

CVD EQUIPMENT CORP
Form 424B5
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Registration Statement No. 333-172252

Prospectus Supplement
(To Prospectus dated February 14, 2011)

841,695 Shares
Common Stock
\$10.50 per Share

We are offering 841,695 shares of our common stock, par value \$0.01 per share, pursuant to this prospectus supplement and the accompanying prospectus.

Our common stock is listed on the NASDAQ Capital Market under the symbol "CVV." On May 23, 2011, the last reported sale price of our common stock on the NASDAQ Capital Market was \$11.41 per share.

As of May 23, 2011, the aggregate market value of our outstanding common equity held by non-affiliates was approximately \$36,541,426 based on 4,859,275 shares of outstanding common stock, of which 1,656,696 shares are held by affiliates, and a price of \$11.41 per share, which was the last reported sale price of our common stock on the NASDAQ Capital Market on May 23, 2011. As of the date of this prospectus supplement, we have not sold any securities pursuant to General Instruction I.B.6. of Form S-3 during the prior 12 calendar month period that ends on, and includes, the date of this prospectus supplement.

Investing in our common stock involves a high degree of risk. See "Risk factors" beginning on page S-7 of this prospectus supplement.

	Per Share	Total
Public offering price	\$10.50	\$8,837,798
Underwriting discounts and commissions	\$ 0.63	\$ 530,268
Proceeds, before expenses, to CVD Equipment Corporation	\$ 9.87	\$8,307,530

We have granted ThinkEquity LLC, as the sole underwriter, an option, for a period of 30 days, to purchase an aggregate of up to 126,255 additional shares of our common stock on the same terms and conditions set forth above to cover over-allotments, if any.

ThinkEquity LLC expects to deliver the shares on or about May 27, 2011.

Neither the U.S. Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus supplement is truthful or complete. Any representation to the contrary is a criminal offense.

ThinkEquity LLC

May 23, 2011

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About this prospectus supplement

This prospectus supplement and the accompanying prospectus are part of a registration statement on Form S-3 (Registration File No. 333-172252) that we filed with the Securities and Exchange Commission ("SEC") utilizing a "shelf" registration process. Under this shelf registration process, we may, from time to time, sell shares of our common stock and preferred stock, various series of debt securities and/or warrants to purchase any of such securities, either individually or in units, in one or more offerings, up to a total dollar amount of \$20,000,000.

This document is in two parts. The first part is the prospectus supplement, including the documents incorporated by reference, which describe the specific terms of this offering. The second part, the accompanying prospectus, including the documents incorporated by reference, provides more general information. Generally, when we refer to this prospectus, we are referring to both parts of this document combined. We urge you to carefully read this prospectus supplement and the accompanying prospectus, and the documents incorporated herein and therein, before buying any of the securities being offered under this prospectus supplement. This prospectus supplement may add, update or change information contained in the accompanying prospectus. To the extent that any statement that we make in this prospectus supplement is inconsistent with statements made in the accompanying prospectus or any documents incorporated by reference therein, the statements made in this prospectus supplement will be deemed to modify or supersede those made in the accompanying prospectus and such documents incorporated by reference therein.

You should rely only on the information contained in or incorporated by reference in this prospectus supplement and the accompanying prospectus. We have not authorized anyone to provide you with different information. We are not making an offer of these securities in any state or jurisdiction where the offer is not permitted. You should not assume that the information contained in this prospectus supplement or the accompanying prospectus is accurate as of any date other than the date on the front of the applicable document or that any information we have incorporated by reference in this prospectus supplement or the accompanying prospectus is accurate as of any date other than the date of the document incorporated by reference. Our business, financial condition, results of operations and prospects may have changed since those dates. You should also read and consider the information in the documents we have referred you to in the section of the accompanying prospectus entitled "Where you can find additional information."

No action is being taken in any jurisdiction outside the United States to permit a public offering of the common stock or possession or distribution of this prospectus supplement or the accompanying prospectus in that jurisdiction. Persons who come into possession of this prospectus supplement or the accompanying prospectus in jurisdictions outside the United States are required to inform themselves about and to observe any restrictions as to this offering and the distribution of this prospectus supplement or the accompanying prospectus applicable to that jurisdiction.

As used in this prospectus, "CVD," "we," "our" and "us" refer to CVD Equipment Corporation, unless stated otherwise or the context requires otherwise.

Prospectus supplement summary

This summary highlights selected information contained elsewhere or incorporated by reference in this prospectus supplement and the accompanying prospectus. This summary may not contain all the information that you should consider before investing in our common stock. You should read the entire prospectus supplement and the accompanying prospectus carefully, including “Risk factors” contained in this prospectus supplement, the accompanying prospectus and the documents incorporated by reference herein and therein and the financial statements incorporated by reference in this prospectus supplement and the accompanying prospectus, before making an investment decision. This prospectus supplement may add to, update or change information in the accompanying prospectus.

Our Company

We design, develop and manufacture both standard and custom state-of-the-art equipment and process solutions used to develop and manufacture advanced solar, nano electronic components, materials and coatings for research and industrial applications, with the focus on enabling tomorrow’s technologies™. 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, smart glass, carbon nanotubes, nanowires, LEDs, MEMS and industrial coatings, as well as equipment for surface mounting of components onto printed circuit boards. Through our Application Laboratory, we can provide process development support and process startup assistance. Our proprietary products are generally customized to meet the particular specifications of individual customers and to accelerate the commercialization of their proprietary intellectual property.

Based on more than 28 years of experience, we use our engineering, manufacturing and process development to transform new applications into leading-edge manufacturing solutions. This enables university, research and industrial scientists at the cutting edge of technology to develop next generation solar, nano, LEDs, semiconductors and other electronic components. We also develop and manufacture research and production equipment based on our proprietary designs.

We have built a significant library of design expertise, know-how and innovative solutions to assist our customers in developing these intricate processes and to accelerate their commercialization. This library of solutions, along with our vertically integrated manufacturing facilities, allows us to provide superior design, process and manufacturing solutions to our customers on a cost effective basis.

Part of our strategy is to target opportunities in the research and development and production equipment market, with a focus on higher-growth applications such as solar and smart glass coatings, carbon nanotubes, nanowires, grapheme, MEMS and LEDs. To expand our penetration into these growth markets, we have a line of proprietary standard products and systems. Historically, we manufactured products on a custom one-at-a-time basis to meet an individual customer’s specific research requirements. Our proprietary systems leverage the technological expertise that we have developed through designing these custom systems onto a standardized basic core. This core is 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, research laboratories, and startup companies in the United States and throughout the world.

Sales of our proprietary standard, custom systems and process solutions have been driven by building on the success of our installed customer base, which includes several Fortune 500 companies. Historically, revenues have grown primarily through sales to existing customers with additional capacity needs or new requirements, as well as to new

customers. However, with the proprietary solutions and our expanded focus on “accelerating the commercialization of tomorrow’s technologies” we are developing an additional new customer base. We have generally gained new customers through word of mouth, the movement of personnel from one company to another; limited print advertising and trade show attendance. We are now also gaining new customers by awareness of our company in the marketplace with results from our Application Laboratory, partnerships with startup companies, increased participation in trade shows and expanded internet advertising.

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Prospectus supplement summary

The core competencies we have developed in equipment and software design, as well as in systems manufacturing and process solutions, are used to engineer our finished products and to accelerate the commercialization path of our customer base. 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 cost, improve quality and reduce the time it takes from customer order to shipment of our products. Our Application Laboratory allows selected customers to bring up their process tools in our Application Laboratory and to work together with our scientists and engineers to optimize process performance.

We conduct our operations through three divisions: (1) CVD, which includes our First Nano product line (“CVD/First Nano”); (2) Stainless Design Concept (“SDC”); and (3) Conceptronic, (“Conceptronic”). 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.

Operating Divisions

CVD/First Nano is a supplier of state-of-the-art chemical vapor deposition systems for use in the research, development and manufacturing of semiconductors, LEDs, carbon nanotubes, nanowires, solar cells and a number of industrial applications. We utilize 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, as well as to provide production equipment and process solutions based on our designs. CVD/First Nano also operates our Application Laboratory in a separate building where our personnel interact effectively with the scientists and engineers of our customer base.

SDC designs and manufactures ultra-high purity gas and chemical delivery control systems for state-of-the-art semiconductor fabrication processes, solar cells, LEDs, carbon nanotubes, nanowires, and a number of industrial applications. Our SDC products are sold on a stand-alone basis, as well as together with our CVD/First Nano systems. SDC operates out of a facility fitted with Class 10 and Class 100 clean room manufacturing space located in Saugerties, New York.

Conceptronic designs and manufactures reflow ovens and rework stations for the printed circuit board assembly and semi-conductor packaging industries. Our equipment is designed to melt solder in a controlled process to form superior connections between components. This, in turn, creates complete electronic circuits for computers and telecommunication systems, as well as for the automotive and defense industries. To address pricing pressure in what is now a mature industry for standardized reflow ovens and the current economic downturn, we have begun to offer customized products for complex heating and drying applications.

Principal Products

Chemical Vapor Deposition - A process which passes a gaseous compound over a target material surface that is heated to such a degree that the compound decomposes and deposits a desired layer onto substrate material. The process is accomplished by combining appropriate gases in a reaction chamber, of the kind produced by the Company, at

elevated temperatures (typically 150-1,800 degrees Celsius). Our Chemical Vapor Deposition systems are complete and include all necessary instrumentation, subsystems and components and include state-of-the-art process control software. We provide both standard and specifically engineered products for particular customer applications. Some of the standard systems we offer are for Silicon, Silicon-Germanium, Silicon Dioxide, Silicon Nitride, Polysilicon, Liquid Phase Epitaxial, Metalorganic Chemical Vapor Deposition, Carbon Nanotubes, Graphene Nanowires, Solar Cell research and Solar material quality control.

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Prospectus supplement summary

Our Chemical Vapor Deposition systems are available in a variety of models that can be used in laboratory research and production. All models are offered with total system automation, a microprocessor control system by which the user can measure, predict and regulate gas flow, temperature, pressure and chemical reaction rates, thus controlling the process in order to enhance the quality of the materials produced. Our standard microprocessor control system is extremely versatile and capable of supporting the complete product line and most custom system requirements. These Chemical Vapor Deposition systems are typically priced between \$60,000 and \$500,000.

Rapid Thermal Processing (“RTP”) - Used to heat semiconductor materials to elevated temperatures of 1,000 degrees Celsius at rapid rates of up to 200 degrees Celsius per second. Our RTP systems are offered for implant activation, oxidation, silicide formation and many other processes. We offer systems that can operate both at atmospheric or reduced pressures. Our RTP systems are priced up to \$600,000.

Annealing and Diffusion Furnaces - Used for diffusion, oxidation, implant anneal, solder reflow, solar cell manufacturing and other processes. The systems are normally operated at atmospheric and/or reduced pressure with gaseous atmospheres related to the process. An optional feature of the system allows for the heating element to be moved away from the process chamber allowing the wafers to rapidly cool or be heated in a controlled environment. Our cascade temperature control system enables more precise control of the wafers. The systems are equipped with an automatic process controller, permitting automatic process sequencing and monitoring with safety alarm provisions. Our annealing and diffusion furnace systems are priced up to \$900,000.

Ultra-high Purity Gas and Liquid Control Systems - Our standard and custom designed gas and liquid control systems, which encompass, gas cylinder storage cabinets, custom gas and chemical delivery systems, gas and liquid valve manifold boxes and gas isolation boxes, provide safe storage and handling of pressurized gases and chemicals. Our system design allows for automatic or manual control from both a local and remote location. A customer order often includes multiple systems and can total up to \$1,000,000.

Quartz ware - We provide standard and custom fabricated quartz ware used in our equipment and other customer tools. We also provide repair and replacement of existing quartz ware.

Convection Furnaces – We provide proprietary reflow ovens used by the printed circuit board assembly and semiconductor packaging industries.

Reflow Furnaces and Rework Stations – We provide standard and custom systems for the printed circuit board and surface mount technology industries. Our equipment is designed to melt solder in a controlled process to form superior connections between components, creating complete electronic circuits for computers and telecommunication systems, as well as for the automotive and defense industries.

We were incorporated in New York on October 13, 1982. Our principal executive office is located at 1860 Smithtown Avenue, Ronkonkoma, NY 11779, and our telephone number is (631) 981-7081. Our website address is www.cvdequipment.com. Information contained on our website is not a part of this prospectus supplement or the accompanying prospectus.

The offering

Issuer	CVD Equipment Corporation
Common stock offered by us pursuant to this prospectus supplement	841,695 shares
Common stock to be outstanding immediately after the offering	5,700,970 shares
Dividends	To date, we have never declared a dividend and our board does not have any plans to do so in the foreseeable future. In addition, financial covenants under our existing debt facilities may limit our ability to pay dividends.
Use of proceeds	We intend to use the net proceeds from this offering for general corporate purposes. See "Use of proceeds" on page S-16 of this prospectus supplement.
NASDAQ Capital Market symbol	CVV
Risk factors	Investing in our common stock involves a high degree of risk. See "Risk factors" beginning on page S-7 of this prospectus supplement and page 7 of the accompanying prospectus.

The number of shares of common stock to be outstanding immediately after this offering as shown above is based on 4,859,275 shares of common stock outstanding as of May 23, 2011. The number of outstanding shares excludes, as of May 23, 2011:

405,550 shares of our common stock reserved for issuance upon the exercise of outstanding stock options; and

35,550 shares of our common stock reserved for issuance pursuant to outstanding restricted stock units.

Unless otherwise indicated, all information in this prospectus supplement assumes that the underwriter does not exercise its over-allotment option.

Cautionary note regarding forward-looking statements

This prospectus supplement, the accompanying prospectus, the documents incorporated by reference herein and therein, and any free writing prospectus that we have authorized for use in connection with this offering contain forward-looking statements within the meaning of Section 27A of the Securities Act regarding our business, financial condition, results of operations and prospects. Words such as expects, anticipates, intends, plans, believes, seeks, estimates and similar expressions or variations of such words are intended to identify forward-looking statements. However, these are not the exclusive means of identifying forward-looking statements. Although forward-looking statements contained in this prospectus supplement, the accompanying prospectus, the documents incorporated by reference herein and therein, and any free writing prospectus that we have authorized for use in connection with this offering, reflect our good faith judgment, such statements can only be based on facts and factors currently known to us. Consequently, forward-looking statements are inherently subject to risks and uncertainties, and actual outcomes may differ materially from the results and outcomes discussed in the forward-looking statements. Further information about the risks and uncertainties that may impact us are described or incorporated by reference in “Risk factors” below and in the documents incorporated by reference herein. You should read carefully the risk factors incorporated by reference and set forth herein. You should not place undue reliance on forward-looking statements, which speak only as of the date of this prospectus supplement. We undertake no obligation to update publicly any forward-looking statements in order to reflect any event or circumstance occurring after the date of this prospectus supplement or currently unknown facts or conditions or the occurrence of unanticipated events.

Risk factors

Investing in our common stock involves a high degree of risk. You should carefully consider the risks and all other information contained in this prospectus supplement and the accompanying prospectus, including the risk factors in the section entitled “Risk factors” in the accompanying prospectus and in the documents incorporated by reference herein and therein. You should also refer to the other information in this prospectus supplement and the accompanying prospectus, including our financial statements and the related notes incorporated by reference in this prospectus supplement and the accompanying prospectus.

Risks Relating to this Offering

Our stock price is and may continue to be volatile and you may not be able to resell our securities at or above the price you paid.

The market price for our common stock is volatile and may continue to fluctuate widely, including due to:

- quarter to quarter variations in results of operations;
- loss of a major client;
- changes in the economic environment which could reduce our potential;
- announcements of technological innovations by us or our competitors;
- changes in, or our failure to meet, the expectations of securities analysts;
- new products or services offered by us or our competitors;
- changes in market valuations of similar companies;
- announcements of strategic relationships or acquisitions by us or our competitors;
- other events or factors that may be beyond our control; or
- dilution resulting from the raising of additional capital pursuant to the shelf registration statement or otherwise.

In addition, the securities markets in general have experienced extreme price and trading volume volatility in the past. The trading prices of securities of companies in our industry have fluctuated broadly, often for reasons unrelated to the operating performance of the specific companies. These general market and industry factors may adversely affect the trading price of our common stock, regardless of our actual operating performance.

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.

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Risk factors

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.

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. This may also make it more difficult to raise funds through the issuance of debt or the sale of equity securities.

Investors in this offering will experience immediate and substantial dilution.

The public offering price of the securities offered pursuant to this prospectus supplement is substantially higher than the net tangible book value per share of our common stock. Therefore, if you purchase shares of common stock in this offering, you will incur immediate and substantial dilution in the pro forma net tangible book value per share of common stock from the price per share that you pay for the common stock

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 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.

Risk Factors

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, 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.

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Risk factors

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 collectability 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.

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Risk factors

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 \$7 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. 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.

Risk factors

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.

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Risk factors

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 or loss of revenue recognition associated with a product or service, or cancellation of the order. 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.

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Risk factors

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

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 include 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.

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Risk factor

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. 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.

Use of proceeds

We expect to receive approximately \$8.1 million in net proceeds from this offering, or approximately \$9.3 million if the underwriter exercises its over-allotment option in full. "Net proceeds" is what we expect to receive after paying the expenses of this offering, including the underwriting discounts and commissions, as described in "Underwriting" below, and other estimated offering expenses payable by us, which include legal, accounting and printing fees.

We intend to use the net proceeds from this offering for general corporate purposes, including working capital and potential technology or company acquisitions.

As of the date of this prospectus supplement, we cannot specify with certainty all of the particular uses of the proceeds from this offering. Accordingly, we will retain broad discretion over the use of such proceeds. Until we use the net proceeds of this offering, we intend to invest the funds in short-term, investment grade, interest-bearing securities.

Dilution

If you invest in our common stock, your interest will be diluted to the extent of the difference between the price per share you pay in this offering and the net tangible book value per share of our common stock immediately after this offering. Our net tangible book value of our common stock as of March 31, 2011 was approximately \$16,915,290, or approximately \$3.51 per share of common stock based upon 4,821,125 shares outstanding. Net tangible book value per share is equal to our total tangible assets, less our total liabilities, divided by the total number of shares of our common stock outstanding as of March 31, 2011. After giving effect to the sale by us of the 841,695 shares of our common stock we are offering, our as-adjusted net tangible book value would have been approximately \$25,222,820, or approximately \$4.45 per share of common stock. This represents an immediate increase in net tangible book value of \$0.94 per share to our existing stockholders and an immediate dilution in net tangible book value of \$6.05 per share to new investors. The following table illustrates this calculation on a per share basis:

Offering price per share		\$	10.50
Net tangible book value per share as of March 31, 2011	\$	3.51	
Increase in net tangible book value per share attributable to the offering	\$	0.94	
As-adjusted net tangible book value per share after giving effect to the offering		\$	4.45
Dilution in net tangible book value per share to new investors		\$	6.05

The foregoing table excludes the following, each as of March 31, 2011:

- 405,550 shares of our common stock reserved for issuance upon the exercise of outstanding stock options; and
- 47,400 shares of our common stock reserved for issuance pursuant to outstanding restricted stock units.

Underwriting

ThinkEquity LLC is acting as sole underwriter for the offering. Subject to the terms and conditions stated in the underwriting agreement dated as of the date of this prospectus supplement, the underwriter has agreed to purchase from us, and we have agreed to sell to the underwriter, 841,695 shares of our common stock.

The underwriting agreement provides that the obligations of the underwriter to purchase the shares included in this offering are subject to approval of legal matters by its counsel, including the validity of the shares, and to other conditions contained in the underwriting agreement, such as the receipt by the underwriter of officers' certificates and legal opinions. The underwriter is obligated to purchase all the shares, other than those covered by the over-allotment option described below, if it purchases any of the shares.

The underwriter has advised us that it proposes initially to offer the shares to the public at \$10.50 per share. If all the shares are not sold at the initial offering, the underwriter may change the offering price and other selling terms. In event that the underwriter is unable to sell all the shares in the offering, the underwriter may purchase shares as a principal for its own investment account.

We have granted to the underwriter an over-allotment option to purchase up to an additional 126,255 shares of our common stock from us at the same price as to the public, and with the same underwriting discounts and commissions, as set forth on the front cover of this prospectus supplement. The underwriter may exercise this option at any time and from time to time, in whole or in part, during the 30-day period after the date of this prospectus supplement, but only to cover over-allotments, if any.

Subject to certain exceptions, we have agreed that we will not, directly or indirectly, take any of the following actions with respect to our common stock or any securities convertible into or exchangeable or exercisable for any of our common stock: (i) offer, sell, issue, contract to sell, pledge or otherwise dispose of such common stock or securities, (ii) offer, sell, issue, contract to sell, contract to purchase or grant any option, right or warrant to purchase such common stock or securities, (iii) enter into any swap, hedge or any other agreement that transfers, in whole or in part, the economic consequences of ownership of such common stock or securities, (iv) establish or increase a put equivalent position or liquidate or decrease a call equivalent position in such common stock or securities within the meaning of Section 16 of the Securities Exchange Act of 1934, as amended, or the Exchange Act, or (v) file with the SEC a registration statement under the Securities Act of 1933, as amended, relating to such common stock or securities, or publicly disclose the intention to take any such action, without, in each case, the prior written consent of the underwriter, for 90 days after the date of this prospectus supplement or such earlier date that the underwriter consents to in writing.

Subject to certain exceptions, each of our officers and directors have agreed not to offer, sell, contract to sell, pledge or otherwise dispose of, directly or indirectly, any common stock or securities convertible into or exchangeable or exercisable for any common stock, enter into a transaction which would have the same effect, or enter into any swap, hedge or other arrangement that transfers, in whole or in part, any of the economic consequences of ownership of common stock, whether any such transaction is to be settled by delivery of common stock or such other securities, in cash or otherwise, or publicly disclose the intention to make any such offer, sale, pledge or disposition, or to enter into any such transaction, swap, hedge or other arrangement, without, in each case, the prior written consent of the underwriter, for a period of 90 days after the date of this prospectus supplement. In addition, each of our officers and directors have agreed that, without the prior written consent of the underwriter, such officer or director will not, during the 90-day lock-up period, make any demand for or exercise any right with respect to, the registration of any common stock or any security convertible into or exercisable or exchangeable for common stock.

Our common stock trades on The NASDAQ Capital Market under the symbol "CVV".

The following table shows the underwriting discounts and commissions that we are to pay to the underwriter in connection with this offering assuming both no exercise and full exercise of the underwriter’s option to purchase additional shares of common stock.

	No Exercise	Full Exercise
Per Share	\$0.63	\$0.63
Total	\$530,268	\$609,809

We also agreed to reimburse the underwriter for legal and other expenses incurred by it up to \$75,000 in the aggregate.

We estimate that our portion of the total expenses of this offering, not including the underwriting discounts and commissions, will be approximately \$150,000. In compliance with guidelines of the Financial Industry Regulatory Authority, or FINRA, the maximum consideration or discount to be received by any FINRA member or independent broker dealer may not exceed 8.0% of the aggregate amount of the securities offered pursuant to this prospectus supplement and the accompanying prospectus.

In connection with the offering, the underwriter may purchase and sell shares of our common stock in the open market. These transactions may include short sales, syndicate covering transactions and stabilizing transactions. Short sales involve syndicate sales of shares of our common stock in excess of the number of shares to be purchased by the underwriter in this offering, which creates a syndicate short position. “Covered” short sales are sales of shares made in an amount up to the number of shares represented by the underwriter’s over-allotment option. In determining the source of shares to close out the covered syndicate short position, the underwriter will consider, among other things, the price of shares available for purchase in the open market as compared to the price at which they may purchase shares through the over-allotment option. Transactions to close out the covered syndicate short positions involve either purchases of the common stock in the open market after the distribution has been completed or the exercise of the over-allotment option. The underwriter may also make “naked” short sales of shares in excess of the over-allotment option. The underwriter must close out any naked short position by purchasing shares of our common stock in the open market. A naked short position is more likely to be created if the underwriter is concerned that there may be downward pressure on the price of the shares in the open market after pricing that could adversely affect investors who purchase in this offering. Stabilizing transactions consist of various bids for or purchases of shares of our common stock in the open market prior to the completion of the offering.

Any of these activities may have the effect of preventing or retarding a decline in the market price of the common stock. They may also cause the price of the common stock to be higher than the price that would otherwise exist in the open market in the absence of these transactions. The underwriter may conduct these transactions on The NASDAQ Capital Market or in the over-the-counter market, or otherwise. If the underwriter commences any of these transactions, it may discontinue them at any time.

In connection with the offering, the underwriter may engage in passive market making transactions in the common stock on The NASDAQ Capital Market in accordance with Rule 103 of Regulation M under the Exchange Act during the period before the commencement of offers or sales of common stock and extending through the completion of distribution. A passive market maker must display its bids at a price not in excess of the highest independent bid of the security. However, if all independent bids are lowered below the passive market maker’s bid, that bid must be lowered when specified purchase limits are exceeded.

A prospectus supplement in electronic format may be made available by the underwriter on a website maintained by a third party vendor or by the underwriter. Other than the prospectus supplement in electronic format, the information on such website is not part of the prospectus supplement.

We have agreed to indemnify the underwriter against certain liabilities, including liabilities under the Securities Act, or to contribute to payments the underwriter may be required to make because of any of those liabilities.

The underwriter has either provided investment banking services to us in the past or may do so in the future. It receives customary fees and commissions for these services.

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Incorporation of certain information by reference

The SEC allows us to incorporate by reference the information we file with it, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is considered to be a part of this prospectus supplement and the accompanying prospectus, and information in documents that we file later with the SEC will automatically update and supersede the information in this prospectus supplement and the accompanying prospectus. We incorporate by reference into this prospectus supplement the documents listed below and any future filings we make with the SEC under Section 13(a), 13(c) 14 or 15(d) of the Securities Exchange Act of 1934, as amended, until this offering is completed and all securities are sold or until the sale of securities pursuant to this prospectus supplement is terminated by us:

Our Annual Report on Form 10-K for the year ended December 31, 2010 filed with the SEC on March 7, 2011;

Our Quarterly Report on Form 10-Q for the quarter ended March 31, 2011 filed with the SEC on May 10, 2011;

Our Current Report on Form 8-K filed with the SEC on February 23, 2011;

Our definitive proxy statement on Schedule 14A filed with the SEC on August 9, 2010; and

The description of our common stock contained in our Registration Statement on Form 8-A pursuant to Section 12(b) of the Exchange Act, as originally filed on June 1, 2001 and as thereafter amended.

Upon request, CVD will provide, free of charge, to each person to whom a prospectus supplement and accompanying prospectus is delivered, including a beneficial owner, a copy of any or all information that has been incorporated by reference in the prospectus supplement and accompanying prospectus but not delivered with the prospectus supplement and accompanying prospectus. Any such request may be made orally or in writing to CVD Equipment Corporation, 1860 Smithtown Avenue, Ronkonkoma, New York 11779, Attention: Glen R. Charles, CFO, Tel. No.: (631) 981-7081.

Where you can find additional information

We file annual, quarterly and current reports, proxy statements and other information with the SEC. Our SEC filings are available to the public over the Internet at the SEC's website at www.sec.gov. You may also read and copy any document we file at the SEC's public reference room at 100 F Street, N.E., Washington, D.C. 205409. Please call the SEC at 1-800-SEC-0330 for further information on the public reference room.

The registration statement to which this prospectus supplement forms a part and the documents referred to above under "Incorporation of certain information by reference" are also available on our website at <http://www.cvdequipment.com>. We have not incorporated by reference into this prospectus supplement and accompanying prospectus the information on our website, and you should not consider it to be a part of this prospectus supplement and accompanying prospectus.

Legal matters

The validity of the issuance of securities offered hereby will be passed upon for us by Ruskin Moscou Faltischek, P.C., Uniondale, New York. Certain legal matters will be passed upon for the underwriter by Goodwin Procter LLP, New York, New York.

Experts

The consolidated financial statements incorporated in this prospectus supplement by reference from CVD Equipment Corporation's Annual Report on Form 10-K for the year ended December 31, 2010 have been audited by MSPC, Certified Public Accountants and Advisors, A Professional Corporation, independent auditors, as stated in their report, which is incorporated herein by reference, and have been so incorporated in reliance upon the report of such firm given upon their authority as experts in accounting and auditing.

PROSPECTUS
CVD EQUIPMENT CORPORATION

\$20,000,000

Common Stock
Preferred Stock
Debt Securities
Warrants
Units

We may offer and sell from time to time in one or more offerings up to \$20,000,000 in the aggregate of:

shares of our common stock;

shares of our preferred stock, in one or more series

our debt securities, in one or more series, which may be either senior or subordinated debt securities;

warrants to purchase shares of our common stock or preferred stock;

units consisting of shares of common stock, debt securities and/or warrants to purchase shares of common stock and/or debt securities in any combination; or

any combination of the foregoing.

Each time we offer securities, we will provide the specific terms of the securities offered in one or more supplements to this prospectus. We may also authorize one or more free writing prospectuses to be provided to you in connection with these offerings. The prospectus supplement and any related free writing prospectus may also add, update or change information contained in this prospectus. You should carefully read this prospectus, the applicable prospectus supplement and any related free writing prospectus, as well as any documents incorporated by reference, before buying any of the securities being offered.

The securities offered by this prospectus may be sold directly by us to investors, through agents designated from time to time or to or through underwriters or dealers. We will set forth the names of any underwriters or agents and any applicable fees, commissions, discounts and over-allotments in an accompanying prospectus supplement. For additional information on the methods of sale, you should refer to the section entitled "Plan of Distribution" in this prospectus and in the applicable prospectus supplement. The price to the public of such securities and the net proceeds we expect to receive from such sale will also be set forth in a prospectus supplement.

Our common stock is listed on the NASDAQ Capital Market under the symbol "CVV." On February 11, 2011, the last reported sale price of our common stock on the NASDAQ Capital Market was \$8.09 per share. As of February 11, 2011, the aggregate market value of our outstanding common stock held by non-affiliates was approximately \$25,828,000. For purposes of this disclosure, shares of common stock held by persons who are known by us to beneficially own more than 5% of the outstanding shares of common stock and shares held by officers and directors of the registrant have been excluded in that such persons may be deemed to be affiliates. We have not offered any

securities pursuant to General Instruction I.B.6 of Form S-3 during the prior 12-calendar month period that ends on, and includes, the date of this prospectus.

INVESTING IN OUR SECURITIES INVOLVES A HIGH DEGREE OF RISK. YOU SHOULD REVIEW CAREFULLY THE RISKS AND UNCERTAINTIES REFERENCED UNDER THE HEADING "RISK FACTORS" BEGINNING ON PAGE 7 OF THIS PROSPECTUS AS WELL AS THOSE CONTAINED IN THE APPLICABLE PROSPECTUS SUPPLEMENT AND ANY RELATED FREE WRITING PROSPECTUS, AND IN THE OTHER DOCUMENTS THAT ARE INCORPORATED BY REFERENCE INTO THIS PROSPECTUS.

NEITHER THE SECURITIES AND EXCHANGE COMMISSION NOR ANY STATE SECURITIES COMMISSION HAS APPROVED OR DISAPPROVED OF THESE SECURITIES OR PASSED UPON THE ACCURACY OR ADEQUACY OF THIS PROSPECTUS. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

THE DATE OF THIS PROSPECTUS IS FEBRUARY 14, 2011.

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ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement on Form S-3 that we filed with the Securities and Exchange Commission (the “SEC”), utilizing a “shelf” registration process. Under this shelf registration process, we may offer shares of our common stock and preferred stock, various series of debt securities and/or warrants to purchase any of such securities, either individually or in units, in one or more offerings, up to a total dollar amount of \$20,000,000. However, in no event will we sell more than one-third (1/3) of our “public float” (the market value of our common stock held by non-affiliates) in any twelve (12) month period. This prospectus provides you with a general description of the securities we may offer. Each time we offer a type or series of securities under this prospectus, we will provide a prospectus supplement that will contain more specific information about the specific terms of the offering. We may also authorize one or more free writing prospectuses to be provided to you that may contain material information relating to these offerings. Each such prospectus supplement (and any related free writing prospectus that we may authorize to be provided to you) may also add, update or change information contained in this prospectus or in documents incorporated by reference into this prospectus. We urge you to carefully read this prospectus, any applicable prospectus supplement and any related free writing prospectus, together with the information incorporated herein by reference as described under the headings “Where You Can Find Additional Information” and “Incorporation of Certain Information by Reference” before buying any of the securities being offered. **THIS PROSPECTUS MAY NOT BE USED TO OFFER OR SELL SECURITIES UNLESS IT IS ACCOMPANIED BY A PROSPECTUS SUPPLEMENT.**

You should rely only on the information contained or incorporated by reference in this prospectus, any applicable prospectus supplement and any related free writing prospectus. We have not authorized anyone to provide you with different information in addition to or different from that contained in this prospectus, any applicable prospectus supplement and any related free writing prospectus. No dealer, salesperson or other person is authorized to give any information or to represent anything not contained in this prospectus, any applicable prospectus supplement or any related free writing prospectus that we may authorize to be provided to you. You must not rely on any unauthorized information or representation. This prospectus is an offer to sell only the securities offered hereby, but only under circumstances and in jurisdictions where it is lawful to do so. You should assume that the information in this prospectus, any applicable prospectus supplement or any related free writing prospectus is accurate only as of the date on the front of the document and that any information incorporated by reference is accurate only as of the date of the document incorporated by reference, regardless of the time of delivery of this prospectus, any applicable prospectus supplement or any related free writing prospectus, or any sale of a security.

This prospectus contains summaries of certain provisions contained in some of the documents described herein, but reference is made to the actual documents for complete information. All of the summaries are qualified in their entirety by the actual documents. Copies of some of the documents referred to herein have been filed, will be filed or will be incorporated by reference as exhibits to the registration statement of which this prospectus is a part, and you may obtain copies of those documents as described below under the heading “Where You Can Find Additional Information.”

SUMMARY

The following summary highlights selected information from this prospectus or incorporated by reference in this prospectus. This summary does not contain all the information you should consider before investing in our securities. You should carefully read the entire prospectus, the applicable prospectus supplement and any related free writing prospectus, including the risks of investing in our securities referred to under the heading "Risk Factors" in this prospectus and contained in the applicable prospectus supplement and any related free writing prospectus, and in the other documents that are incorporated by reference into this prospectus. You should also carefully read the information incorporated by reference into this prospectus, including our financial statements, and the exhibits to the registration statement of which this prospectus is a part.

As used in this prospectus, "CVD," "we," "our" and "us" refer to CVD Equipment Corporation, unless stated otherwise or the context requires otherwise.

Our Company

We design, develop and manufacture customized state-of-the-art equipment and process solutions used to develop and manufacture solar, nano and advanced electronic components, materials and coatings for research and industrial applications, with the focus on enabling tomorrow's technologies™. 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, smart glass, carbon nanotubes, nanowires, LEDs, MEMS and industrial coatings, as well as equipment for surface mounting of components onto printed circuit boards. Through our Application Laboratory, we provide process development support and process startup assistance. Our proprietary products are generally customized to meet the particular specifications of individual customers and to accelerate the commercialization of their proprietary intellectual property. We also offer standard products that are based on the expertise and know-how we have developed in designing and manufacturing our customized products.

Based on more than 28 years of experience, we use our engineering, manufacturing and process development to transform new applications into leading-edge manufacturing solutions. This enables university, research and industrial scientists at the cutting edge of technology to develop next generation solar, nano, LEDs, semiconductors and other electronic components. We also develop and manufacture research and production equipment based on our proprietary designs. We have built a significant library of design expertise, know-how and innovative solutions to assist our customers in developing these intricate processes and to accelerate their commercialization. This library of solutions, along with our vertically integrated manufacturing facilities, allows us to provide superior design, process and manufacturing solutions to our customers on a cost effective basis.

Part of our strategy is to target opportunities in the research and development and production equipment market, with a focus on higher-growth applications such as solar smart glass coatings, carbon nanotubes, nanowires, MEMS and LEDs. To expand our penetration into these growth markets, we have a line of proprietary standard products and custom systems. Historically, we manufactured most products on a custom one-at-a-time basis to meet an 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 is 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, research laboratories, and startup companies in the United States and throughout the world.

Sales of our proprietary standard, custom systems and process solutions have been driven by building on the success of our installed customer base, which includes several Fortune 500 companies. Historically, revenues have grown primarily through sales to existing customers with additional capacity needs or new requirements, as well as to new customers. However, with the proprietary solutions and our expanded focus on “accelerating the commercialization of tomorrow’s technologies” we are developing an additional customer base. We have generally gained new customers through word of mouth, the movement of personnel from one company to another, limited print advertising and trade show attendance. We are now also gaining new customers by awareness of our company in the marketplace with results from our Application Laboratory, partnerships with startup companies, increased participation in trade shows and expanded internet advertising.

The core competencies we have developed in equipment and software design, as well as in systems manufacturing and process solutions, are used to engineer our finished products and to accelerate the commercialization path of our customer base. 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 cost, improve quality and reduce the time it takes from customer order to shipment of our products. Our Application Laboratory allows selected customers to bring up their process tools in our Application Laboratory and to work together with our scientists and engineers to optimize process performance.

We conduct our operations through three divisions: (1) CVD, which includes our First Nano product line (“CVD/First Nano”); (2) Stainless Design Concept (“SDC”); and (3) Conceptronic, (“Conceptronic”). 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.

Operating Divisions

CVD/First Nano is a supplier of state-of-the-art chemical vapor deposition systems for use in the research, development and manufacturing of semiconductors, LEDs, carbon nanotubes, nanowires, solar cells and a number of industrial applications. We utilize 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, as well as to provide production equipment and process solutions based on our designs. CVD/First Nano also operates our Application Laboratory in a separate building where our personnel interact effectively with the scientists and engineers of our customer base.

SDC designs and manufactures ultra-high purity gas and chemical delivery control systems for state-of-the-art semiconductor fabrication processes, solar cells, LEDs, carbon nanotubes, nanowires, and a number of industrial applications. Our SDC products are sold on a stand-alone basis, as well as together with our CVD/First Nano systems. SDC operates out of a 22,000 square foot facility fitted with Class 10 and Class 100 clean room manufacturing space located in Saugerties, New York.

Conceptronic designs and manufactures reflow ovens and rework stations for the printed circuit board assembly and semi-conductor packaging industries. Our equipment is designed to melt solder in a controlled process to form superior connections between components. This, in turn, creates complete electronic circuits for computers and telecommunication systems, as well as for the automotive and defense industries. To address pricing pressure in what is now a mature industry for standardized reflow ovens and the current economic downturn, we have begun to offer customized products for complex heating and drying applications.

Principal Products

Chemical Vapor Deposition - A process which passes a gaseous compound over a target material surface that is heated to such a degree that the compound decomposes and deposits a desired layer onto substrate material. The process is accomplished by combining appropriate gases in a reaction chamber, of the kind produced by the Company, at elevated temperatures (typically 300-1,800 degrees Celsius). Our Chemical Vapor Deposition systems are complete and include all necessary instrumentation, subsystems and components and include state-of-the-art process control software. We provide both standard and specifically engineered products for particular customer applications. Some of the standard systems we offer are for Silicon, Silicon-Germanium, Silicon Dioxide, Silicon Nitride, Polysilicon, Liquid Phase Epitaxial, Metalorganic Chemical Vapor Deposition, Carbon Nanotubes, Graphene and Nanowires, Solar Cell research and Solar material quality control.

Our Chemical Vapor Deposition systems are available in a variety of models that can be used in laboratory research and production. All models are offered with total system automation, a microprocessor control system by which the user can measure, predict and regulate gas flow, temperature, pressure and chemical reaction rates, thus controlling the process in order to enhance the quality of the materials produced. Our standard microprocessor control system is extremely versatile and capable of supporting the complete product line and most custom system requirements. These Chemical Vapor Deposition systems are typically priced between \$80,000 and \$1,500,000.

We were incorporated in New York on October 13, 1982. Our principal executive office is located at 1860 Smithtown Avenue, Ronkonkoma, NY 11779, and our telephone number is (631) 981-7081. Our website address is www.cvdequipment.com. Information contained on our website is not a part of this prospectus.

The Securities We May Offer

We may offer shares of our common stock, various series of debt securities and/or warrants to purchase any of such securities, either individually or in units, with a total value of up to \$20,000,000 from time to time under this prospectus at prices and on terms to be determined at the time of any offering. This prospectus provides you with a general description of the securities we may offer. Each time we offer a type or series of securities under this prospectus, we will provide a prospectus supplement that will describe the specific amounts, prices and other important terms of the securities, including, to the extent applicable:

designation or classification;

aggregate principal amount or aggregate offering price;

maturity, if applicable;

original issue discount, if any;

rates and times of payment of interest or dividends, if any;

redemption, conversion, exercise, exchange or sinking fund terms, if any;

preferences over other classes of our securities, if any;

restrictive covenants, if any;

Voting or other rights, if any;

conversion or exchange prices or rates, if any, and, if applicable, any provisions for changes to or adjustments in the conversion or exchange prices or rates and in the securities or other property receivable upon conversion or exchange; and

important United States federal income tax considerations.

The prospectus supplement and any related free writing prospectus that we may authorize to be provided to you may also add, update or change information contained in this prospectus or in documents we have incorporated by reference. However, no prospectus supplement or free writing prospectus will offer a security that is not registered and described in this prospectus at the time of the effectiveness of the registration statement of which this prospectus is a part.

Common Stock. We may issue shares of our common stock from time to time. Holders of shares of common stock are entitled to one vote for each share on all matters to be voted on by the shareholders, and do not have cumulative voting rights. Subject to the preferences that may be applicable to any then outstanding shares of preferred stock, holders of shares of common stock are entitled to share ratably in dividends, if any, as may be declared from time to time by the Board of Directors in its discretion, from funds legally available therefore. In the event of our liquidation, dissolution or winding up, holders of our common stock will be entitled to share ratably in the net assets legally available for distribution to shareholders after the payment of all of our debts and other liabilities.. Subject to the

satisfaction of any liquidation preference granted to the holders of any outstanding shares of preferred stock, holders of common stock have no preemptive or other subscription rights, and there are no conversion rights or redemption with respect to such shares.

Preferred Stock. In the event authorized by our Board of Directors and the holders of not less than two-thirds (2/3) of the shares of our outstanding common stock, we may issue shares of our preferred stock from time to time, in one or more series. The rights, preferences and privileges of the shares of each wholly unissued series, and any qualifications, limitations or restrictions thereon, including dividend rights, conversion rights, preemptive rights, terms of redemption or repurchase, liquidation preferences, sinking fund terms and the number of shares constituting any series or the designation of any series would be set forth in our Certificate of Incorporation, as amended. Convertible preferred stock will be convertible into our common stock or exchangeable for other securities. Conversion may be mandatory or at your option and would be at prescribed conversion rates.

Debt Securities. We may issue debt securities from time to time, in one or more series, as either senior or subordinated debt or as senior or subordinated convertible debt. The senior debt securities will rank equally with any other unsecured and unsubordinated debt. The subordinated debt securities will be subordinate and junior in right of payment, to the extent and in the manner described in the instrument governing the debt, to all of our senior indebtedness. Convertible debt securities will be convertible into or exchangeable for our common stock or other securities. Conversion may be mandatory or at your option and would be at prescribed conversion rates.

The debt securities will be issued under one or more documents called indentures, which are contracts between us and a national banking association or other eligible party, as trustee. In this prospectus, we have summarized certain general features of the debt securities. We urge you, however, to read the applicable prospectus supplement (and any free writing prospectus that we may authorize to be provided to you) related to the series of debt securities being offered, as well as the complete indentures that contain the terms of the debt securities. A form of indenture has been filed as an exhibit to the registration statement of which this prospectus is a part, and supplemental indentures and forms of debt securities containing the terms of the debt securities being offered will be filed as exhibits to the registration statement of which this prospectus is a part or will be incorporated by reference from reports we file with the SEC.

Warrants. We may issue warrants for the purchase of common stock, preferred stock and/or debt securities in one or more series. We may issue warrants independently or together with common stock, preferred stock and/or debt securities, and the warrants may be attached to or separate from these securities. In this prospectus, we have summarized certain general features of the warrants. We urge you, however, to read the applicable prospectus supplement (and any free writing prospectus that we may authorize to be provided to you) related to the particular series of warrants being offered, as well as the complete warrant agreements and/or warrant certificates that contain the terms of the warrants.

Units. We may issue, in one or more series, units consisting of common stock, , preferred stock debt securities and/or warrants for the purchase of common stock, preferred stock and/or debt securities in any combination. In this prospectus, we have summarized certain general features of the units. We urge you, however, to read the applicable prospectus supplement (and any free writing prospectus that we may authorize to be provided to you) related to the series of units being offered, as well as the complete unit agreement that contains the terms of the units.

We may evidence each series of units by unit certificates that we will issue. Units may be issued under a unit agreement that we enter into with a unit agent. We will indicate the name and address of the unit agent, if applicable, in the prospectus supplement relating to the particular series of units being offered.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains forward-looking statements within the meaning of Section 27A of the Securities Act regarding our business, financial condition, results of operations and prospects. Words such as expects, anticipates, intends, plans, believes, seeks, estimates and similar expressions or variations of such words are intended to identify forward-looking statements. However, these are not the exclusive means of identifying forward-looking statements. Although forward-looking statements contained in this prospectus reflect our good faith judgment, such statements can only be based on facts and factors currently known to us. Consequently, forward-looking statements are inherently subject to risks and uncertainties, and actual outcomes may differ materially from the results and outcomes discussed in the forward-looking statements. Further information about the risks and uncertainties that may impact us are described or incorporated by reference in “Risk Factors” below. You should read that section carefully. You should not place undue reliance on forward-looking statements, which speak only as of the date of this prospectus. We undertake no obligation to update publicly any forward-looking statements in order to reflect any event or circumstance occurring after the date of this prospectus or currently unknown facts or conditions or the occurrence of unanticipated events.

RISK FACTORS

Investing in our securities involves significant risks. You should review carefully the risks and uncertainties described under the heading “Risk Factors” contained in, or incorporated into, the applicable prospectus supplement and any related free writing prospectus, and under similar headings in the other documents that are incorporated by reference herein or therein. Each of the referenced risks and uncertainties could adversely affect our business, operating results and financial condition, as well as adversely affect the value of an investment in our securities. Additional risks not known to us or that we believe are immaterial may also adversely affect our business, operating results and financial condition and the value of an investment in our securities.

USE OF PROCEEDS

Unless otherwise indicated in the applicable prospectus supplement, we currently intend to use the net proceeds from the sale of securities offered by this prospectus for working capital and other general corporate purposes, including capital expenditures, facilities expansion, acquisitions of complementary products, technologies or businesses and repaying indebtedness we may incur from time to time. The timing and amount of our actual expenditures will be based on many factors, including cash flows from operations and the anticipated growth of our business. As a result, unless otherwise indicated in the prospectus supplement, our management will have broad discretion to allocate the net proceeds of the offerings.

DESCRIPTION OF CAPITAL STOCK

The following is only a summary of the material terms of our common stock and preferred stock. Because it is only a summary, it does not contain all the information that may be important to you. Accordingly, you should carefully read the more detailed provisions of our certificate of incorporation, as amended, and our by-laws, each of which has been filed with the SEC, as well as applicable provisions of New York law.

Authorized Capitalization

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Our authorized capital stock consists of 10,000,000 shares of Common Stock, par value \$0.01 per share, 500 shares of Class A Preferred Stock, par value \$0.01 per share and 250 shares of Class B Preferred Stock, par value \$0.01 per share.

As of February 11, 2011, there were 4,828,325 shares of common stock outstanding held by approximately 76 shareholders of record and over 700 beneficial owners. No shares of our preferred stock were outstanding.

Common Stock

Holders of shares of common stock are entitled to one vote for each share on all matters to be voted on by the shareholders, and do not have cumulative voting rights, subject to the preferences that may be applicable to any then outstanding shares of preferred stock. Holders of shares of common stock are entitled to share ratably in dividends, if any, as may be declared from time to time by the Board of Directors in its discretion, from funds legally available therefore. In the event of our liquidation, dissolution or winding up, holders of our common stock will be entitled to share ratably in the net assets legally available for distribution to shareholders after the payment of all of our debts and other liabilities. Holders of common stock have no preemptive or other subscription rights, and there are no conversion rights or redemption with respect to such shares.

Preferred Stock

By their terms, all of the shares of Class A Preferred Stock and Class B Preferred Stock were redeemed for one cent (\$0.01) per share on July 2, 1990 and July 1, 1988 respectively. All such shares were cancelled and may not be reissued.

At present, we do not have any shares of preferred stock authorized under our certificate of incorporation available for issuance. If we were going to issue shares of preferred stock, our Board of Directors and the holders of at least two-thirds (2/3) of the outstanding shares of our common stock would have to first authorize and approve an amendment to our certificate of incorporation authorizing shares of preferred stock for issuance.

Assuming our Board of Directors and shareholders authorize an amendment to our certificate of incorporation in the manner described above to authorize "blank check" preferred stock, our certificate of incorporation, as amended would provide that our Board of Directors has the authority, without further action by the shareholders, to issue up to a specified number of shares of preferred stock in one or more series and to fix the rights, preferences, privileges and restrictions of this preferred stock, including dividend rights, conversion rights, voting rights, terms of redemption, liquidation preferences, sinking fund terms and the number of shares constituting any series or the designation of a series, without further vote or action by the shareholders.

If our certificate of incorporation is amended to authorize "blank check" preferred stock, our Board of Directors would fix the rights, preferences, privileges and restrictions of the preferred stock of each series in the certificate of amendment relating to that series. We will incorporate by reference as an exhibit to the registration statement that includes this prospectus or as an exhibit to a current report on Form 8-K, the form of any certificate of amendment that describes the terms of the series of preferred stock we are offering before the issuance of the related series of preferred stock. This description will include:

the title and stated value;

the number of shares we are offering;

the liquidation preference per share;

the purchase price;

the dividend rate, period and payment date and method of calculation for dividends;

whether dividends will be cumulative or non-cumulative and, if cumulative, the date from which dividends will accumulate;

the procedures for any auction and remarketing, if any;

the provisions for a sinking fund, if any;

the provisions for redemption or repurchase, if applicable, and any restrictions on our ability to exercise those redemption and repurchase rights;

any listing of the preferred stock on any securities exchange or market;

whether the preferred stock will be convertible into our common stock, and, if applicable, the conversion price, or how it will be calculated, and the conversion period;

voting rights, if any, of the preferred stock;

preemption rights, if any;

restrictions on transfer, sale or other assignment, if any;

a discussion of any material or special United States federal income tax considerations applicable to the preferred stock;

the relative ranking and preferences of the preferred stock as to dividend rights and rights if we liquidate, dissolve or wind up our affairs;

any limitations on issuance of any class or series of preferred stock ranking senior to or on a parity with the series of preferred stock as to dividend rights and rights if we liquidate, dissolve or wind up our affairs; and

any other specific terms, preferences, rights or limitations of, or restrictions on, the preferred stock.

The issuance of preferred stock, whether pursuant to this offering or otherwise, could adversely affect the voting power, conversion or other rights of holders of our common stock. Preferred stock could be issued quickly with terms designed to delay or prevent a change in control of our company or make removal of management more difficult. Additionally, the issuance of preferred stock may have the effect of decreasing the market price of our common stock.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is Continental Stock Transfer & Trust Company. Its telephone number is 212-509-4000.

Listing

Our common stock trades on the NASDAQ Capital Market under the symbol "CVV."

New York Anti-Takeover Law

We are subject to the provisions of Section 912 of the New York Business Corporation Law, or BCL, which prohibits certain business combinations with interested shareholders and prevents certain persons from making a takeover bid for a New York corporation unless certain prescribed requirements are satisfied. Section 912 of the BCL defines an "interested shareholder" as any person that:

is the beneficial owner of 20% or more of the outstanding voting stock of a New York corporation, or

is an affiliate or associate of the corporation and at any time during the prior five years was the beneficial owner, directly or indirectly, of 20% or more of the corporation's then outstanding voting stock.

Section 912 of the BCL provides that a New York corporation may not engage in a business combination, such as a merger, consolidation, recapitalization or disposition of stock, with any interested shareholder for a period of five years from the date that such person first became an interested shareholder unless the business combination was first approved by the board of directors prior to date such person became an interested shareholder.

Additionally, a New York corporation may not engage at any time in any business combination with an interested shareholder unless:

the business combination is approved by the board of directors prior to the date such person first became an interested shareholder,

the business combination is approved by the holders of a majority of the outstanding voting stock not beneficially owned by the interested shareholder at a meeting of shareholders occurring no earlier than five years after such person first became an interested shareholder, or

the consideration to be paid to all of the shareholders in connection with the business combination is at least equal to the greater of (i) the price paid by the interested shareholder for the interest in the corporation or (ii) the market value of the stock of the corporation equal to the greater of its value when acquired by the interested shareholder or when the announcement of the business combination was made.

The effect of Section 912 of the BCL may be to delay or prevent the consummation of a transaction which is favored by a majority of shareholders.

Limitation of liability of Directors

As permitted by the BCL, our certificate of incorporation provides that a director will not be personally liable to us or our shareholders for damages for any breach of duty in his capacity as a director unless a judgment or other final adjudication adverse to such director establishes that his acts or omissions were in bad faith or involved intentional misconduct or a knowing violation of law, such director personally gained in fact a financial profit or other advantage to which he or she was not legally entitled or his acts violated Section 719 of the BCL. Any repeal or modification of what is set forth hereinabove will not adversely affect any right or protection of a director of the company existing at the time of such repeal or modification with respect to acts or omissions occurring prior to such repeal or modification. The effect of this provision is to eliminate the rights of the company and its shareholders (through shareholders' derivative suits on behalf of the company) to recover monetary damages against a director for breach of the fiduciary duty of care as a director (including breaches resulting from negligent or grossly negligent behavior) except in certain limited situations. This provision does not limit or eliminate the rights of the company or any shareholder to seek non-monetary relief such as an injunction or rescission in the event of a breach of a director's duty of care. These provisions will not alter the liability of directors under federal securities laws. Section 722 of the BCL empowers a New York corporation to indemnify any person, made, or threatened to be made, a party to an action or proceeding other than one by or in the right of the corporation to procure a judgment in its favor, whether civil or criminal, including an action by or in the right of any other corporation of any type or kind, domestic or foreign, or any partnership, joint venture, trust, employee benefit plan or other enterprise, which any director or officer of the corporation served in any capacity at the request of the corporation, by reason of the fact that he, his testator or intestate, was a director or officer of the corporation, or served such other corporation, partnership, joint venture, trust, employee benefit plan or other enterprise in any capacity, against judgments, fines, amounts paid in settlement and reasonable expenses, including attorney's fees actually and necessarily incurred as a result of such action or proceeding, or any appeal therein, if such director or officer acted, in good faith, for a purpose which he reasonably believed to be in, or in the case of service for any other corporation or any partnership, joint venture, trust, employee benefit plan or other enterprise, not opposed to, the best interests of the corporation and, in criminal actions or proceedings, in addition, had no reasonable cause to believe that his conduct was unlawful.

Indemnification of Directors

Section 722 of the BCL states that a New York corporation may indemnify any person made, or threatened to be made, a party to an action by or in the right of the corporation to procure a judgment in its favor by reason of the fact that he, his testator or intestate, is or was a director or officer of the corporation, or is or was serving at the request of the corporation as a director or officer of any other corporation of any type of kind, domestic or foreign, of any partnership, joint venture, trust, employee benefit plan or other enterprise, against amounts paid in settlement and reasonable expenses, including attorneys' fees, actually and necessarily incurred by him in connection with the defense or settlement of such action, or in connection with an appeal therein if such director or officer acted, in good faith, for a purpose which he reasonably believed to be in, or, in the case of service for any other corporation or any partnership, joint venture, trust, employee benefit plan or other enterprise, not opposed to, the best interests of the corporation, except that no indemnification under this paragraph shall be made in respect of (1) a threatened action, or a pending action which is settled or otherwise disposed of, or (2) any claim, issue or matter as to which such person shall have been adjudged to be liable to the corporation, unless and only to the extent that the court on which the action was brought, or, if no action was brought, any court of competent jurisdiction, determines upon application that, in view of all the circumstances of the case, the person is fairly and reasonably entitled to indemnity for such portion of the settlement amount and expenses as the court deems proper.

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the company pursuant to the foregoing provisions, or otherwise, we have been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act of 1933 and is, therefore, unenforceable.

We have the power to purchase and maintain insurance on behalf of any person who is or was one of our directors or officers, or is or was serving at our request as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other business against any liability asserted against the person or incurred by the person in any of these capacities, or arising out of the person's fulfilling one of these capacities, and related expenses, whether or not we would have the power to indemnify the person against the claim under the provisions of the BCL. We currently maintain and intend to maintain for the foreseeable future director and officer liability insurance on behalf of our directors and officers.

DESCRIPTION OF DEBT SECURITIES

We may issue debt securities, secured or unsecured, in one or more series, as either senior or subordinated debt or as senior or subordinated convertible debt. While the terms we have summarized below will apply generally to any debt securities that we may offer under this prospectus, we will describe the particular terms of any debt securities that we may offer in more detail in the applicable prospectus supplement. The terms of any debt securities offered under a prospectus supplement may differ from the terms described below. As you read this section, please remember that the specific terms of a debt security as described in the applicable prospectus supplement will supplement and may modify or replace the general terms described in this section. If there are any differences between the applicable prospectus supplement and this prospectus, the applicable prospectus supplement will control. Unless the context requires otherwise, whenever we refer to the indentures, we also are referring to any supplemental indentures that specify the terms of a particular series of debt securities.

We may issue the debt securities under an indenture that we would enter into with a trustee to be named in the indenture. If we enter into an indenture, the indenture would be qualified under the Trust Indenture Act of 1939, as in effect on the date of the indenture. We use the term “trustee” to refer to the trustee under the indenture.

General

If we issue debt securities, we will describe in the applicable prospectus supplement the terms of the series of debt securities being offered, including:

the title or designation of the debt securities;

whether the debt securities will be secured or unsecured, and the terms of any secured debt;

the terms of the subordination of any series of subordinated debt securities;

any limit upon the aggregate principal amount of the debt securities;

the date or dates on which the debt securities may be issued and on which we will pay the principal on the debt securities;

the interest rate, which may be fixed or variable, or the method for determining the rate and the date interest will begin to accrue, the date or dates interest will be payable and the record dates for interest payment dates or the method for determining such dates;

the manner in which the amounts of payment of principal of, premium or interest on the debt securities will be determined, if these amounts may be determined by reference to an index based on a currency or currencies other than that in which the debt securities are denominated or designated to be payable or by reference to a commodity, commodity index, stock exchange index or financial index;

the currency of denomination of the debt securities;

if payments of principal of, premium or interest on the debt securities will be made in one or more currencies or currency units other than that or those in which the debt securities are denominated, the manner in which the exchange rate with respect to these payments will be determined;

the place or places where the principal of, premium, and interest on the debt securities will be payable, where debt securities of any series may be presented for registration of transfer, exchange or conversion, and where notices and demands to or upon the Company in respect of the debt securities may be made;

the form of consideration in which principal of, premium or interest on the debt securities will be paid;

the terms and conditions upon which we may redeem the debt securities;

any obligation we have to redeem or purchase the debt securities pursuant to any sinking fund, amortization or analogous provisions or at the option of a holder of debt securities;

the dates on which and the price or prices at which we will repurchase the debt securities at the option of the holders of debt securities and other detailed terms and provisions of these repurchase obligations;

the denominations in which the debt securities will be issued, if other than denominations of \$1,000 and any integral multiple thereof;

the portion of principal amount of the debt securities payable upon declaration of acceleration of the maturity date, if other than the principal amount;

whether the debt securities are to be issued at any original issuance discount and the amount of discount with which such debt securities may be issued;

whether the debt securities will be issued in the form of certificated debt securities or global debt securities and, in such case, the depositary for such global security or securities and the terms and conditions, if any, upon which interests in such global security or securities may be exchanged in whole or in part for the individual securities represented thereby;

provisions, if any, for the defeasance of the debt securities of a series in whole or in part and any addition or change in the provisions related to satisfaction and discharge;

the form of the debt securities;

the terms and conditions upon which the debt securities will be so convertible or exchangeable into securities or property of another person, if at all, and any additions or changes, if any, to permit or facilitate such conversion or exchange;

whether the debt securities will be subject to subordination and the terms of such subordination;

provisions, if any, granting special rights to holders of the debt securities upon the occurrence of specified events;

any restriction or condition on the transferability of the debt securities;

any addition or change in the provisions related to compensation and reimbursement of the trustee which applies to securities of such series;

any addition to or change in the events of default described in this prospectus or in the indenture with respect to the debt securities and any change in the acceleration provisions described in this prospectus or in the indenture with

respect to the debt securities;

any addition to or change in the covenants described in this prospectus or in the indenture with respect to the debt securities; and

any other terms of the debt securities, which may modify or delete any provision of the indenture.

Conversion or Exchange Rights

If we issue debt securities, we will set forth in the prospectus supplement the terms, if any, on which a series of debt securities may be convertible into or exchangeable for our common stock or our other securities. We will include provisions as to whether conversion or exchange is mandatory, at the option of the holder or at our option. We may include provisions pursuant to which the number of shares of our common stock or our other securities that the holders of the series of debt securities receive would be subject to adjustment.

Consolidation, Merger or Sale

Unless we provide otherwise in the prospectus supplement applicable to a particular series of debt securities, the indentures will not contain any covenant that restricts our ability to merge or consolidate, or sell, convey, transfer or otherwise dispose of all or substantially all of our assets. However, any successor to or acquirer of such assets must assume all of our obligations under the indentures or the debt securities, as appropriate.

Unless we state otherwise in the applicable prospectus supplement, the debt securities will not contain any provisions that may afford holders of the debt securities additional protection in the event we have a change of control or in the event of a highly leveraged transaction (whether or not such transaction results in a change of control), which could adversely affect holders of debt securities.

Events of Default Under the Indenture

Unless we provide otherwise in the prospectus supplement applicable to a particular series of debt securities, the following are events of default under the indenture with respect to any series of debt securities that we may issue:

if we fail to pay interest when due and payable and our failure continues for more than 30 days and the time for payment has not been extended or deferred;

if we fail to pay the principal, premium, or sinking fund payment, if any, when due and payable and our failure continues for more than 30 days and the time for payment has not been extended or delayed;

if we fail to observe or perform any other covenant relating to such series contained in the debt securities of such series or the indenture, other than a covenant specifically relating to and for the benefit of holders of another series of debt securities, and our failure continues for 60 days after we receive written notice from the trustee or holders of not less than a majority in aggregate principal amount of the outstanding debt securities of the applicable series;

if specified events of bankruptcy, insolvency or reorganization occur as to us;

any other event of default provided in or pursuant to the applicable agreement or indenture, if any, or prospectus supplement with respect to the debt securities of that series.

Unless we provide otherwise in the prospectus supplement applicable to a particular series of debt securities, no event of default with respect to a particular series of debt securities (except as to certain events of bankruptcy, insolvency or reorganization) necessarily constitutes an event of default with respect to any other series of debt securities. The

occurrence of an event of default may constitute an event of default under any bank credit agreements we may have in existence from time to time. In addition, the occurrence of certain events of default or an acceleration under the indenture may constitute an event of default under certain of our other indebtedness outstanding from time to time.

If an event of default with respect to debt securities of any series at the time outstanding occurs and is continuing, then the trustee or the holders of not less than a majority in principal amount of the outstanding debt securities of that series may, by a notice in writing to us (and to the trustee if given by the holders), declare to be due and payable immediately the principal (or, if the debt securities of that series are discount securities, that portion of the principal amount as may be specified in the terms of that series) of and premium and accrued and unpaid interest, if any, on all debt securities of that series. The holders of a majority in principal amount of the outstanding debt securities of an affected series may waive any default or event of default with respect to the series and its consequences, except defaults or events of default regarding payment of principal, premium, if any, or interest, unless we have cured the default or event of default in accordance with the indenture. Any waiver shall cure the default or event of default.

We refer you to the prospectus supplement relating to any series of debt securities that are discount securities for the particular provisions relating to acceleration of a portion of the principal amount of such discount securities upon the occurrence of an event of default.

Subject to the terms of the indenture, if an event of default under the indenture shall occur and be continuing, the trustee will be under no obligation to exercise any of its rights or powers under such indenture at the request or direction of any of the holders of the applicable series of debt securities, unless such holders have offered the trustee reasonable indemnity. The holders of a majority in principal amount of the outstanding debt securities of any series will have the right to direct the time, method and place of conducting any proceeding for any remedy available to the trustee, or exercising any trust or power conferred on the trustee, with respect to the debt securities of that series, provided that, subject to the terms of the indenture, the trustee need not take any action that it believes, upon the advice of counsel, might involve it in personal liability or might be unduly prejudicial to the holders not involved in the proceeding.

A holder of the debt securities of any series will only have the right to institute a proceeding under the indenture or to appoint a receiver or trustee, or to seek other remedies if:

the holder previously has given written notice to the trustee of a continuing event of default with respect to that series;

the holders of at least a majority in aggregate principal amount of the outstanding debt securities of that series have made written request, and such holders have offered reasonable indemnity to the trustee to institute the proceeding as trustee; and

the trustee does not institute the proceeding, and does not receive from the holders of a majority in aggregate principal amount of the outstanding debt securities of that series (or at a meeting of holders of such series at which a quorum is present, the holders of a majority in principal amount of the debt securities of such series represented at such meeting) other conflicting directions within [60] days after the notice, request and offer.

These limitations do not apply to a suit instituted by a holder of debt securities if we default in the payment of the principal, premium, if any, or interest on, the debt securities.

We will periodically file statements with the applicable trustee regarding our compliance with specified covenants in the applicable indenture.

Modification of Indenture; Waiver

The trustee and we may, without the consent of any holders, execute a supplemental indenture to change the applicable indenture with respect to specific matters, including, among other things:

to surrender any right or power conferred upon the Company;

to provide, change or eliminate any restrictions on the payment of principal of or premium, if any, on the debt securities; provided that any such action shall not adversely affect the interests of the holders of debt securities of any series in any material respect;

to change or eliminate any of the provisions of the indenture; provided that any such change or elimination shall become effective only when there is no outstanding debt security of any series

created prior to the execution of such supplemental indenture that is entitled to the benefit of such provision and as to which such supplemental indenture would apply;

to evidence the succession of another corporation to the Company;

to evidence and provide for the acceptance of appointment by a successor trustee with respect to one or more series of debt securities and to add or change provisions of the indenture to facilitate the administration of the trusts thereunder by more than one trustee;

to cure any ambiguity, mistake, manifest error, omission, defect or inconsistency in the indenture or to conform the text of any provision in the indenture or in any supplemental indenture to any description thereof in the applicable section of a prospectus, prospectus supplement or other offering document that was intended to be a verbatim recitation of a provision of the indenture or of any supplemental indenture;

to add to or change or eliminate any provision of the indenture as shall be necessary or desirable in accordance with any amendments to the Trust Indenture Act of 1939;

to make any change in any series of debt securities that does not adversely affect in any material respect the interests of the holders of such debt securities; and

to supplement any of the provisions of the indenture to such extent as shall be necessary to permit or facilitate the defeasance and discharge of any series of debt securities; provided that any such action shall not adversely affect the interests of the holders of debt securities of such series or any other series of debt securities.

In addition, under the indenture, the rights of holders of a series of debt securities may be changed by us and the trustee with the written consent of the holders of at least a majority in aggregate principal amount of the outstanding debt securities of each series that is affected. However, unless we provide otherwise in the prospectus supplement applicable to a particular series of debt securities, we and the trustee may make the following changes only with the consent of each holder of any outstanding debt securities affected:

- extending the fixed maturity of the series of debt securities;
- reducing the principal amount, reducing the rate of or extending the time of payment of interest, or reducing any premium payable upon the redemption of any debt securities;
- reducing the principal amount of discount securities payable upon acceleration of maturity;
- making the principal of or premium or interest on any debt security payable in currency other than that stated in the debt security;
- impairing the right to institute suit for the enforcement of any payment on or after the fixed maturity date of any series of debt securities;
- materially adversely affecting the economic terms of any right to convert or exchange any debt securities;
- and
- reducing the percentage of debt securities, the holders of which are required to consent to any amendment, supplement, modification or waiver.

Except for certain specified provisions, the holders of at least a majority in principal amount of the outstanding debt securities of any series (or, at a meeting of holders of such series at which a quorum is present, the holders of a majority in principal amount of the debt securities of such series represented at such meeting) may, on behalf of the holders of all debt securities of that series, waive our compliance with provisions of the indenture. The holders of a majority in principal amount of the outstanding debt securities of any series may, on behalf of the holders of all the debt securities of such series, waive any past default under the indenture with respect to that series and its consequences, other than a default in the payment of the principal of, premium or any interest on any debt security of that series; provided, however, that the holders of a majority in principal amount of the outstanding debt securities of any series may rescind an acceleration and its consequences, including any related payment default that resulted from the acceleration.

Discharge

The indenture provides that we can elect to be discharged from our obligations with respect to one or more series of debt securities. In order to exercise our rights to be discharged with respect to a series, we must deposit with the trustee money or government obligations sufficient to pay all the principal of, the premium, if any, and interest on, the debt securities of the series on the dates payments are due.

Form, Exchange and Transfer

We will issue the debt securities of each series only in fully registered form without coupons and, unless we otherwise specify in the applicable prospectus supplement, in denominations of \$1,000 and any integral multiple thereof. We may issue debt securities of a series in temporary or permanent global form and as book-entry securities that will be deposited with a depository named by us and identified in a prospectus supplement with respect to that series.

At the option of the holder, subject to the terms of the indenture and the limitations applicable to global securities described in the applicable prospectus supplement, the holder of the debt securities of any series can exchange the debt securities for other debt securities of the same series, in any authorized denomination and of like tenor and aggregate principal amount.

Subject to the terms of the indenture and the limitations applicable to global securities set forth in the applicable prospectus supplement, holders of the debt securities may present the debt securities for exchange or for registration of transfer, duly endorsed or with the form of transfer endorsed thereon duly executed if so required by us or the security registrar, at the office of the security registrar or at the office of any transfer agent designated by us for this purpose. Unless otherwise provided in the debt securities that the holder presents for transfer or exchange or in the indenture, we will make no service charge for any registration of transfer or exchange, but we may require payment of any taxes or other governmental charges.

We will name in the applicable prospectus supplement the security registrar, and any transfer agent in addition to the security registrar, that we initially designate for any debt securities. We may at any time designate additional transfer agents or rescind the designation of any transfer agent or approve a change in the office through which any transfer agent acts, except that we will be required to maintain a transfer agent in each place of payment for the debt securities of each series.

If we elect to redeem the debt securities of any series, we will not be required to:

issue, register the transfer of, or exchange any debt securities of that series during a period beginning at the opening of business 15 days before the day of mailing of a notice of redemption of any debt securities that may be selected for redemption and ending at the close of business on the day of the mailing; or

register the transfer of or exchange any debt securities so selected for redemption, in whole or in part, except the unredeemed portion of any debt securities we are redeeming in part.

Information Concerning the Trustee

The trustee, other than during the occurrence and continuance of an event of default under the indenture, undertakes to perform only those duties as are specifically set forth in the indenture. Upon an event of default under the indenture, the trustee must use the same degree of care as a prudent person would exercise or use in the conduct of his or her own affairs. Subject to this provision, the trustee is under no obligation to exercise any of the powers given it by the indenture at the request of any holder of debt securities unless it is offered reasonable security and indemnity against the costs, expenses and liabilities that it might incur.

Payment and Paying Agents

Unless we otherwise indicate in the applicable prospectus supplement, we will make payment of the interest on any debt securities on any interest payment date to the person in whose name the debt securities, or one or more predecessor securities, are registered at the close of business on the regular record date for the interest.

Unless we otherwise indicate in the applicable prospectus supplement, we will pay principal of and any premium and interest on the debt securities of a particular series at the office of the indenture trustee or, at the option of the Company, by wire or check payable to the holder. Unless we otherwise indicate in a prospectus supplement, we will designate the corporate trust office of the trustee our sole paying agent for payments with respect to debt securities of a particular series. We will name in the applicable prospectus supplement any other paying agents that we initially designate for the debt securities of a particular series. We will maintain a paying agent in each place of payment for the debt securities of a particular series. All money we pay to a paying agent or the trustee for the payment of the principal of or any premium or interest on any debt securities which remains unclaimed at the end of two years after such principal, premium or interest has become due and payable will be repaid to us, and the holder of the security thereafter may look only to us for payment thereof.

Governing Law

Each indenture and the debt securities will be governed and construed in accordance with the laws of the State of New York.

DESCRIPTION OF WARRANTS

We may issue warrants to purchase debt securities, preferred stock or common stock. We may issue warrants independently or together with any other securities we offer under a prospectus supplement. The warrants may be attached to or separate from the securities. We may issue each series of warrants under a separate warrant agreement that we will enter into with a bank or trust company, as warrant agent. The statements made in this section relating to the warrant agreement are summaries only. These summaries are not complete. When we issue warrants, we will provide the specific terms of the warrants and the applicable warrant agreement in a prospectus supplement. To the extent the information contained in the prospectus supplement differs from this summary description, you should rely on the information in the prospectus supplement. For more detail, we refer you to the applicable warrant agreement itself, which we will file as an exhibit to, or incorporate by reference in, the registration statement.

General

We will describe in the applicable prospectus supplement the terms relating to warrants being offered including:

the offering price and aggregate number of warrants offered;

if applicable, the designation and terms of the securities with which the warrants are issued and the number of warrants issued with each such security or each principal amount of such security;

if applicable, the date on and after which the warrants and the related securities will be separately transferable;

in the case of warrants to purchase common stock or preferred stock, the number of shares of common stock or preferred stock purchasable upon the exercise of one warrant and the price at which these shares may be purchased upon such exercise;

the terms of any rights to redeem or call the warrants;

any provisions for changes to or adjustments in the exercise price or number of securities issuable upon exercise of the warrants;

the dates on which the right to exercise the warrants will commence and expire;

the manner in which the warrant agreements and warrants may be modified;

federal income tax consequences of holding or exercising the warrants, if material;

the terms of the securities issuable upon exercise of the warrants; and

any other specific terms, preferences, rights or limitations of or restrictions on the warrants.

Before exercising their warrants, holders of warrants will not have any of the rights of holders of the securities purchasable upon such exercise, including, in the case of warrants to purchase common stock, the right to receive

dividends, if any, or payments upon our liquidation, dissolution or winding up of our affairs or to exercise voting rights, if any.

Exercise of Warrants

Each warrant will entitle the holder to purchase the securities that we specify in the applicable prospectus supplement at the exercise price that we describe in the applicable prospectus supplement. Unless we otherwise specify in the applicable prospectus supplement, holders of the warrants may exercise the warrants at any time up to the specified time on the expiration date that we set forth in the applicable prospectus supplement. After the close of business on the expiration date, unexercised warrants will become void.

Holders of the warrants may exercise the warrants by delivering the warrant certificate representing the warrants to be exercised together with specified information, and paying the required amount to the warrant agent in immediately available funds, as provided in the applicable prospectus supplement. We intend to set forth in any warrant agreement and in the applicable prospectus supplement the information that the holder of the warrant will be required to deliver to the warrant agent.

Upon receipt of the required payment and any warrant certificate or other form required for exercise properly completed and duly executed at the corporate trust office of the warrant agent or any other office indicated in the applicable prospectus supplement, we will issue and deliver the securities purchasable upon such exercise. If fewer than all of the warrants represented by the warrant or warrant certificate are exercised, then we will issue a new warrant or warrant certificate for the remaining amount of warrants. If we so indicate in the applicable prospectus supplement, holders of the warrants may surrender securities as all or part of the exercise price for warrants.

Governing Law

Unless we provide otherwise in the applicable prospectus supplement, the warrants and warrant agreements will be governed by and construed in accordance with the laws of the State of New York.

DESCRIPTION OF UNITS

We may issue units comprised of one or more debt securities, shares of common stock, preferred stock and/or warrants in any combination. Each unit will be issued so that the holder of the unit is also the holder of each security included in the unit. Thus, the holder of a unit will have the rights and obligations of a holder of each included security. The unit agreement under which a unit is issued may provide that the securities included in the unit may not be held or transferred separately, at any time or at any time before a specified date. The statements made in this section relating to the unit agreement are summaries only. These summaries are not complete. When we issue units, we will provide the specific terms of the units and the applicable unit agreement in a prospectus supplement. To the extent the information contained in the prospectus supplement differs from this summary description, you should rely on the information in the prospectus supplement. For more detail, we refer you to the applicable unit agreement itself, which we will file as an exhibit to, or incorporate by reference in, the registration statement.

We will describe in the applicable prospectus supplement the terms of the series of units being offered, including:

the designation and terms of the units and of the securities comprising the units, including whether and under what circumstances those securities may be held or transferred separately;

any provisions of the governing unit agreement that differ from those described below; and

any provisions for the issuance, payment, settlement, transfer or exchange of the units or of the securities comprising the units.

The provisions described in this section, as well as those described under “Description of Capital Stock,” “Description of Debt Securities” and “Description of Warrants” will apply to each unit and to any common stock, debt security or warrant included in each unit, respectively.

We may issue units in such amounts and in such numerous distinct series as we determine.

PLAN OF DISTRIBUTION

We may sell the securities through underwriters or dealers, through agents, or directly to one or more purchasers. We may sell the securities from time to time in one or more transactions at a fixed price or prices, which may be changed from time to time, at market prices prevailing at the times of sale, at prices related to such prevailing market prices, or at negotiated prices. The accompanying prospectus supplement will describe the terms of the offering of the securities, including:

- the name or names of any underwriters;
- the purchase price of the securities being offered and the proceeds we will receive from the sale;
- any over-allotment options pursuant to which underwriters may purchase additional securities from us;
- Any agency fees or underwriting discounts and other items constituting agents' or underwriters' compensation;
- any public offering price;
- any discounts or concessions allowed or reallocated or paid to dealers; and
- any securities exchange or market on which the securities may be listed.

If underwriters are used in the sale, they will acquire the securities for their own account and may resell the securities from time to time in one or more transactions at a fixed public offering price or at varying prices determined at the time of the sale. The obligations of the underwriters to purchase the securities will be subject to the conditions set forth in the applicable underwriting agreement. We may offer the securities to the public through underwriting syndicates represented by managing underwriters or by underwriters without a syndicate. Subject to certain conditions, the underwriters will be obligated to purchase all the securities offered by the prospectus supplement. Any public offering price and any discounts or concessions allowed or reallocated or paid to dealers may change from time to time. We may use underwriters with whom we have a material relationship. We will describe such relationships in the prospectus supplement naming the underwriter and the nature of any such relationship.

We may engage in "at the market" offerings of our common stock, which are offerings into an existing trading market, at other than a fixed price, on or through the facilities of a national securities exchange or to or through a market maker otherwise than on an exchange.

We may sell securities directly or through agents we designate from time to time. We will name any agent involved in the offering and sale of the securities, and we will describe any commissions we will pay the agent in the prospectus supplement. Unless the prospectus supplement states otherwise, our agent will act on a best efforts basis for the period of its appointment.

We may enter into derivative transactions with third parties, or sell securities not covered by this prospectus to third parties in privately negotiated transactions. If the applicable prospectus supplement indicates, in connection with those derivatives, the third parties may sell securities covered by this prospectus and the applicable prospectus supplement, including short sale transactions. If so, the third party may use securities pledged by us or borrowed from us or others to settle those sales or to close out any related open borrowings of common shares, and may use securities received from us in settlement of those derivatives to close out any related open borrowings of common shares. The third party in such sale transactions will be an underwriter and, if not identified in this prospectus, will be identified in the

applicable prospectus supplement or a post-effective amendment to this registration statement.

Some or all of the securities that we offer through this prospectus, other than common stock, may be new issues of securities with no established trading market. Any underwriters to whom we sell our securities for public offerings and sale may make a market for those securities, but they will not be obligated to do so and they may discontinue any market making at any time without notice. Accordingly, we cannot assure you of the liquidity of, or continued trading markets for, any securities that we offer.

All securities we offer, other than common stock, will be new issues of securities for which there is no established trading market. Any underwriters may make a market in these securities, but will not be obligated to do so and may discontinue any market making activities at any time without notice. We cannot guaranty the liquidity of the trading markets for any securities.

We may provide agents and underwriters with indemnification against civil liabilities related to this offering, including liabilities under the Securities Act, or contribution with respect to payments that the agents or underwriters may make with respect to these liabilities. Agents and underwriters may engage in transactions with, or perform services for, us in the ordinary course of business.

Any underwriter may also engage in stabilizing transactions, syndicate covering transactions and penalty bids in accordance with Rule 104 under the Securities Exchange Act of 1934, as amended. Stabilizing transactions involve bids to purchase the underlying security in the open market for the purpose of pegging, fixing or maintaining the price of the securities. Syndicate covering transactions involve purchases of the securities in the open market after the distribution has been completed in order to cover syndicate short positions.

Penalty bids permit the underwriters to reclaim a selling concession from a syndicate member when the securities originally sold by the syndicate member are purchased in a syndicate covering transaction to cover syndicate short positions. Stabilizing transactions, syndicate covering transactions and penalty bids may cause the price of the securities to be higher than it would be in the absence of the transactions. The underwriters may, if they commence these transactions, discontinue them at any time.

Similar to other purchase transactions, an underwriter's purchases to cover the syndicate short sales or to stabilize the market price of our securities may have the effect of raising or maintaining the market price of our securities or preventing or mitigating a decline in the market price of our securities. As a result, the price of the securities may be higher than the price that might otherwise exist in the open market. The imposition of a penalty bid might also have an effect on the price of shares if it discourages resales of the securities.

Any underwriters who are qualified market makers on the NASDAQ Capital Market may engage in passive market making transactions in our common stock on the NASDAQ Capital Market in accordance with Rule 103 of Regulation M, during the business day prior to the pricing of the offering, before the commencement of offers or sales of common stock. Passive market makers must comply with applicable volume and price limitations and must be identified as passive market makers. In general, a passive market maker must display its bid at a price not in excess of the highest independent bid for such security; if all independent bids are lowered below the passive market maker's bid, however, the passive market maker's bid must then be lowered when certain purchase limits are exceeded.

In compliance with guidelines of the Financial Industry Regulatory Authority, or FINRA, the maximum consideration or discount to be received by any FINRA member or independent broker dealer may not exceed 8% of the aggregate amount of the securities offered pursuant to this prospectus and any applicable prospectus supplement.

Underwriters, broker-dealers or agents who may become involved in the sale of our securities may engage in transactions with and perform other services for us in the ordinary course of their business for which they receive compensation.

LEGAL MATTERS

The validity of the issuance of securities offered hereby will be passed upon for us by Ruskin Moscou Faltischek, P.C., of Uniondale, New York.

EXPERTS

The consolidated financial statements incorporated in this prospectus by reference from CVD Equipment Corporation's Annual Report on Form 10-K for the year ended December 31, 2009 have been audited by MSPC, Certified Public Accountants and Advisors, A Professional Corporation, independent auditors, as stated in their report, which is incorporated herein by reference, and have been so incorporated in reliance upon the report of such firm given upon their authority as experts in accounting and auditing.

WHERE YOU CAN FIND ADDITIONAL INFORMATION

We file annual, quarterly and current reports, proxy statements and other information with the SEC. Our SEC filings are available to the public over the Internet at the SEC's website at www.sec.gov. You may also read and copy any document we file at the SEC's public reference room at 100 F Street, N.E., Washington, D.C. 205409. Please call the SEC at 1-800-SEC-0330 for further information on the public reference room.

The registration statement and the documents referred to below under "Incorporation of Certain Information by Reference" are also available on our website at <http://www.cvdequipment.com>. We have not incorporated by reference into this prospectus the information on our website, and you should not consider it to be a part of this prospectus.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to incorporate by reference the information we file with it, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is considered to be a part of this prospectus, and information in documents that we file later with the SEC will automatically update and supersede the information in this prospectus. We incorporate by reference into this prospectus the documents listed below and any future filings we make with the SEC under Section 13(a), 13(c) 14 or 15(d) of the Securities Exchange Act of 1934, as amended, until this offering is completed and all securities are sold or until the sale of securities pursuant to this prospectus is terminated by us:

Our Annual Report on Form 10-K for the year ended December 31, 2009 filed with the SEC on March 31, 2010;

Our Quarterly Reports on Form 10-Q for the quarters ended March 31, 2010, June 30, 2010 and September 30, 2010 filed with the SEC on May 17, 2010, August 16, 2010 and November 15, 2010, respectively;

Our Current Report on Form 8-K filed with the SEC on September 20, 2010;

Our definitive proxy statement on Schedule 14A filed with the SEC on August 9, 2010; and

The description of our common stock contained in our Registration Statement on Form 8-A pursuant to Section 12(b) of the Exchange Act, as originally filed on June 1, 2001 and as thereafter amended.

This prospectus is part of a registration statement on Form S-3 we have filed with the SEC. This prospectus does not contain all of the information in the registration statement. We have omitted certain parts of the registration statement as permitted under the rules and regulations of the SEC. You may view and inspect the registration statement and exhibits at the SEC's public reference room or on the SEC's website (see above "Where You Can Find Additional Information").

Upon request, CVD will provide, free of charge, to each person to whom a prospectus is delivered, including a beneficial owner, a copy of any or all information that has been incorporated by reference in the prospectus but not delivered with the prospectus. Any such request may be made orally or in writing to CVD Equipment Corporation, 1860 Smithtown Avenue, Ronkonkoma, New York 11779, Attention: Glen R. Charles, CFO, Tel. No.: (631) 981-7081.

