMEX Trading Symbol | CVV |

(1) The number of shares excludes 280,000 shares of our common stock issuable upon exercise of options outstanding, and 335,250 shares of our common stock available for future grants, under our stock option plans. Unless otherwise indicated, all information in this prospectus assumes that the underwriter’s overallotment option to purchase up to 375,000 shares of common stock is not exercised.

OUR CORPORATE INFORMATION

CVD Equipment Corporation was incorporated in New York in 1982. Our principal executive offices are located at 1860 Smithtown Avenue, Ronkonkoma, New York 11779. Our telephone number is 631-981-7081 and our principal website address is www.cvdequipment.com. The information found on or accessible through our website is not part of this prospectus.

SUMMARY CONSOLIDATED FINANCIAL DATA

We derived the summary consolidated operating data set forth below for the years ended December 31, 2004, 2005 and 2006 and the summary consolidated balance sheet data as of December 31, 2005 and 2006 from our audited consolidated financial statements and related notes thereto included in this prospectus. We derived the summary consolidated balance stock data as of December 31, 2004 from our audited consolidated balance sheet not included in this prospectus. The summary consolidated operating data for the three months ended March 31, 2006 and 2007 and the summary consolidated balance sheet data as of March 31, 2006 and 2007, have been derived from our unaudited consolidated financial statements and related notes thereto included in this prospectus. The results of operations for the interim periods are not necessarily indicative of the results to be expected for the full year or any future period.

The following data should be read in conjunction with “*Management’s Discussion and Analysis of Financial Condition and Results of Operations*,” and our consolidated financial statements and related notes thereto included elsewhere in this prospectus.

| Consolidated Statements of Operations Data: | Year Ended December 31, | | | Three Months Ended March 31, | |
|--|---------------------------------------|-----------|-----------|------------------------------|---------------------|
| | 2004 | 2005 | 2006 | 2006 (unaudited) | 2007 (unaudited) |
| | (In thousands, except per share data) | | | | |
| Revenues | \$ 9,874 | \$ 11,225 | \$ 13,356 | \$ 3,211 | \$ 3,811 |
| Cost of revenue | 6,549 | 7,356 | 8,672 | 2,141 | 2,555 |
| Operating expenses | 2,943 | 3,247 | 3,681 | 915 | 1,052 |
| General and administrative | 2,252 | 2,531 | 2,925 | 718 | 773 |
| Research and development | 410 | 500 | 513 | 130 | 175 |
| Operating income | 382 | 623 | 1,003 | 155 | 204 |
| Net income | 71 | 391 | 604 | 113 | 96 |
| Net income per common share: | | | | | |
| Basic | 0.02 | 0.13 | 0.19 | 0.04 | 0.03 |
| Diluted | 0.02 | 0.12 | 0.19 | 0.03 | 0.03 |
| Weighted average shares of common stock outstanding: | | | | | |
| Basic | 3,039 | 3,098 | 3,169 | 3,133 | 3,285 |
| Diluted | 3,053 | 3,220 | 3,264 | 3,302 | 3,414 |
| | | | | | |
| Balance Sheet Data: | At December 31, | | | At March 31, | |
| | 2004 | 2005 | 2006 | 2006 (unaudited) | 2007 (unaudited) |
| | (In thousands) | | | | |
| Cash and cash equivalents | \$ 171 | \$ 265 | \$ 257 | \$ 229 | \$ 73 |
| Working capital | 2,878 | 3,123 | 4,151 | 3,320 | 4,305 |
| Total assets | 11,553 | 10,910 | 12,918 | 11,787 | 12,885 |
| Total current liabilities | 2,713 | 1,748 | 2,274 | 2,426 | 1,985 |
| Long-term obligations | 3,141 | 2,923 | 2,777 | 2,942 | 2,844 |
| Total shareholders’ equity | \$ 5,699 | \$ 6,238 | \$ 7,200 | \$ 6,419 | \$ 7,422 |

RISK FACTORS

This offering and an investment in our securities involves a high degree of risk. You should carefully consider the risks described below and the other information in this prospectus, including our consolidated financial statements and the related notes thereto included in those statements, as well as our filings with the Securities and Exchange Commission under the Exchange Act, before you purchase any of our common stock. The risks and uncertainties described below are not the only ones we face. Additional risks and uncertainties not presently known to us, or that we currently deem immaterial, could negatively impact our business, results of operations or financial condition in the future. If any of the following risks and uncertainties develops into actual events, our business, results of operations or financial condition could be adversely affected. In those cases, the trading price of our securities could decline, and you may lose all or part of your investment.

Risks Related to our Business and Industry

If demand declines for chemical vapor deposition, gas control and related equipment, or for carbon nanotube and nanowire deposition systems, our financial position and results of operations could be materially adversely affected.

Our products are utilized in the research, development and production of semiconductors and other electronic components such as solar cells, LEDs, carbon nanotubes and nanowires and MEMS, and equipment for surface mounting of components on to printed circuit boards. They are also used to reflow solder on printed circuit boards. Revenue from sales of our equipment used for research relating to, and manufacturing of, semiconductor and other electronic components was approximately 74% of our consolidated revenue in the year ended December 31, 2006, and is derived primarily from sales of customized chemical vapor deposition equipment, gas control systems, process equipment suitable for the synthesis of a variety of one-dimensional nanostructures and nanomaterials. A significant part of our growth strategy involves continued expansion of the sales of our products for research and development purposes by companies, university and government-funded research laboratories, as well as for production purposes. The availability of funds for these purposes may be subject to budgetary and political restrictions, as well as cost-cutting measures by manufacturers in the semiconductor and electronics industry.

If the availability of funds for research and development or the demand for capital equipment in the semiconductor and electronics industry declines, the demand for our products would also decline and our financial position and results of operations could be harmed.

The ongoing volatility of the semiconductor and electronics industry may negatively impact our business and results of operations and our corresponding ability to efficiently budget our expenses.

The semiconductor and electronics industry is highly cyclical. The demand for our products and the profitability of our products can change significantly from period to period as a result of numerous factors, including, but not limited to, changes in:

- the availability of funds for research and development;
- global and regional economic conditions;
- governmental budgetary and political constraints;
- changes in the capacity utilization and production volume of manufacturers of semiconductors, silicon wafers, solar cells, LEDS surface mount technology and MEMS;

· the profitability and capital resources of semiconductor and electronics manufacturers; and

· changes in technology.

For these and other reasons, our results of operations for past periods may not necessarily be indicative of future operating results.

Volatile demand for our products may make it difficult for us to accurately budget our expense levels, which are based in part on our projections of future revenues.

Demand for semiconductor and electronic manufacturing equipment and related consumable products may be volatile as a result of sudden changes in supply and demand, and other factors in the manufacturing processes. Our orders tend to be more volatile than our revenue, as any change in demand is reflected immediately in orders booked, which are net of cancellations, while revenue tends to be recognized over multiple quarters as a result of procurement and production lead times, and the deferral of certain revenue under our revenue recognition policies. The fiscal period in which we are able to recognize revenue is also at times subject to the length of time that our customers require to evaluate the performance of our equipment. This could cause our quarterly operating results to fluctuate.

When cyclical fluctuations result in lower than expected revenue levels, operating results may be adversely affected and cost reduction measures may be necessary in order for us to remain competitive and financially sound. During a down cycle, we must be able to make timely adjustments to our cost and expense structure to correspond to the prevailing market conditions. In addition, during periods of rapid growth, we must be able to increase manufacturing capacity and the number of our personnel to meet customer demand, which may require additional liquidity. We can provide no assurance, that these objectives can be met in a timely manner in response to changes within the semiconductor and electronics industry cycles. If we fail to respond to these cyclical changes, our business could be seriously harmed.

During the most recent down cycle in the semiconductor and electronics industry in 2001, this industry experienced a significant decrease in capital spending. We do not have long-term volume production contracts with our customers, and we do not control the timing or volume of orders placed by our customers. Whether and to what extent our customers place orders for any specific products, and the mix and quantities of products included in those orders are factors beyond our control. Insufficient orders would result in under-utilization of our manufacturing facilities and infrastructure, and will negatively affect our financial position and results of operations.

The semiconductor and electronics processing equipment industry is competitive and we are relatively small in size and have fewer resources in comparison with many of our competitors.

The semiconductor and electronics processing equipment industry includes large manufacturers with substantial financial, marketing and other resources to develop new products and to support customers worldwide. Our future performance depends, in part, upon our ability to continue to compete successfully worldwide. Some of our competitors are diversified companies that have substantially greater financial resources and more extensive research, engineering, manufacturing, marketing and customer service and support capabilities than we can provide. We face competition from companies whose strategy is to provide a broad array of products, some of which compete with the products and services that we offer, as well as companies, universities and research laboratories that have the capacity to design and build their own equipment internally. These competitors may bundle their products and services in a manner that may discourage customers from purchasing our products. In addition, we face competition from smaller emerging semiconductor and electronics processing equipment companies, whose strategy is to provide a portion of the products and services that we offer at often lower prices than ours, using innovative technology to sell products into specialized markets. Loss of competitive position could impair our prices, customer orders, revenue, gross margin and market share, any of which would negatively affect our financial position and results of operations. Our failure to compete successfully with these other companies would seriously harm our business. There is a risk that larger, better-financed competitors will develop and market more advanced products than those we currently offer, or that competitors with greater financial resources may decrease prices, thereby putting us under financial pressure.

The health and environmental effects of nanotechnology are unknown, and this uncertainty could adversely affect the expansion of our business.

The health effects of nanotechnology are unknown. There is no scientific agreement on the health effects of nanomaterials in general and carbon nanotubes, in particular, but some scientists believe that in some cases, nanomaterials may be hazardous to an individual's health or to the environment. The science of nanotechnology is based on arranging atoms in such a way as to modify or build materials not made in nature; therefore, the effects are unknown. Future research into the effects of nanomaterials in general, and carbon nanotubes in particular, on health and environmental issues, may have an adverse effect on products incorporating nanotechnology. Since part of our growth strategy is based on sales of research equipment for the production of carbon nanotubes and the sale of such materials, the determination that these materials are harmful could adversely affect the expansion of our business.

Risks Related to Our Company

We may experience increasing price pressure.

Our historical business strategy for many of our products has focused on product performance and customer service rather than on price. As a result of budgetary constraints, many of our customers are extremely price sensitive when purchasing of capital equipment. In addition, in our Conceptronic/Research division, we may face increased pricing pressure on our standardized products from competitors who have or are moving their manufacturing facilities to Asia. If we are unable to realize prices that allow us to continue to compete on the basis of product performance and customer service, our profit margins will be reduced.

We may not be able to keep pace with the rapid change in the technology we use in our products.

We believe that our continued success in the semiconductor and electronics processing equipment industry depends, in part, on our ability to continually improve existing technologies and to develop and manufacture new products and product enhancements on a timely and cost-effective basis. We must be able to introduce these products and product enhancements into the market in a timely manner, in response to customers' demands for higher-performance research and assembly equipment, customized to address rapid technological advances in capital equipment designs.

Technological innovations are inherently complex, and require long development cycles and appropriate professional staffing. Our future business success depends on our ability to develop and introduce new products (such as our Easy Tube product line sold by our CVD/First Nano division), or new uses for existing products, that successfully address changing customer needs. Our success also depends on our ability to achieve market acceptance of our new products. In order to maintain our success in the marketplace, we may have to substantially increase our expenditures on research and development. If we do not develop and introduce new products, technologies or uses for existing products in a timely manner and continually find ways to reduce the cost of developing and producing them in response to changing market conditions or customer requirements, our business could be seriously harmed.

If any of our customers cancel or fail to accept a large system order, our financial position and results of operations could be materially and adversely affected.

Our backlog, which largely consists of orders for large customized systems that include our chemical vapor deposition equipment and annealing and diffusion furnaces, which are built to client specifications, can have system prices of up to approximately \$1.0 million depending on the system configuration, specific options included and any special requirements of the customer. Because all of our backlogged orders are subject to cancellation or delay by the customer, our backlog at any particular point in time is not necessarily representative of actual sales for succeeding periods, nor does our backlog provide any assurance that we will realize a profit from completing these orders. Our financial position and results of operations could be materially and adversely affected should any large system order be cancelled prior to shipment, or not be accepted by the customer due to non-conformity with product specifications or otherwise. Likewise, a significant change in the liquidity or financial position of any of our customers that purchase large systems, could have a material impact on the collectibility of our accounts receivable and our future operating results. Our backlog does not provide any assurance that we will realize a profit from those orders, or indicate in which period revenue will be recognized.

Our success is highly dependent on the technical, sales, marketing and managerial contributions of key individuals, including Leonard A. Rosenbaum, Chairman of the Board of Directors, Chief Executive Officer and President, and we may be unable to retain these individuals or recruit others.

We depend on our senior executives, including Leonard A. Rosenbaum, our Chairman of the Board of Directors, Chief Executive Officer and President, and certain key managers as well as, engineering, research and development,

sales, marketing and manufacturing personnel, who are critical to our business. We do not have long-term employment agreements with our key employees. We presently have three separate key person life insurance policies on the life of Leonard A. Rosenbaum, for a total insured amount of \$9 million, which may not be sufficient to cover our loss of Mr. Rosenbaum's services. Furthermore, larger competitors may be able to offer more generous compensation packages to our executives and key employees, and therefore we risk losing key personnel to those competitors. If we were to lose the services of any of our key personnel, our engineering, product development, manufacturing and sales efforts could be slowed. We may also incur increased operating expenses, and be required to divert the attention of our senior executives to search for their replacements. The integration of any new personnel could disrupt our ongoing operations.

We may not be able to hire or retain the number of qualified personnel, particularly engineering personnel, required for our business, which would harm the development and sales of our products and limit our ability to grow.

Competition in our industry for senior management, technical, sales, marketing and other key personnel is intense. If we are unable to retain our existing personnel, or attract and train additional qualified personnel, our growth may be limited due to a lack of capacity to develop and market our products.

In particular, we have, from time to time, experienced difficulty in hiring and retaining skilled engineers with appropriate qualifications to support our growth strategy. Our success depends on our ability to identify, hire, train and retain qualified engineering personnel with experience in equipment design. Specifically, we need to continue to attract and retain mechanical, electrical, software and field service engineers to work with our direct sales force to technically qualify and perform on new sales opportunities and orders, and to demonstrate our products.

The substantial lead-time required for ordering parts and materials may lead to inventory problems.

The lead-time for ordering parts and materials for some of our products can be many months. As a result, we must order some components based on forecasted demand. If demand for our products lags significantly behind our forecasts, we may order more components than we require, which would result in cash flow problems as well as excess or obsolete inventory.

Acquisitions can result in an increase in our operating costs, divert management's attention away from other operational matters and expose us to other associated risks.

We continually evaluate potential acquisitions of businesses and technologies, and we consider targeted acquisitions that expand our core competencies to be an important part of our future growth strategy. In the past, we have made acquisitions of other businesses with synergistic products, services and technologies, and plan to continue to do so in the future. An example of this is our recent acquisition of the assets of First Nano, Inc. Acquisitions involve numerous risks, which include but are not limited to:

- difficulties and increased costs in connection with the integration of the personnel, operations, technologies and products of the acquired companies into our existing facilities and operations;
- diversion of management's attention from other operational matters;
- failure to commercialize the acquired technology;
- the potential loss of key employees of the acquired companies;
- lack of synergy, or inability to realize expected synergies, resulting from the acquisition;
- the risk that the issuance of our common stock, if any, in an acquisition or merger could be dilutive to our shareholders;
- the inability to obtain and protect intellectual property rights in key technologies; and

·the acquired assets becoming impaired as a result of technological advancements or worse-than-expected performance of the acquired assets.

Our financial position and results of operations may be materially harmed if we are unable to recoup our investment in research and development.

The rapid change in technology in our industry requires that we continue to make substantial investments in research and development and selective acquisitions of technologies and products, in order to enhance the performance and functionality of our product line, to keep pace with competitive products and to satisfy customer demands for improved performance, features and functionality. These efforts include those related to the development of technology for the commercialization of carbon nanotubes. There can be no assurance that revenue from future products or enhancements will be sufficient to recover the development costs associated with such products, enhancements or acquisitions, or that we will be able to secure the financial resources necessary to fund future research and development or acquisitions. Research and development costs are typically incurred before we confirm the technical feasibility and commercial viability of a product, and not all development activities result in commercially viable products. In addition, we cannot ensure that products or enhancements will receive market acceptance, or that we will be able to sell these products at prices that are favorable to us. Our business could be seriously harmed if we are unable to sell our products at favorable prices, or if our products are not accepted by the markets in which we operate.

If third parties violate our proprietary rights, in which we have made significant investments, or accuse us of infringing upon their proprietary rights, such events could result in a loss of value of some of our intellectual property or costly litigation.

Our success is dependent in part on our technology and other proprietary rights. We believe that while patents can be useful and may be utilized by us in the future, they are not always necessary or feasible to protect our intellectual property. The process of seeking patent protection is lengthy and expensive, and we cannot be certain that 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 to us. Instead, we have historically protected our proprietary information and intellectual property such as design specifications, blueprints, technical processes and employee know-how, by limiting access to this confidential information and trade secrets and through the use of non-disclosure agreements. Other companies and individuals, including our larger competitors, may develop technologies that are similar or superior to our technology, or design around the intellectual property that we own or license. Our failure to adequately protect our intellectual property, could result in the reduction or extinguishment of our rights to such intellectual property. We also assert rights to certain trademarks relating to certain of our products and product lines. We have not filed trademark applications to protect such marks with any governmental agency, including, but not limited to the U.S. Patent and Trademark Office. We claim copyright protection for certain proprietary software and documentation, but we have not filed any copyright applications with the U.S. Copyright Office in connection with those works. As a result, we can give no assurance that our trademarks and copyrights will be upheld or successfully deter infringement by third parties.

While patent, copyright and trademark protection for our intellectual property may be important, we believe our future success in highly dynamic markets is most dependent upon the technical competence and creative skills of our personnel. We attempt to protect our trade secrets and other proprietary information through confidentiality agreements with our customers, suppliers, employees and consultants, and through other internal security measures. However, these employees, consultants and third parties may breach these agreements, and we may not have adequate remedies for wrongdoing. In addition, the laws of certain territories in which we sell our products may not protect our intellectual property rights to the same extent as do the laws of the United States.

Occasionally, we may receive communications from other parties asserting the existence of patent rights or other intellectual property rights that they believe cover certain of our products, processes, technologies or information. If such cases arise, we will evaluate our position and consider the available alternatives, which may include seeking licenses to use the technology in question on commercially reasonable terms, or defending our position. Nevertheless, we cannot ensure that we will be able to obtain licenses, or if we are able to obtain licenses, that such licenses will be on acceptable terms, or that litigation or other administrative proceedings will not occur. Defending our intellectual property rights through litigation could be very costly. If we are not able to negotiate the necessary licenses on commercially reasonable terms or successfully defend our position, our financial position and results of operations could be materially and adversely affected.

Our reputation and operating performance may be negatively affected if our products are not timely delivered.

We provide complex products that often require substantial lead-time for design, ordering parts and materials, and for assembly and installation. The time required to design, order parts and materials and to manufacture, assemble and install our products, may in turn lead to delays or shortages in the availability of some products. If a product is delayed or is the subject of shortage because of problems with our ability to design, manufacture or assemble the product on a timely basis, or if a product or software otherwise fails to meet performance criteria, we may lose revenue opportunities entirely, or experience delays in revenue recognition associated with a product or service. In addition, we may incur higher operating expenses during the period required to correct the problem.

Our lengthy and variable sales cycle may make it difficult to predict our financial results.

The marketing, sale and manufacture of our products, often requires a lengthy sales cycle ranging from several months to over one year before we can complete production and delivery. The lengthy sales cycle makes forecasting the volume and timing of sales difficult, and raises additional risks that customers may cancel or decide not to enter into contracts. The length of the sales cycle depends on the size and complexity of the project, the customer's in-depth evaluation of our products. and, in some cases, the protractedness of a bidding process. Because a significant portion of our operating expenses are fixed, we may incur substantial expense before we earn associated revenue. If customer cancellations occur, they could result in the loss of anticipated sales without allowing us sufficient time to reduce our operating expenses.

We anticipate continued growth in our revenues and operations during the next few years. If we fail to manage our growth effectively, we may experience difficulty in filling customer orders, declining product quality, increased costs or other operating challenges.

We anticipate that continued growth of our operations will be required to satisfy our projected increase in demand for our products and to avail ourselves of new market opportunities. The expanding scope of our business and the growth in the number of our employees, customers and products have placed and will continue to place a significant strain on our management, information technology systems, manufacturing facilities and other resources. To properly manage our growth, we may need to hire additional employees, upgrade our existing financial and reporting systems and improve our business processes and controls. We may also be required to expand our manufacturing facilities or add new manufacturing facilities. Failure to effectively manage our growth could make it difficult to manufacture our products and fill orders, as well as lead to declines in product quality or increased costs; any of these would adversely impact our business and results of operations.

Historically, we have only manufactured in unit or small batch quantities. If we receive orders for a large number of our systems, we may not have the internal manufacturing capacity to fill these orders on a timely basis, if at all, and may be forced to subcontract or outsource some of the fabrication of these systems to third parties. We cannot assure you that we will be able to successfully subcontract or outsource the fabrication of our systems at a reasonable cost to us, or that such third parties will adhere to our quality control standards.

Our business might be adversely affected by our dependence on foreign business.

During the year ended December 31, 2006, 31% of our revenues came from foreign exports as compared with 29% for the year ended December 31, 2005.

Because a significant amount of our revenues are derived from international customers, our operating results could be negatively affected by a decline in the economies of any of the countries or regions in which we do business. Each region in the global semiconductor and electronics equipment market exhibits unique characteristics, which can cause capital equipment investment patterns to vary significantly from period to period. Periodic local or international

economic downturns, trade balance issues and political instability, as well as fluctuations in interest and currency exchange rates, could negatively affect our business and results of operations.

All of our sales historically have been priced in U.S. dollars. While our business has not been materially affected in the past by currency fluctuations, there is a risk that it may be materially adversely affected in the future. Such risks includes possible losses due to both currency exchange rate fluctuations and from possible social and political instability.

Failure to comply with the United States Foreign Corrupt Practices Act could subject us to penalties and other adverse consequences.

We are subject to the United States Foreign Corrupt Practices Act, which generally prohibits United States companies from engaging in bribery or other prohibited payments to foreign officials for the purpose of obtaining or retaining business. We have agreements with third parties and make sales in countries known to experience corruption, extortion, bribery, pay-offs, theft and other fraudulent practices. We can make no assurance, however, that our employees or other agents will not engage in such conduct for which we might be held responsible. If our employees or other agents are found to have engaged in such practices, we could suffer severe penalties and other consequences that may have a material adverse effect on our business, financial condition and results of operations.

If our critical suppliers fail to deliver sufficient quantities of quality materials and components in a timely and cost-effective manner, it could negatively affect our business.

We do not manufacture many components used in the production of our products, and consequently, we use numerous unrelated suppliers of materials and components. We generally do not have guaranteed supply arrangements with our suppliers. Because of the variability and uniqueness of our customer's orders, we try to avoid maintaining an extensive inventory of materials and components for manufacturing. While we are not dependent on any principal or major supplier for most of our material and component needs, switching over to an alternative supplier may take significant amounts of time and added expense, which could result in a disruption of our operations and adversely affect our business.

It is not always practical or even possible to ensure that component parts are available from multiple suppliers; accordingly, we procure some key parts from a single supplier or a limited group of suppliers. During the semiconductor and electronics market peak years, increases in demand for capital equipment resulted in longer lead-times for many important system components, which caused delays in meeting shipments to our customers. The delay in the shipment of even a few systems could cause significant variations in our quarterly revenue, operating results and the market value of our common stock.

We cannot assure you that our financial position and results of operations will not be materially and adversely affected if, in the future, we do not receive in a timely and cost-effective manner a sufficient quantity of quality component parts and materials to meet our production requirements.

We might require additional financing to expand our operations.

We may require additional financing to further implement our growth plans. We cannot assure you any additional financing will be available if and when required, or, even if available, that it would not materially dilute the ownership percentage of the then existing shareholders.

Cost of compliance with Section 404 of the Sarbanes-Oxley Act could adversely affect future operating results, the trading price of our common stock and failure to comply could result in loss of our stock market listing, civil penalties and other liabilities.

Section 404 of the Sarbanes-Oxley Act requires management to certify that it has tested and found the company's internal controls to be effective. It is also required that the company's independent auditors attest that such

management representations are reasonably founded. The adequacy of internal controls generally takes into consideration that the anticipated benefits of a control should outweigh the cost of that control. Auditing standards related to the internal control requirements of Section 404 of the Sarbanes Oxley Act will significantly increase the cost and time needed to comply with the requirements of Section 404. Based upon the existing deadlines, we must fully comply with all requirements of Section 404 (including provision of an auditor's attestation report), for our year ending December 31, 2008. Complying with these requirements is very complex, costly and time consuming and, if we are required to comply under the existing regulations, will have a material impact on our operating results. Failure to comply could result in civil penalties, loss of our listing on AMEX, and the imposition of possible litigation.

We face the risk of product liability claims.

The manufacture and sale of our products, which in operation may involve the use of toxic materials and extreme temperatures, involve the risk of product liability claims. For example, our rapid thermal processing systems are used to heat semiconductor materials to temperatures in excess of 1000° Celsius. In addition, a failure of one of our products at a customer site could interrupt the business operations of our customer. Our existing insurance coverage limits may not be adequate to protect us from all liabilities that we might incur in connection with the manufacture and sale of our products if a successful product liability claim or series of product liability claims were brought against us.

We are subject to environmental regulations, and our inability or failure to comply with these regulations could adversely affect our business.

We are subject to environmental regulations in connection with our business operations, including regulations related to the development and manufacture of our products and our customers' use of our products. Our failure or inability to comply with existing or future environmental regulations could result in significant remediation liabilities, the imposition of fines or the suspension or termination of development, manufacturing or use of certain of our products, or affect the operation of our facilities, use or value of our real property, each of which could damage our financial position and results of operations.

Risks Related to the Securities Offered Pursuant to this Prospectus

Our officers and directors may be able to block proposals for a change in control.

Leonard A. Rosenbaum, our founder, President and Chief Executive Officer and a director, beneficially owns approximately 40.5% of our outstanding common stock, 23.2% after this offering, assuming no exercise of the overallotment option, and our officers and directors as a group beneficially own approximately 48.1% of our outstanding common stock, 27.9% after this offering, assuming no exercise of the overallotment option, as of the date of this prospectus. Due to this concentration of ownership, Mr. Rosenbaum may be able to prevail on all matters requiring a shareholder vote, including:

the election of directors;

the amendment of our organizational documents; or

the approval of a merger, sale of assets or other major corporate transaction.

We do not intend to pay dividends on our common stock. You will realize a return on your investment only if our stock price appreciates and you sell.

Our policy is to retain earnings to provide funds for the operation and expansion of our business. We have never paid cash dividends on our common stock and do not anticipate that we will do so in the foreseeable future. The payment of dividends in the future will depend on our growth, profitability, financial condition and other factors that our Board of Directors may deem relevant.

Because our common stock has low trading volume and its public trading price has been volatile, you may only be able to resell shares of our common stock at a loss.

During the year ended December 31, 2006, the sale price of our common stock fluctuated between \$2.25 and \$7.13 per share, with an average monthly trading volume during such period of approximately 350,000 shares, ranging from

a low of 49,400 shares in March 2006 to 1,762,900 in December 2006. In addition to general market volatility, many factors may have significant adverse effects on the market price of our stock, including:

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- actual or anticipated variations in quarterly operating results;
- changes in financial estimates by securities analysts;
- announcements of significant acquisitions, strategic partnerships, joint ventures or capital commitments by us or our competitors;
- issuance of debt or equity securities;
- new products or services offered by us or our competitors; and
- other events or factors, many of which are beyond our control.

Broad market and industry factors may negatively affect the market price of our common stock, regardless of our actual operating performance. In the past, following a period of volatility in the market price of a company's securities, securities class action litigation has often been instituted against such companies. This type of litigation, if instituted, could result in substantial costs and a diversion of management's attention and resources, which would harm our business.

Shares eligible for sale in the future could negatively effect our stock price.

The market price of our common stock could decline as a result of sales of a large number of shares of our common stock, including sales of shares as a result of this offering, or the perception that these sales may occur. Leonard A. Rosenbaum, our Chairman of the Board, President, and Chief Executive Officer, beneficially owns approximately 40.5% of our outstanding common stock, prior to this offering. In the event Mr. Rosenbaum elects to sell a significant number of these shares on the open market following expiration of his lock-up agreement, our stock price could be negatively affected. This may also make it more difficult to raise funds through the issuance of debt or the sale of equity securities.

Our management will have broad discretion as to the use of proceeds from this offering, and might not apply the proceeds in ways that increase the value of your investment.

Our management will have broad discretion to use the net proceeds from this offering, and you will be relying on the judgment of our management regarding the application of these proceeds. We might not apply the net proceeds of this offering in ways that you agree, or in ways that increase the value of your investment. We expect to use the proceeds of this offering for general corporate purposes and working capital, research and development and possible future acquisition. See "*Use of Proceeds*". We have not allocated these net proceeds for any specific purposes. Our management might not be able to yield a significant return, if any, on any investment of these proceeds.

USE OF PROCEEDS

In this offering, we estimate that the net proceeds to us from the sale of shares of our common stock will be approximately \$_____, assuming a public offering price of \$_____ per share (the last reported sale price of our common stock on the AMEX on _____, 2007) and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us.

The net proceeds will be used for general corporate purposes. We will have broad discretion as to the use of these proceeds and may apply them to product development efforts, acquisitions or strategic alliances. We have no definitive agreements with respect to future acquisitions or future strategic alliances and have no commitments with respect to these net proceeds.

We will not receive any of the proceeds from the sale of common stock, if any, by the selling shareholders upon the exercise of the underwriter's overallotment option.

PRICE RANGE OF COMMON STOCK

Our common stock is traded on the American Stock Exchange (“AMEX”) under the symbol CVV. The following table sets forth, for the periods indicated, the high and low closing prices per share of the common stock as reported on the AMEX.

| | High | Low |
|--|-------------|------------|
| <i>Fiscal Year 2005</i> | | |
| First Quarter ended March 31, 2005 | \$ 5.25 | \$ 0.91 |
| Second Quarter ended June 30, 2005 | 6.51 | 2.04 |
| Third Quarter ended September 30, 2005 | 4.30 | 1.90 |
| Fourth Quarter ended December 31, 2005 | 4.60 | 2.72 |
| <i>Fiscal Year 2006</i> | | |
| First Quarter ended March 31, 2006 | 4.21 | 2.80 |
| Second Quarter ended June 30, 2006 | 4.22 | 2.80 |
| Third Quarter ended September 30, 2006 | 3.69 | 2.25 |
| Fourth Quarter ended December 31, 2006 | 7.13 | 3.09 |
| <i>Fiscal Year 2007</i> | | |
| First Quarter ended March 31, 2007 | 6.21 | 4.90 |
| Second Quarter ended June 30, 2007 | 8.95 | 5.25 |

On July 2, 2007, the last sale price of our common stock reported on the AMEX was \$5.30 per share. As of July 2, 2007, we had approximately 76 holders of record of our common stock.

DIVIDEND POLICY

We have never paid dividends on our common stock and currently intend to retain any future earnings for use in our business. There can be no assurance that we will ever pay dividends on our common stock. Our dividend policy with respect to our common stock is within the discretion of our Board of Directors, and its policy with respect to dividends in the future will depend on numerous factors including earnings, cash balances, financial requirements and general business conditions.

CAPITALIZATION

The following table sets forth our capitalization as of March 31, 2007. Our capitalization is presented on an historical basis and on an as-adjusted basis to give effect to the sale of 2,500,000 shares of common stock, based on an assumed public offering price of _____ per share, as if the offering has been completed as of March 31, 2007 and assuming:

- the net proceeds of the offering are \$____ million, after deducting the estimated underwriting discounts and commissions and estimated offering expenses of \$____; and
- the application of the net proceeds of this offering to the uses described in “*Use of Proceeds.*”

The following data should be read together with our consolidated financial statements and the related notes thereto included elsewhere in this prospectus.

| | March 31, 2007 (unaudited) | |
|---|---|--------------------|
| | Actual | As Adjusted |
| | (Dollar amounts in thousands, except per share data) | |
| Long-Term Debt, net of current portion | \$ | 2,844 |
| | | |
| Shareholders' Equity | | |
| Common stock, par value \$0.01 per share, 10,000,000 shares authorized, 3,303,500 shares issued and outstanding | | 33 |
| Preferred stock, par value \$0.01 per share; 500 shares Class A Preferred stock authorized, no shares issued and outstanding; 250 shares Class B Preferred Stock authorized, no shares issued and outstanding | | |
| Additional paid-in capital | | 3,531 |
| Retained earnings | | 3,858 |
| Total shareholders' equity | | 7,422 |
| | | |
| Total capitalization (1) | | |
| Book value per common share | | 2.25 |
| Diluted book value per common share (2) | | 2.17 |

(1) Includes total shareholders' equity and long-term indebtedness.

(2) Includes options, the exercise prices of which were below the market price of the common stock as of March 31, 2007.

SELECTED CONSOLIDATED FINANCIAL DATA

We derived the consolidated operating data for the years ended December 31, 2002, 2003, 2004, 2005 and 2006 and the consolidated balance sheet data as of December 31, 2002, 2003, 2004, 2005 and 2006 from our audited consolidated financial statements. The selected consolidated operating data for the years ended December 31, 2004, 2005 and 2006 and the selected consolidated balance sheet data as of December 31, 2005 and 2006 are derived from our audited consolidated financial statements that appear elsewhere in this prospectus. The selected consolidated operating data for the years ended December 31, 2002 and 2003 and the selected consolidated balance sheet data as of December 31, 2002, 2003 and 2004, are derived from our audited financial statements not incorporated into this prospectus. The selected consolidated operating data as and for the three months ended March 31, 2006 and 2007 and the selected consolidated balance sheet data as of March 31, 2006 and 2007 are derived from our unaudited financial statements which appear elsewhere in this prospectus. Our historical results are not necessarily indicative of our results for any future period.

The following selected consolidated financial data should be read in conjunction with the section of this prospectus entitled “*Management’s Discussion and Analysis of Financial Condition and Results of Operations,*” and our consolidated financial statements (including the related notes thereto) included elsewhere in this prospectus.

| | Years Ended December 31, | | | | | Three Months Ended March 31, (Unaudited) | |
|---|--------------------------|----------|----------|-----------|-----------|--|----------|
| | 2002 | 2003 | 2004 | 2005 | 2006 | 2006 | 2007 |
| (In thousands, except percentages and per share data) | | | | | | | |
| Operating Data: | | | | | | | |
| Revenues | \$ 9,242 | \$ 9,788 | \$ 9,874 | \$ 11,225 | \$ 13,356 | \$ 3,211 | \$ 3,811 |
| Gross profit | 3,037 | 2,304 | 3,325 | 3,870 | 4,684 | 1,070 | 1,256 |
| Gross profit % | 32.9% | 23.5% | 33.7% | 34.5% | 35.1% | 33.3% | 33.0% |
| Operating expenses | 3,370 | 2,904 | 2,943 | 3,247 | 3,681 | 915 | 1,052 |
| Operating income (loss) | (334) | (601) | 382 | 623 | 1,003 | 155 | 204 |
| Other income | 544 | 310 | 26 | 51 | 116 | 75 | 5 |
| Total other income, expense net | 432 | 102 | (186) | (167) | (106) | 19 | (48) |
| Income (loss) before tax (expense) benefit | 98 | (498) | 196 | 455 | 897 | 174 | 156 |
| Net income (loss) | 168 | (337) | 71 | 391 | 604 | 113 | 96 |
| Earnings (loss) per share: | | | | | | | |
| Basic earnings (loss) per share | 0.06 | (0.11) | 0.02 | 0.13 | 0.19 | 0.04 | 0.03 |
| Diluted earnings (loss) per share | 0.05 | (0.11) | 0.02 | 0.12 | 0.19 | 0.03 | 0.03 |

| | At December 31, (In thousands) | | | | | At March 31, (Unaudited) | |
|----------------------------|--------------------------------|----------|----------|----------|----------|--------------------------|----------|
| | 2002 | 2003 | 2004 | 2005 | 2006 | 2006 | 2007 |
| Balance Sheet Data: | | | | | | | |
| Cash and cash equivalents | \$ 324 | \$ 321 | \$ 171 | \$ 265 | \$ 257 | \$ 229 | \$ 73 |
| Working capital | 3,230 | 2,857 | 2,878 | 3,123 | 4,151 | 3,320 | 4,305 |
| Total assets | 11,428 | 10,325 | 11,553 | 10,910 | 12,918 | 11,787 | 12,885 |
| Total current liabilities | 1,948 | 1,360 | 2,713 | 1,748 | 2,274 | 2,426 | 1,985 |
| Long-term obligations | 3,514 | 3,336 | 3,141 | 2,923 | 2,777 | 2,942 | 2,844 |
| Total shareholders’ equity | \$ 5,965 | \$ 5,629 | \$ 5,699 | \$ 6,238 | \$ 7,200 | \$ 6,419 | \$ 7,422 |

SELECTED QUARTERLY CONSOLIDATED FINANCIAL DATA

The following table presents unaudited quarterly financial information for each of the nine quarters ended March 31, 2007. In the opinion of management, this information contains all adjustments, consisting only of normal recurring adjustments, necessary for a fair presentation thereof. The operating results are not necessarily indicative of results for any future periods. Quarter-to-quarter comparisons should not be relied upon as indicators of future performance. Our operating results are subject to quarterly fluctuations as a result of a number of factors. See “*Risk Factors.*”

| | For the Quarter Ended | | | | | | | | |
|---------------------------------|--|----------|----------|----------|----------|----------|----------|----------|----------|
| | 2005 | | | | 2006 | | | | 2007 |
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 |
| Operating Data: | (In thousands, except percentages and per share data) | | | | | | | | |
| Revenues | \$ 2,398 | \$ 3,009 | \$ 2,851 | \$ 2,967 | \$ 3,211 | \$ 3,111 | \$ 3,636 | \$ 3,398 | \$ 3,811 |
| Gross profit | 771 | 1,214 | 937 | 947 | 1,070 | 1,066 | 1,417 | 1,131 | 1,256 |
| Gross profit % | 32.2% | 40.4% | 32.9% | 31.9% | 33.3% | 34.3% | 39.0% | 33.3% | 33.0% |
| Operating expenses | 711 | 799 | 882 | 855 | 915 | 942 | 963 | 861 | 1,052 |
| Operating income | 60 | 415 | 55 | 92 | 155 | 125 | 454 | 270 | 204 |
| Total other income (expense) | (58) | (46) | (31) | (32) | 19 | (47) | (48) | (30) | (48) |
| Income before tax | 2 | 369 | 24 | 60 | 174 | 77 | 406 | 239 | 156 |
| Net income | 1 | 293 | 35 | 62 | 113 | 23 | 229 | 239 | 96 |
| Earnings per share: | | | | | | | | | |
| Basic earnings per share | ¾ | 0.09 | 0.01 | 0.03 | 0.04 | 0.01 | 0.07 | 0.07 | 0.03 |
| Diluted earnings per share | ¾ | 0.09 | 0.01 | 0.02 | 0.03 | 0.01 | 0.07 | 0.07 | 0.03 |

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion of our financial condition and results of operations should be read in conjunction with our consolidated financial statements and the related notes attached hereto. This discussion contains forward-looking statements, which involve risk and uncertainties. Our actual results could differ materially from those anticipated in the forward-looking statements as a result of certain factors including, but not limited to, those discussed in "Risk Factors" and elsewhere in this prospectus.

Introduction

Our Management's Discussion and Analysis of Financial Condition and Results of Operation ("MD&A") is intended to facilitate an understanding of our business and results of operations. MD&A consists of the following sections:

- Overview: a summary of our business;
- Results of Operations: a discussion of operating results;
- Liquidity and Capital Resources: an analysis of cash flows, sources and uses of cash and financial position;
- Contractual Obligations and Commercial Commitments;
- Critical Accounting Policies: a discussion of critical accounting policies that require the exercise of judgments and estimates;
- Impact of Recently Issued Accounting Pronouncements: a discussion of how we may be affected by recent pronouncements; and
- Quantitative and Qualitative Disclosures About Market Risk.

Overview

We design and manufacture customized state-of-the-art equipment used in the development, design and manufacture of advanced electronic components, materials and coatings for research and industrial applications. We offer a broad range of chemical vapor deposition, gas control and other equipment that is used by our customers to research, design and manufacture semiconductors, solar cells, carbon nanotubes, nanowires, LEDs and MEMS and industrial coatings, as well as equipment for surface mounting of components onto printed circuit boards. Our proprietary products are customized to meet the particular specifications of individual customers or manufactured as standardized products.

Based on our 25 years of experience, we provide leading-edge design and manufacturing solutions to our customers. We use our engineering, design and manufacturing expertise to provide technologically advanced equipment that enables laboratory and research scientists to develop the precise processes for the manufacture of next generation semiconductors and other electronic components as well as solar and energy applications and industrial applications. We also develop and manufacture production equipment based on our designs. We have built a significant library of design expertise, know-how and innovative solutions to assist our customers in developing these intricate processes. This library of solutions, along with our vertically integrated manufacturing facilities, allows us to provide superior design and manufacturing solutions to our customers on a cost effective basis.

For the three-year period 2004 to 2006, our revenues increased from \$9.9 million to \$13.4 million while our net pretax income increased from \$196,000 to \$897,000. We plan to continue building on this growth through expanded product

offerings, increased marketing efforts and increased foreign sales as well as through current and expected product developments in our research laboratory.

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In the fourth quarter of 2006, we began implementing a strategy to target opportunities in the research and development market, with a focus on higher-growth applications such as carbon nanotubes, nanowires, MEMS and LEDs. Our initial strategy is to introduce a line of proprietary standardized products and systems targeted for this market. Historically, we have manufactured our products for this market on a custom one-at-a-time basis to meet individual customers' specific research requirements. Our new proprietary systems leverage the technological expertise we have developed through designing these custom systems onto a standardized basic core. This core can be easily adapted through a broad array of available add-on options to meet the diverse product and budgetary requirements of the research community. By manufacturing the basic core of these systems in higher volumes, we are able to reduce both the cost and delivery time for our systems. These systems, which we market and sell under the "EasyTube" product line, are sold to researchers at universities and laboratories in the United States and throughout the world.

Our core competencies in equipment design, as well as in software and systems manufacturing are used to engineer our finished products. Our proprietary Windows-based, real-time software application allows for rapid configuration and provides our customers with powerful tools to understand, optimize and repeatedly control their processes. Our vertically integrated manufacturing process allows us to control the process from the raw material stage, to when we send out finished products. This integrated process significantly reduces our costs, improves our quality and reduces the time it takes to fill and ship a customer's order.

In the fourth quarter of 2006, we began to broaden our First Nano product line and pursue a significantly larger share of the research and development market with additional equipment platforms under the First Nano EasyTube brand name. We have begun to market, quote and manufacture these products. In July 2007, we plan to ship the first model of a new series of products intended for the research and development market. We believe we will be successful with the multiple new products to be offered, as their design will be based on building blocks we have used in our previous systems over the years.

To support the increase in our existing product sales and the development and sales of the new First Nano products, we will need to increase our manufacturing capacity, hire additional personnel and expand our advertising, trade show and marketing budgets. Additionally, our First Nano research laboratory is being expanded with both additional laboratory test equipment, and the new First Nano products for demonstration purposes, we believe that this will help us remain in the forefront of carbon nanotube and nanowire research and production.

Operating Divisions

We conduct our operations through three divisions: (1) CVD, including the First Nano product line ("CVD/First Nano"); (2) Stainless Design Concept ("SDC"); and (3) Conceptronic, including the Research International product line ("Conceptronic/Research"). Each division operates on a day-to-day basis with its own operating manager, while product development, sales and administration are managed at the corporate level.

CVD/First Nano is a supplier of state-of-the-art chemical vapor deposition systems for use in the research and development and manufacturing of semiconductors, LEDs, carbon nanotubes, nanowires, solar cells, MEMS and a number of industrial applications. We use our expertise in the design and manufacture of chemical vapor deposition systems to work with laboratory scientists to bring state-of-the-art processes from the research laboratory into production, and to provide production equipment based on our designs.

SDC designs and manufactures ultra-high purity gas and chemical delivery control systems for state-of-the-art semiconductor fabrication processes, LEDs, carbon nanotubes, nanowires, solar cells and a number of industrial applications. Our systems are sold both on a stand-alone basis as well as together with our CVD/First Nano systems. In addition, SDC's field service group provides our customers with high purity equipment installations, contract maintenance and equipment removal. SDC operates out of a 22,000 square foot facility fitted with Class 10 and Class 100 clean room manufacturing space.

Conceptronic/Research designs and manufactures reflow ovens and rework stations for the printed circuit board assembly and semiconductor packaging industries. Our equipment is designed to melt solder in a controlled process to form superior connections between components, which creates complete electronic circuits for computers and telecommunications systems, as well as for the automotive and defense industries.

We also offer customized products for complex applications within the printed circuit board and other industries that use conveyor-type ovens in heating and drying applications.

Results of Operations

The following table sets forth certain operational data as a percentage of revenue for the periods indicated:

| | Years Ended December 31, | | |
|--|--------------------------|--------|--------|
| | 2004 | 2005 | 2006 |
| Total revenue | 100.0% | 100.0% | 100.0% |
| Cost of sales | 66.3% | 65.5% | 64.9% |
| Gross margin | 33.7% | 34.5% | 35.1% |
| Selling, general and administrative expenses | 29.8% | 28.9% | 27.6% |
| Operating income | 3.9% | 5.5% | 7.5% |
| Interest and other income (expense), net | 1.9% | 1.5% | 0.8% |
| Income before income taxes | 2.0% | 4.1% | 6.7% |
| Income tax (expense) | 1.3% | 0.6% | 2.2% |
| Net income | 0.7% | 3.5% | 4.5% |

Three Months Ended March 31, 2007 compared to Three Months Ended March 31, 2006

Revenue

We recognize revenues and income using the percentage-of-completion method for custom production-type contracts while revenues from other products are recorded when such products are accepted and shipped. Revenues on custom production-type contracts are recorded on the basis of our estimates of the percentage-of-completion of individual contracts, commencing when progress reaches a point where experience is sufficient to estimate final results with reasonable accuracy. Under this method, revenues are recognized based on costs incurred to date compared with total estimated costs.

The following table illustrates revenue by division for the three months ended March 31, 2006 and 2007.

| Revenue | Three Months Ended March 31, | | | |
|--------------------------------|------------------------------------|----------|----------|-------|
| | 2006 | 2007 | Increase | % |
| | (In thousands, except percentages) | | | |
| CVD/ First Nano division | \$ 1,862 | \$ 2,113 | \$ 251 | 13.5% |
| SDC division | 683 | 823 | 140 | 20.5% |
| Conceptronic/Research division | 799 | 931 | 132 | 16.5% |
| Eliminations | (133) | (56) | 77 | |
| Total revenue | \$ 3,211 | \$ 3,811 | \$ 600 | 18.7% |

Overall revenue growth for the three-month period ended March 31, 2007, was 18.7%, an increase of \$600,000 from the three months ended March 31, 2006. This increase was primarily attributable to higher sales of our products across all divisions.

Gross Profit

Gross profit is the difference between revenue and cost of goods sold. Cost of goods sold consists of purchased material, labor and overhead to manufacture equipment or spare parts, cost of service, as well as factory and field support to customers under warranty. It also includes installation and paid service calls.

The following table illustrates our gross profit by division for the three months ended March 31, 2006 and 2007:

| Gross Profit by Division | Three Months Ended March 31, | | | |
|--------------------------------|------------------------------------|----------|----------|--------|
| | 2006 | 2007 | Increase | % |
| | (In thousands, except percentages) | | | |
| CVD/ First Nano division | \$ 872 | \$ 874 | \$ 2 | 0% |
| SDC division | 70 | 163 | 93 | 132.9% |
| Conceptronic/Research division | 128 | 219 | 91 | 71.1% |
| Total | \$ 1,070 | \$ 1,256 | \$ 186 | 17.3% |
| Gross Margin | 33.0 | | | |