CVD EQUIPMENT CORP
Form 10-K
March 30, 2017

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

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Form 10-K

(Mark One)

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

For the fiscal year ended December 31, 2016

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934.
For the transition period from ____ to _____

Commission file number: 1-16525

CVD EQUIPMENT CORPORATION

(Exact name of registrant as specified in its charter)

New York	**11-2621692**
(State or Other Jurisdiction of Incorporation or Organization)	*(I.R.S. Employer Identification No.)*

355 South Technology Drive
Central Islip, New York 11722
(Address including zip code of registrant's Principal Executive Offices)

(631) 981-7081
(Registrant's Telephone Number, Including Area Code)

Securities registered under Section 12(b) of the Act:

Title of each class	Name of each exchange on which registered
Common Stock, Par value $0.01	**NASDAQ Capital Market**

Securities registered under Section 12(g) of the Act:
None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes No

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

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

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

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) is not contained herein, and will not be contained, to the best of the registrant’s knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer or a smaller reporting company. See the definitions of “large accelerated filer,” “accelerated filer,” and “smaller reporting company” in Rule 12b-2 of the Exchange Act.

Large accelerated filer Accelerated filer Non-accelerated filer Smaller reporting company

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes No

State the aggregate market value of the voting and non-voting common equity held by non-affiliates computed by reference to the price at which the common equity was last sold, or the average bid and asked price of such common equity, as of the last business day of the registrant's most recently completed second fiscal quarter: $44,511,547 at June 30, 2016

Indicate the number of shares outstanding of each of the registrant's classes of common stock, as of the latest practicable date: 6,363,690 shares of Common Stock, $0.01 par value at March 15, 2017.

DOCUMENTS INCORPORATED BY REFERENCE: None.

PART I

INFORMATION CONCERNING FORWARD-LOOKING STATEMENTS

Except for historical information contained herein, this Annual Report on Form 10-K contains forward–looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended and Section 21E of the Securities Exchange Act of 1934, as amended. Readers are cautioned not to place undue reliance on forward-looking statements, as there can be no assurance that the plans, intentions or expectations upon which they are based will occur. These statements involve known and unknown risks and uncertainties that may cause our actual results or outcomes to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. These forward-looking statements are based on various factors and are derived utilizing numerous important assumptions and other important factors that could cause actual results to differ materially from those in the forward-looking statements. Important assumptions and other factors that could cause actual results to differ materially from those in the forward-looking statements, include, but are not limited to: competition in our existing and potential future product lines of business; our ability to obtain financing on acceptable terms if and when needed; uncertainty as to our future profitability, uncertainty as to the future profitability of acquired businesses or product lines, uncertainty as to any future expansion of the Company. Other factors and assumptions not identified above were also involved in the derivation of these forward-looking statements and the failure of such assumptions to be realized as well as other factors may also cause actual results to differ materially from those projected. We assume no obligation to update these forward-looking statements to reflect actual results, changes in assumptions, or changes in other factors affecting such forward-looking statements. Past performance is no guaranty of future results.

Item 1. Description of Business.

The use of the words “CVD,” “we,” “us” or “our” refers to CVD Equipment Corporation, a New York corporation incorporated on October 13, 1982, and its wholly owned subsidiaries, CVD Materials Corporation (including its wholly owned subsidiary CVD Tantaline ApS, collectively “CVD Materials”) and FAE Holdings 411519R LLC, except where the context otherwise requires.

We design, develop and manufacture a broad range of chemical vapor deposition, gas control and other state-of-the-art equipment and process solutions used to develop and manufacture materials and coatings for research and industrial applications. This equipment is used by our customers to research, design, and manufacture these materials or coatings for aerospace engine components, medical implants, semiconductors, solar cells, smart glass, carbon nanotubes, nanowires, LEDs, MEMS and other applications. Through CVD Materials and our Application Laboratory, we provide material coatings, process development support and process startup assistance with the focus on enabling tomorrow’s technologies™.

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Based on more than 34 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 aerospace, medical, solar, nano, LEDs, semiconductors and other electronic components. We develop, manufacture and provide equipment for research and production 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.

Our strategy is to target opportunities in the research and development and production equipment market, with a focus on higher-growth applications such as aerospace, medical, solar, smart glass, carbon nanotubes, nanowires, graphene, MEMS and LEDs. To expand our penetration into these growth markets, we have developed a line of proprietary standard products and custom systems. Historically, we manufactured 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 our installed customer base, which includes several Fortune 500 companies. The strong performance and success of our products has historically driven repeat orders from existing customers, as well as business from new customers. However, with our proprietary solutions and expanded focus on "accelerating the commercialization of tomorrow's technologies™" we have been developing a new customer base in addition to growing with our existing customers. We have generally gained new customers through word of mouth, limited print advertising and trade show attendance. We are now also gaining new customers by their 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-real-time, software 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 test their process tools in our Application Laboratory and to work together with our scientists and engineers to optimize process performance.

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Business Developments

On December 16, 2016, we purchased certain assets formerly owned by Tantaline A/S of Nordborg, Denmark ("Tantaline A/S") through our wholly owned subsidiary, CVD Materials. Formed in 2007, as a spin off from The Danfoss Group, Tantaline A/S established itself as a leader in the commercialization of tantalum treated parts for corrosion resistance. We have now established in Denmark a new and wholly owned CVD subsidiary operating under the name Tantaline CVD ApS ("Tantaline").

This asset acquisition was a significant step in our strategic plan to leverage our equipment know-how and proven ability to scale up deposition processes into offering high value added materials, products and services. This innovative tantalum chemical vapor technology, called Tantaline® treatment, is used to create a tantalum surface alloy on parts including valves, fittings, autoclaves, process chambers, flow reactors, fasteners, mixers, flowmeters, and medical devices, as well as other parts that are prone to corrosion in harsh environments. These parts are used across a broad range of industries including chemical processing, oil & gas, mining, pharmaceutical, and medical. In hot corrosive acidic environments (>150°C) such as sulfuric, nitric, and hydrochloric acids, Tantaline® treated parts outperform most high priced specialty alloys nearly at the level of more expensive solid tantalum parts. Tantaline® treatment therefore provides solid tantalum like superior corrosion resistance at a lower part cost. We believe that the acquisition of these assets will further CVD's corrosion resistant technology and applications base and provide access to new markets and applications. Additionally, sales and manufacturing operations in Denmark expand our geographic footprint.

Operating Units

In 2016, we conducted our operations through two divisions: (1) CVD/First Nano, and (2) Stainless Design Concepts ("SDC"). Each division operates with divisional management supported by product development, sales and administration which are managed at the corporate level.

With the acquisition of certain assets formerly owned by Tantaline A/S, we set up Tantaline, a wholly owned subsidiary of CVD Materials where we operate a facility in Denmark. There was minimal activity in 2016 and is included in CVD/First Nano.

CVD/First Nano supplies state-of-the-art chemical vapor deposition systems for use in the research, development and manufacturing of aerospace and medical components, semiconductors, LEDs, carbon nanotubes, nanowires, solar cells and a number of other 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 where our personnel interact effectively with the scientists and engineers of our customer base. CVD/First Nano operates out of our main facility in Central Islip, New York.

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 either a stand-alone basis, or 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.

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° 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.

Chemical Vapor Deposition Systems - Used in a variety of models for 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, but can go significantly higher.

Rapid Thermal Processing ("RTP") - Used to heat semiconductor materials to elevated temperatures of up to 1,000° Celsius at rapid rates of up to 200° 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.

Markets and Marketing

Due to the highly technical nature of our products, we believe it is essential to contact customers directly through our sales personnel and through a network of domestic and international independent sales representatives and distributors specializing in the type of equipment we sell. Our primary marketing activities include direct sales contacts, participation in trade shows and our internet websites. We are also focusing our efforts on being in the top listings on many search engines in order to increase the number of “hits” to our websites.

Customers

We are continuing to work on expanding our product offerings. Many of these products are used in research and in production applications. We sell our products primarily to electronic component manufacturers, institutions involved in electronic component research (such as universities, government and industrial laboratories) and to industries such as aerospace that require specialized coatings. We have both a domestic and international customer base with hundreds of installed systems.

Given the complexity of some of the systems we sell, revenue from a single customer in any one year can exceed 10.0% of our total sales. In fiscal years 2016 and 2015 one customer represented 45.3% and 49.6% of our annual revenues respectively. Another customer represented 13.7% of our annual revenues for 2015. The loss of current key customers, if not replaced by others, may have a material adverse effect on our business and financial condition.

For the twelve months ended December 31, 2016, approximately 11.9% of our revenues were generated by sales to customers outside the U.S., compared to 9.0% for the twelve months ended December 31, 2015.

Warranties

Warranties on our equipment can range up to twenty-four months from shipment and we pass along any warranties from original manufacturers of components used in our products. We provide service and support for our installed base of equipment with in-house field service personnel. Warranty costs, including those incurred in fiscal years 2016

and 2015, have been historically insignificant and expensed as incurred.

Competition

We are subject to intense competition. We are aware of other competitors that offer a substantial number of products and services comparable to ours. Many of our competitors (including customers who may elect to manufacture systems for internal use) have financial, marketing and other resources greater than ours. To date, we believe that each of our two operating divisions has been able to compete favorably in markets that include these competitors, primarily on the basis of know-how, technical performance, quality, delivery and price and aftermarket support.

CVD/First Nano competes primarily with in-house design and engineering personnel at research and university laboratories with the capacity to design and build their own equipment internally. Due to budgetary and funding constraints, many of these customers are extremely price sensitive. We believe that our systems are among the most advanced available for the targeted market space.

SDC's gas management and chemical delivery control systems are among the most advanced available. We further believe that SDC is differentiated from our competitors through our intimate understanding of how the systems in which our products are incorporated are actually used in field applications. We have gained this understanding as a result of having designed and built complex process gas systems for CVD/First Nano as well as for a number of the world's leading semiconductor, solar manufacturers, research laboratories and universities.

Sources of Supply

Many of the components used in producing our products are purchased from unrelated suppliers. We have OEM status with our suppliers but we are not obligated to purchase a pre-determined quantity. We are not dependent on a principal or major supplier and alternate suppliers are available. Subject to lead times, the components and raw materials we use in manufacturing our products are readily obtainable.

We have a fully-equipped machine shop that we use to fabricate most of our metal components in-house, including the most complex designed parts of our equipment. Our investment in CNC machines for our machine shop has increased our efficiencies while significantly reducing costs in production. Similarly, our quartz fabrication capability is sufficient to meet our quartz-ware needs.

Materials procured from the outside and/or manufactured internally undergo a rigorous quality control process to ensure that the parts meet or exceed our requirements and those of our customers. Upon final assembly, all equipment undergoes a final series of complete testing to ensure maximum product performance.

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Backlog

As of December 31, 2016, our order backlog was approximately $27.8 million compared to approximately $6.1 million at December 31, 2015, an increase of $21.7 million, or 355.7%. We received approximately $42.6 million in orders for the twelve months ended December 31, 2016 compared to $24.0 million in orders for the twelve months ended December 31, 2015, an increase of $18.6 million or 77.5%. The CVD/First Nano division received orders totaling $39.9 million and the SDC division received $2.7 million. The December 31, 2016 backlog consists of $23.3 million or 84% from one customer as a result of multiple orders that are still in process. The increase in backlog is related to an increase in orders, as we focus on new opportunities with new and existing customers. The timing for completion of the backlog varies depending on the product mix and can be as long as two years. Included in the backlog are all accepted purchase orders with the exception of those that are included in our percentage-of-completion. Order backlog is usually a reasonable management tool to indicate expected revenues and projected profits, however, it does not provide an assurance of future achievement or profits as order cancellations or delays are possible.

Intellectual Property

Our success is dependent, in part on our proprietary technology and other proprietary rights. We have historically protected our proprietary information and intellectual property such as design specifications, blueprints, technical processes and employee know-how through the use of non-disclosure agreements. In addition, where we deem appropriate, we file for patent and trademark protection of our proprietary technology and intellectual property that has the potential to be incorporated into our products and can be sold to multiple customers. We also maintain and/or assert rights in certain trademarks relating to certain of our products and product lines, and claim copyright protection for certain proprietary software and documentation.

While patent, copyright and trademark protections for our intellectual property are important to different degrees for our various products and solutions, we believe our future success in highly dynamic markets is most dependent upon the technical competence and creative skills of our personnel and our ability to accelerate the commercialization of next generation intellectual properties. We attempt to protect our trade secrets and other proprietary information through non-disclosure agreements with our customers, suppliers, employees and consultants and other security measures.

Research and Development

The university research community is at the forefront of nanotechnology research, and we are focused on providing state-of-the-art systems to this market that will help bridge the gap between pioneering research and marketable

products. Our Application Laboratory, together with a number of leading universities and startup companies, with whom we partner from time to time, conducts cutting-edge research on the growth of carbon nanotubes, graphene and nanowires as well as on selected solar cell manufacturing processes and smart glass coating processes. The results of this research could have far reaching implications concerning the use and manufacture of carbon nanotubes, graphene and nanowires, solar cell and glass coatings for many markets. Our intention is that together, with these leading universities and start-up companies, we will leverage our collective expertise in this field, which will allow us to capitalize on commercial opportunities in the future. This relationship has thus far produced leading edge results, including what we believe are the tallest carbon nanotube arrays yet developed.

In 2016, we incurred approximately $2.4 million in research and development expenses of which $434,000 was independent of external customer orders compared to 2015, when we incurred $1.8 million of research and development expenses, $605,000 of which was independent of external customer orders.

Government Regulation

We are subject to a variety of federal, state and local government regulations, such as environmental, labor and export control. We believe that we have obtained all necessary permits to operate our business and that we are in material compliance with all laws and regulations applicable to us.

We are not aware of any government regulations or requirements necessary for the sale of our products, other than certain approvals or permits which may be required for us to export certain of our products to certain foreign countries.

Insurance

Our products are used in our customers' manufacturing processes which in some cases contain explosive, flammable, corrosive and toxic gases. There are potential exposures to personal injury as well as property damage, particularly if operated without regard to the design limits of the systems and components. Additionally, the end products of some of our customers are used in areas such as aerospace and high tech devices where safety is of great concern. Management reviews its insurance coverage on an annual basis or more frequently if appropriate and we believe we have the types and amounts of insurance coverage that are sufficient for our business.

Employees

At December 31, 2016, we had 173 employees, with all but one being full time personnel. We had 95 people in manufacturing, 32 in engineering (including research and development and efforts related to product improvement) 7 in field service, 10 in sales and marketing and 29 in general management, maintenance and administration.

Item 1A. Risk Factors

In addition to the other information set forth in this Annual Report on Form 10-K, our shareholders should carefully consider the risk factors described below. The risks set forth below may not be the only risk factors relating to the company. Any of these factors, many of which are beyond our control, could materially adversely affect our business, financial condition, operating results, cash flow and stock price.

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 to develop and manufacture materials and coatings for industrial and research applications that are used in numerous markets including but not limited to aerospace, medical, solar, nano and advanced electronic components. A significant part of our growth strategy involves continued expansion of the sales of our products for industrial as well as research and development purposes by companies, universities and government-funded research laboratories. 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 markets in which we operate.

If the availability of funds or the demand for capital equipment in the markets in which we operate declines, the demand for our products would also decline and our financial position and results of operations could be harmed.

We face risks associated with selling our products to a highly concentrated customer base.

In fiscal 2016, approximately 53.5% of our net sales was accounted for by 2 customers. We expect that contracts or orders from a relatively limited number of customers will continue to account for a substantial portion of our business. The mix and type of customers, and sales to any single customer, may vary significantly from quarter to quarter and from year to year. If any of our significant customers do not place orders, or they substantially reduce, delay or cancel orders, we may not be able to replace the business in a timely manner or at all, which could have a material adverse effect on our results of operations and financial condition. Major customers may also seek, and on occasion receive, pricing, payment, intellectual property-related, or other commercial terms that are less favorable to us.

The conditions of the markets in which we operate are volatile. The demand for our products and the profitability of our products can change significantly from period to period as a result of numerous factors.

The industries in which we operate are characterized by ongoing changes, including:

- 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 for research and industrial applications in the markets in which we operate;

the profitability and capital resources of manufacturers in the markets in which we operate; and

changes in technology.

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

Volatile and cyclical 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 our equipment and related consumable products may be volatile as a result of sudden changes in supply and demand, and other factors in the manufacturing process. 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 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 industry cycles in which we operate. If we fail to respond to these cyclical change, our business could be seriously harmed.

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.

We face significant competition and we are relatively small in size and have fewer resources in comparison with many of our competitors.

We face significant competition throughout the world, which may increase as certain markets in which we operate continue to evolve. Some of our competitors have greater financial, engineering, manufacturing and marketing resources than us 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 processing equipment companies, whose strategy is to provide a portion of the products and services that we offer at often lower prices than ours, using innovative technology to sell products into specialized markets. Loss of competitive position could impair our prices, customer orders, revenue, gross margin and market share, any of which would negatively affect our financial position and results of operations. Our failure to compete successfully with these other companies would seriously harm our business. There is a risk that larger, better financed competitors will develop and market more advanced products than those we currently offer, or that competitors with greater financial resources may decrease prices, thereby putting us under financial pressure.

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

The health and environmental 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.

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. If we are unable to obtain 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 markets in which we operate 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 customer's 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, 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.

Manufacturing interruptions or delays could affect our ability to meet customer demand and lead to higher costs, while the failure to estimate customer demand accurately could result in excess or obsolete inventory.

Our business depends on timely supply of equipment, services and related products that meet the rapidly changing technical and volume requirements of our customers. Some key parts to our products are subject to long lead-times and/or obtainable only from a single supplier or limited group of suppliers. Cyclical industry conditions and the volatility of demand for manufacturing equipment increase capital, technical, operational and other risks for us and for companies throughout our supply chain. Further, these conditions may cause some suppliers to scale back operations, exit businesses, merge with other companies, or file for bankruptcy protection and possibly cease operations. We may also experience significant interruptions of our manufacturing operations, delays in our ability to deliver products or services, increased costs or customer order cancellations as a result of:

- The failure or inability of suppliers to timely deliver sufficient quantities of quality parts on a cost-effective basis;
- Volatility in the availability and cost of materials, including rare earth elements;
- Difficulties or delays in obtaining required import or export approvals;
- Information technology or infrastructure failures; and
- Natural disasters or other events beyond our control (such as earthquakes, floods or storms, regional economic downturns, pandemics, social unrest, political instability, terrorism, or acts of war).

If a supplier fails to meet our requirements concerning quality, cost, socially-responsible business practices, or other performance factors, we may transfer our business to alternative sources, which could entail manufacturing delays, additional costs, or other difficulties. In addition, if we need to rapidly increase our business and manufacturing capacity to meet increases in demand or expedited shipment schedules, this may exacerbate any interruptions in our manufacturing operations and supply chain and the associated effect on our working capital.

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, largely consists of orders for customized systems including our chemical vapor deposition equipment and annealing and diffusion furnaces which are built to client specifications. These customized systems can have prices that range from $100,000 to several million dollars, depending on the configuration, specific options included and any special requirements of the customer. Because our 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 of achievement of revenues or that we will realize a profit from completing these orders. Since revenues on long-term contracts are recognized by the percentage-of-completion method, if a contract is canceled, we may have to reverse revenue at such time. 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 alleged 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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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 a key person life insurance policies on the life of Leonard A. Rosenbaum, for a total insured amount of $5 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 several 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.

In December 2016, we purchased certain assets formally owned by Tantaline A/S, which we incorporated into a facility in Denmark which is operated by our subsidiary, Tnataline CVD ApS. 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, services 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 acquisitions;
- 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;
- the acquired assets becoming impaired as a result of technological advancements or worse-than-expected performance of the acquired assets.

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

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

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We have made investments in our proprietary technologies. If third parties violate our proprietary rights, 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 technologies and our 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. In addition to patent protection, we have also historically protected our proprietary information and intellectual property such as design specifications, blueprints, technical processes and employee know-how, by limiting access to this confidential information and trade secrets and through the use of non-disclosure agreements. Other companies and individuals, including our larger competitors, may develop technologies that are similar or superior to our technology, or design around the intellectual property that we own or license. Our failure to adequately protect our intellectual property, could result in the reduction or extinguishment of our rights to such intellectual property. We also assert rights to certain trademarks relating to certain of our products and product lines. We have not filed trademark applications to protect such marks with any governmental agency, including, but not limited to the U.S. Patent and Trademark Office. We claim copyright protection for certain proprietary software and documentation, but we have not filed any copyright applications with the U.S. Copyright Office in connection with those works. As a result, we can give no assurance that our trademarks and copyrights will be upheld or successfully deter infringement by third parties.

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

Occasionally, we may receive communications from other parties asserting the existence of patent rights or other intellectual property rights that they believe cover certain of our products, processes, technologies or information. If such cases arise, we will evaluate our position and consider the available alternatives, which may include seeking licenses to use the technology in question on commercially reasonable terms, or defending our position. Nevertheless, we cannot ensure that we will be able to obtain licenses, or, if we are able to obtain licenses, that related terms will be acceptable, 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.

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

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

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

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

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

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

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

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

During the year ended December 31, 2016, 11.9% of our revenues came from foreign exports as compared with 9.0% for the year ended December 31, 2015.

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 to date 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. At certain times, increases in demand for capital equipment can result in longer lead-times for many important system components, which may cause delays in meeting shipments to our customers. The delay in the shipment of even a few systems could cause significant variations in our quarterly revenue, operating results and the market value of our common stock.

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

We might require additional financing to expand our operations.

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

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

Section 404 of the Sarbanes-Oxley Act requires management to certify that it has tested and found the company's internal controls to be effective. It also requires, for accelerated filers, that a company's independent auditors attest that such management representations are reasonably founded. The adequacy of internal controls generally takes into consideration that the anticipated benefits of a control should outweigh the cost of that control. Auditing standards related to the internal control requirements of Section 404 of the Sarbanes Oxley Act will significantly increase the cost and time needed to comply with the requirements of Section 404. Complying with these requirements is very complex, costly and time consuming and, if we are required to comply under the existing regulations, will have a material impact on our operating results. Failure to comply could result in civil penalties, loss of our listing on NASDAQ, and the imposition of possible litigation.

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

Changes in accounting pronouncements or taxation rules or practices can have a significant effect on our reported results. New accounting pronouncements or taxation rules and varying interpretations of accounting pronouncements or taxation practices have occurred and may occur in the future. New rules, changes to existing rules, or the questioning of our current or past practices may adversely affect our reported financial results.

We may be required to take additional impairment charges on assets.

We are required to assess goodwill and indefinite-lived intangible assets annually for impairment, or on an interim basis, whenever certain events occur or circumstances change, such as an adverse change in business climate or a decline in the overall industry, that would more likely than not reduce the fair value below its carrying amount. We are also required to test our long-lived assets, including acquired intangible assets and property, plant and equipment, for recoverability and impairment whenever there are indicators or impairment, such as an adverse change in business climate.

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

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

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

- difficult macroeconomic conditions, unfavorable geopolitical events, and general stock market uncertainties, such as those occasioned by a global liquidity crises and a failure of large financial institutions;
- receipt of large orders or cancellations of orders for our products;
- issues associated with the performance and reliability of our products;
- actual or anticipated variations in our results of operations;
- announcements of financial developments or technological innovations;
- changes in recommendations and/or financial estimates by investment research analysis;
- strategic transactions, such as acquisitions, divestitures, or spin-offs; and
- the occurrence of major catastrophic events

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

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 1000º Celsius. In addition, a failure of one of our products at a customer site could interrupt the business operations of our customer. Our existing insurance coverage limits may not be adequate to protect us from all liabilities that we might incur in connection with the manufacture and sale of our products if a successful product liability claim or series of product liability claims were brought against us.

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

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

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

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

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

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

Under the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, or the Dodd-Frank Act, the SEC adopted requirements for companies that manufacture products that contain certain minerals and metals known as conflict minerals. These rules require public companies to perform diligence and to report annually to the SEC whether such minerals originate from the Democratic Republic of Congo and adjoining countries. The implementation of these requirements could adversely affect the sourcing, availability, and pricing of minerals we use in the manufacture of our products. In addition, we have incurred and will continue to incur additional costs to comply with the disclosure requirements, including costs related to determining the source of any of the relevant minerals used in our products. Given the complexity of our supply chain, we may not be able to ascertain the origins of these minerals used in our products through the due diligence procedures that we implement, which may harm our reputation. We may also face difficulties in satisfying customers who may require that our products be certified as conflict mineral free, which could harm our relationships with these customers and lead to a loss of revenue. These requirements could limit the pool of suppliers that can provide conflict-free minerals, and we may be unable to obtain conflict-free minerals at competitive prices, which could increase our costs and adversely affect our manufacturing operations and our profitability.

Item 1B. Unresolved Staff Comments

None.

Item 2. Description of Property.

Owned Locations	Size (sf)	Division	Mortgage/Loan	Principal use
Central Islip, NY	130,000	CVD/First Nano	Yes	Corporate: R&D; Mfg.
Saugerties, NY	22,000	SDC	Yes	Admin; Mfg.

Leased Locations	Size (sf)	Subsidiary	Lease term	Principal use
Nordborgvej, Denmark	7,793	Tantaline AsP	5 Years	Process coatings; admin

Item 3. Legal Proceedings.

None

Item 4. **Mine Safety Disclosures**.

Not applicable.

PART II

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

Our common stock is listed on the NASDAQ Capital Market under the symbol "CVV." The following table sets forth, for the periods indicated, the high and low closing prices of our common stock on the NASDAQ Capital Market.

	High	Low
Year Ended December 31, 2016:		
1st Quarter	$9.95	$7.79
2nd Quarter	8.74	6.27
3rd Quarter	9.27	8.33
4th Quarter	8.83	7.70

	High	Low
Year Ended December 31, 2015:		
1st Quarter	$16.48	$13.05
2nd Quarter	13.62	10.52
3rd Quarter	12.94	9.80
4th Quarter	13.18	9.70

As of March 22, 2017 there were approximately 83 holders of record and approximately 1,226 beneficial owners of our common stock, and the closing sales price of our common stock as reported on the NASDAQ Capital Market was $10.17

Dividend Policy

We have never paid dividends on our common stock and we do not anticipate paying dividends on common stock at the present time. We currently intend to retain earnings, if any, for use in our business. There can be no assurance that we will ever pay dividends on our common stock. Our dividend policy with respect to our common stock is within the discretion of the Board of Directors and its policy with respect to dividends in the future will depend on numerous factors, including earnings, financial requirements and general business conditions. We are also prohibited from paying dividends under the terms of our Revolving Line of Credit Agreement with HSBC Bank, USA, N.A.

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Equity Compensation Plan Information Table

The following table provides information about shares of our common stock that may be issued upon the exercise of options under all of our existing compensation plans as of December 31, 2016.

Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants and rights(1)	Weighted-average exercise price of outstanding options, warrants and rights(2)	Number of securities remaining available for future issuance
Equity compensation plans approved by security holders	284,730	$ 8.40	237,200
Equity compensation plans not approved by security holders	--	N/A	--
Total	284,730	$ 8.40	237,200

(1) Reflects aggregate options and restricted stock awards outstanding under our 1989 Key Employee Stock Option Plan, 2001 Stock Option Plan and 2007 Share Incentive Plan.

(2) Calculation is exclusive of the value of any unvested restricted stock awards.

Recent Sales of Unregistered Securities

None.

Issuer Purchases of Equity Securities

None.

Item 6. Selected Financial Data.

Not applicable.

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

Except for historical information contained herein, this "Management's Discussion and Analysis of Financial Condition and Results of Operations" contains forward-looking statements within the meaning of the U.S. Private Securities Litigation Reform Act of 1995, as amended. These statements involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance, or achievements of the Company to be materially different from any future results, performance, or achievements expressed or implied by such forward-looking statements. These forward-looking statements were based on various factors and were derived utilizing numerous important assumptions and other important factors that could cause actual results to differ materially from those in the forward-looking statements. Important assumptions and other factors that could cause actual results to differ materially from those in the forward-looking statements, include but are not limited to: competition in the Company's existing and potential future product lines of business; the Company's ability to obtain financing on acceptable terms if and when needed; uncertainty as to the Company's future profitability, uncertainty as to the future profitability of acquired businesses or product lines, uncertainty as to any future expansion of the Company. Other factors and assumptions not identified above were also involved in the derivation of these forward-looking statements and the failure of such assumptions to be realized as well as other factors may also cause actual results to differ materially from those projected. The Company assumes no obligation to update these forward looking statements to reflect actual results, changes in assumptions or changes in other factors affecting such forward-looking statements. Past results are no guaranty future performance. You should not place undue reliance on any forward-looking statements, which speak only as of the dates they are made. When used with this Report, the words "believes," "anticipates," "expects," "estimates," "plans," "intends," "will" and similar expressions are intended to identify forward-looking statements.

We design and manufacture state-of-the-art equipment and process solutions used to develop and manufacture materials and coatings for research and industrial applications with the focus on *enabling tomorrow's technologies*™. These coatings are used in numerous fields including but not limited to aerospace, medical, solar, nano and advanced electronic components. 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 these materials or coatings for turbine blades, implants, semiconductors, solar cells, smart glass, carbon nanotubes, nanowires, LEDs, MEMS and other applications. Through our Application Laboratory, we provide process development support, startup assistance and focus on developing higher efficiency material manufacturing for a wide variety of growth markets. We look to accelerate the introduction of nano materials into a range of products and applications to help create a demand for our equipment or which we can market through our wholly owned subsidiary, CVD Materials Corporation. Our proprietary technology 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 34 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 chemical vapor deposited products for use in solar, nano materials, LEDs, semiconductors and other applications. 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 of chemically deposited materials. 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.

Results of Operations

Twelve Months Ended December 31, 2016 vs Twelve Months Ended December 31, 2015

	Twelve Months Ended December 31			
	2016	2015	Change	% Change
Revenue				
CVD (net of eliminations)	$18,560	$35,461	$(16,901)	(47.7)
SDC (net of eliminations)	2,395	3,504	(1,109)	(31.6)
Total Revenue	20,955	38,965	(18,010)	(46.2)
Cost of Goods Sold	13,851	23,820	(9,969)	(41.9)
Gross Profit	7,104	15,145	(8,041)	(53.1)
Gross Margin	33.9%	38.9%		(5.0)
Research & Development	434	605	(171)	(28.3)
Selling and Shipping	1,098	1,208	(110)	(9.1)
General & Administrative	6,926	7,745	(819)	(10.6)
	8,458	9,558	(1,100)	(11.5)
Litigation settlement	---	995	(995)	
Gain on settlement	(629)	---	(629)	
Total Operating expenses	7,829	10,553	(2,724)	(25.8)
Operating (loss)/income	(724)	4,592	5,316	115.8
Other income/(expense)	71	(67)	138	206.0
(Loss)/income before taxes	(653)	4,525	(5,178)	114.4
Income tax (benefit)/expense	(504)	1,320	(1,824)	
Net (loss)/income	(149)	3,205	(3,354)	104.6
Net (loss)/income per share				
Basic	(0.02)	0.52		
Diluted	(0.02)	0.51		

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Revenue

Our revenue for the year ended December 31, 2016 was $21 million compared to $39 million for the year ended December 31, 2015, resulting in a decrease of 46.2%. This decrease was primarily attributable to the protracted negotiations with a customer, a major aviation component supplier, which caused a delay in receiving a large anticipated follow-on order. The revenue contributed for the year ended December 31, 2016, by the CVD/First Nano division, of $18.6 million, which totaled 88.6% of our overall revenue, was 47.7% or $16.9 million less than the division's $35.5 million contribution made in the prior year, which totaled 91% of our overall revenue.

Annual revenue for the SDC division decreased to $2.4 million in 2016 compared to $3.5 million in 2015. This was a result of a general slowdown in the industry. However, we are beginning to see an increase in activity, as some of the expected orders from earlier are now being received. The SDC division represented 11.4% and 9% of our total revenue during the years ended December 31, 2016 and December 31, 2015 respectively.

Gross Profit

Gross profit for the year ended December 31, 2016 amounted to $7.1 million, with a gross profit margin of 33.9%, compared to a gross profit of $15.1 million and a gross profit margin of 38.9% for the year ended December 31, 2015. The reduced gross profit and gross margin was the result of the lower revenue and the costs associated with maintaining production staff in anticipation of the large follow-on order from our largest customer.

Research and Development, Selling and General and Administrative Expenses

Due to the technical development required on our custom orders, our research and development team and their expenses are charged to costs of goods sold when they are working directly on a customer project. When they are not working on a customer project they work in our Application Laboratory and their costs are charged to research and development. In 2016, we incurred $0.4 million of internal research and development costs compared to $0.6 million of internal research and product development expenses incurred in 2015. The Company had temporarily curtailed independent research and development activities during the first six months of 2016, however, it has begun to expand those activities during the last half of the year.

Selling and shipping expenses were $1.1 million or 5.2% of the revenue for the year ended December 31, 2016 compared to $1.2 million or 3.1% for the year ended December 31, 2015. The decrease in actual expenses was a result of reduced personnel and shipping costs in the current period. The increase as a percentage of revenue was due to the

reduced revenues for the current year.

General and administrative expenses for the year ended December 31, 2016 were $6.9 million compared to $7.7 million during the year ended December 31, 2015, a decrease of $0.8 million. In 2016, we incurred general legal fees of $75,000 compared to $619,000 in legal fees related to litigation that was settled in 2015.

Litigation Settlement

Pursuant to a settlement agreement, in September 2015, the Company paid the sum of $995,000 to Development Specialists, Inc. an Illinois corporation, solely in its capacity as assignee for the benefit of creditors of CM Manufacturing, Inc., f/k/a Stion Corporation, a Delaware corporation in full settlement and satisfaction of all claims asserted in a previously disclosed proceeding. Each party released all claims of any nature which it had against the other.

Gain on Settlement

The Company has included the results of a negotiated reduction to legal fees and expenses

in connection with the settlement of the previously disclosed Taiwan Glass litigation. The final negotiated sum was $1.1 million, resulting in a reduction of the amount that was previously billed and accrued and a gain on the statement of operations of $629,000 during the period.

Operating (Loss)/Income

As a result of the decreased revenues, we incurred a loss from operations of $0.7 million for the year ended December 31, 2016 compared to operating income of $4.5 million for the year ended December 31, 2015.

Other Income/(Expenses)

During the year ended December 31, 2016, we received a payment from our insurance company on a property damage claim that exceeded the repair costs by $119,000.

Income Taxes

For the twelve months ended December 31, 2016, we recorded an income tax benefit of approximately $504,000. This is primarily the result of available research and development and other tax credits to a pre-tax loss of $654 as

compared to an income tax expense of $1.3 million on pre-tax income of $4.5 million for the twelve months ended December 31, 2015.

Net (Loss)/Income

As a result of the foregoing factors, for the year ended December 31, 2016, we incurred a net loss of $149,000 or $(0.02) per diluted share compared to net income of $3.2 million or $0.51 per diluted share for the year ended December 31, 2015.

Inflation

Inflation has not materially impacted our operations.

Liquidity and Capital Resources

As of December 31, 2016, we had aggregate working capital of $20.5 million compared to aggregate working capital of $19.9 million at December 31, 2015 and had available cash and cash equivalents of $21.7 million, compared to $13.1 million, in cash and cash equivalents at December 31, 2015. The increase in working capital of $0.6 million is primarily attributable to an increase in cash that was partially offset by a reduction in costs and estimated earnings in excess of billings on contracts in progress as well as an increase in billings in excess of costs and estimated earnings on contracts in progress. Net cash increased by $8.6 million as a result of cash provided by operating activities of $8.8 million which was primarily attributed to an increase in billings in excess of costs and estimated earnings on contracts in progress. Net cash used in investing activities was $0.4 million.

Accounts receivable, net of allowance for doubtful accounts, decreased by $2.5 million or 80.6% at December 31, 2016 to $0.6 million compared to $3.1 million at December 31, 2015. This decrease is principally due to the timing of shipments and customer payments.

Inventories as of December 31, 2016 were approximately $3.3 million representing an increase of approximately $0.2 million or 6.5% compared to the balance of approximately $3.1 million as of December 31, 2015

We maintain a revolving credit facility with HSBC Bank, USA, N.A. (“HSBC”) providing up to $7 million, although we have never utilized this facility. This credit facility remains available until September 1, 2018. The credit facility also contains certain financial covenants, all of which we were in compliance with at December 31, 2016.

On August 1, 2016 we made the final payment on a $2.1 million term loan that was initially entered into in August 2011. The balance on that term loan at December 31, 2015 was $280,000.

The Company has a loan agreement with HSBC which is secured by a mortgage against our Central Islip facility. The loan is payable in 120 consecutive equal monthly installments of $25,000 in principal plus interest and a final balloon payment upon maturity in March 2022. The balances as of December 31, 2016 and December 31, 2015 were approximately $3.3 million and $3.6 million respectively. Interest accrues on the Loan, at our option, at the variable rate of LIBOR plus 1.75% which was 2.1765% and 1.9455% at December 31, 2016 and 2015 respectively.

On December 16, 2016, we purchased certain assets formerly owned by Tantaline A/S of Nordborg, Denmark through our wholly owned subsidiary, CVD Materials Corporation. Formed in 2007, as a spin off from The Danfoss Group, Tantaline A/S established itself as a leader in the commercialization of tantalum treated parts for corrosion resistance. We have now established in Nordborg a new and wholly owned CVD subsidiary operating under the name Tantaline CVD ApS (“Tantaline”).

We believe that our cash and cash equivalent positions and cash flow from operations will be sufficient to meet our working capital and capital expenditure requirements for the next twelve months.

We may also raise additional funds in the event we determine in the future to effect one or more acquisitions of businesses, technologies or products. In addition, we may elect to raise additional funds even before we need them if the conditions for raising capital are favorable. Any equity or equity-linked financing could be dilutive to existing shareholders.

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Critical Accounting Policies

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates. Our significant estimates include accounting for certain items such as revenues on long-term contracts recognized on the percentage-of-completion method; valuation of inventories at the lower of cost or market; allowance for doubtful accounts receivable; recognition of stock-based compensation; estimated lives and recoverable value of our long-lived assets; costs associated with product warranties; and certain components of the current and deferred income tax provisions which ae based on estimates of future taxable events.

Revenue Recognition

Product and service sales, including those based on time and materials type contracts, are recognized when persuasive evidence of an arrangement exists, product delivery has occurred or services have been rendered, pricing is fixed or determinable, and collection is reasonably assured. Service sales, principally representing repair, maintenance and engineering activities are recognized over the contractual period or as services are rendered.

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

Stock-Based Compensation

We record stock-based compensation in accordance with the provisions set forth in the Financial Accounting Standard Board (“FASB”) Accounting Standards Codification (“ASC”) 718, “Stock Compensation,” using the modified prospective method. ASC 718 requires companies to recognize the cost of employee services received in exchange for awards of equity instruments based upon the grant date fair value of those awards.

Long-Lived Assets

Long-lived assets consist primarily of property, plant and equipment. Long-lived assets are reviewed for impairment whenever events or circumstances indicate their carrying value may not be recoverable. When such events or circumstances arise, an estimate of the future undiscounted cash flows produced by the asset, or the appropriate grouping of assets, is compared to the asset's carrying value to determine if impairment exists pursuant to the requirements of ASC 360-10-35, "Impairment or Disposal of Long-Lived Assets." If the asset is determined to be impaired, the impairment loss is measured on the excess of its carrying value over its fair value. Assets to be disposed of are reported at the lower of their carrying value or net realizable value. We had no recorded long-lived asset impairment charges in the statement of operations during each of the years ended December 31, 2016 and 2015.

Off-Balance Sheet Arrangements

None.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk.

Not applicable.

Item 8. Financial Statements and Supplementary Data.

The consolidated financial statements and supplementary data required by this item are included in this annual report beginning on page F-1.

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

None.

Item 9A. Controls and Procedures.

Disclosure Controls and Procedures. We maintain a system of disclosure controls and procedures (as defined in Rule 13a-15(e) under the Exchange Act). As required by Rule 13a-15(b) under the Exchange Act, management of the Company, under the direction of our Chief Executive Officer and Chief Financial Officer, reviewed and performed an evaluation of the effectiveness of design and operation of our disclosure controls and procedures (as defined in Rule 13a-15(e) under the Exchange Act) as of December 31, 2016. Based on that review and evaluation, the Chief Executive Officer and Chief Financial Officer, along with the management of the Company, have determined that as of December 31, 2016, the disclosure controls and procedures were effective to provide reasonable assurance that information required to be disclosed by us in the reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms and were effective

to provide reasonable assurance that such information is accumulated and communicated to our management, including our principal executive officer and principal financial officer, as appropriate to allow timely decisions regarding required disclosures.

Management's Annual Report on Internal Control Over Financial Reporting. Our management is responsible for establishing and maintaining effective internal control over financial reporting (as defined in Rule 13a – 15(f) of the Exchange Act). There are inherent limitations to the effectiveness of any internal control, including the possibility of human error and the circumvention or overriding of controls. Accordingly, even effective internal controls can provide only reasonable assurance with respect to financial statement preparation. Further, because of changes in conditions, the effectiveness of internal control may vary over time. We have assessed the effectiveness of our internal controls over financial reporting (as defined in Rule 13a -15(f) of the Exchange Act) as of December 31, 2016. In making this assessment, we used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in "Internal Control – Integrated Framework (2013)". Management concluded that, as of December 31, 2016, our internal control over financial reporting was effective based on the criteria established by the COSO Internal Control Framework.

This annual report does not include an attestation report of our registered public accounting firm regarding internal control over financial reporting. Management's report was not subject to attestation by our registered public accounting firm pursuant to the rules of the Securities and Exchange Commission that permit us to provide only management's report in this annual report.

Changes in Internal Control Over Financial Reporting. There were no changes in our internal control over financial reporting, identified in connection with the evaluation of such internal control that occurred during our last fiscal quarter that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. Other Information.

None.

PART III

Item 10. Directors, Executive Officers, and Corporate Governance.

Background and Experience of Directors

When considering whether directors and nominees have the experience, qualifications, attributes or skills, taken as a whole, to enable the Board of Directors to satisfy its oversight responsibilities effectively in light of our business and structure, the Nominating, Governance and Compliance Committee focused primarily on each person's background and experience as reflected in the information discussed in each of the directors' individual biographies set forth immediately below. We believe that our directors provide an appropriate mix of experience and skills relevant to the size and nature of our business. As more specifically described in such person's individual biographies set forth below, our directors possess relevant and industry-specific experience and knowledge in the engineering financial and business fields, as the case may be, which we believe enhances the Board's ability to oversee, evaluate and direct our overall corporate strategy. The Nominating, Governance and Compliance Committee annually reviews and makes recommendations to the Board regarding the composition and size of the Board so that the Board consists of members with the proper expertise, skills, attributes, and personal and professional backgrounds needed by the Board, consistent with applicable regulatory requirements.

The Nominating, Governance and Compliance Committee believes that all directors, including nominees, should possess the highest personal and professional ethics, integrity, and values, and be committed to representing the long-term interests of our shareholders. The Nominating, Governance and Compliance Committee will consider criteria including the nominee's current or recent experience as a senior executive officer, whether the nominee is independent, as that term is defined in existing independence requirements of the NASDAQ Capital Market and the Securities and Exchange Commission, the business, scientific or engineering experience currently desired on the Board, geography, the nominee's industry experience, and the nominee's general ability to enhance the overall composition of the Board.

The Nominating, Governance and Compliance Committee does not have a formal policy on diversity; however, in recommending directors, the Board and the Committee consider the specific background and experience of the Board members and other personal attributes in an effort to provide a diverse mix of capabilities, contributions and viewpoints which the Board believes enables it to function effectively as the Board of Directors of a company with our size and the nature of our business.

Director Service on other Boards

Lawrence J. Waldman has served as a director of Bovie Medical Corporation (“Bovie”) since 2011 and is currently the Chair of the Audit Committee and Lead Independent Director of Bovie’s Board. Mr. Waldman serves as a member of the Board of Directors of Northstar/RXR Metro Income Fund, a non-traded Real Estate Investment Trust, and has served as a member of its Audit Committee since 2014. Mr. Waldman also serves as a member of the Board of Directors of Comtech Telecommunications, Corp. since August of 2014, and has served as the Chairman of the Audit Committee since December 2015.

Raymond A. Nielsen has been a member of the Board of Directors of Bridgehampton National Bank and Bridge Bancorp Inc., its parent holding company since 2013. He currently serves on the Compensation Committee, Corporate Governance and Nominating Committee as well as on the ALCO and Loan Committees and the Compliance BSA & CRA Committee.

Legal Proceedings Involving Directors

None.

Board Leadership

The Board has no formal policy with respect to separation of the positions of Chairman and CEO or with respect to whether the Chairman should be a member of management or an independent director, and believes that these are matters that should be discussed and determined by the Board from time to time. Currently, Leonard A. Rosenbaum serves as our Chairman, President and CEO. Given the fact that Mr. Rosenbaum, in his capacity as our President and CEO is tasked with the responsibility of implementing our corporate strategy, we believe he is best suited for leading discussions, at the Board level, regarding performance relative to our corporate strategy, and these discussions account for a significant portion of the time devoted at our Board meetings.

Our Certificate of Incorporation and Bylaws provide for our Company to be managed by or under the direction of the Board of Directors. Under our Certificate of Incorporation and Bylaws, the number of directors is fixed from time to time by the Board of Directors. The Board of Directors currently consists of five members. Directors are elected for a period of one year and thereafter serve, subject to the Bylaws, until the next annual meeting at which their successors are duly elected by the shareholders.

The following table sets for the names, ages and positions with the Company of each of our directors and executive officers, as of March 22, 2017.

Name	Age	Position(s) with the Company
Leonard A. Rosenbaum	71	Chairman of the Board of Directors, Chief Executive Officer, President
Martin J. Teitelbaum	66	Director, General Counsel and Assistant Secretary
Conrad J. Gunther	70	Director, Chairperson-Audit Committee
Lawrence J. Waldman	70	Director, Chairperson-Compensation Committee
Raymond A. Nielsen	66	Director, Chairperson-Nominating, Governance and Compliance Committee
Glen R. Charles	63	Chief Financial Officer, Secretary
Steven Aragon	55	Chief Operating Officer
Karlheinz Strobl	57	Vice President of Business Development

William S. Linss	59	Vice President of Operations-CVD/First Nano Division
Kevin R. Collins	51	Vice President and General Manager-SDC Division
Emmanuel Lakios	55	Vice President of Sales and Marketing

Leonard A. Rosenbaum

Leonard A. Rosenbaum founded the Company in 1982 and has been our President, Chief Executive Officer and has served as Chairman of the Board of Directors since that time. From 1971 until 1982, Mr. Rosenbaum was president, director and a principal stockholder of Nav-Tec Industries, a manufacturer of semiconductor processing equipment similar to the type of equipment we manufacture. From 1966 to 1971, Mr. Rosenbaum was employed by a division of General Instrument, a manufacturer of semiconductor materials and equipment.

Martin J. Teitelbaum, Esq.

Martin J. Teitelbaum has served as a member of our Board of Directors and General Counsel since 1985 and as our in-house General Counsel since May 16, 2011. Mr. Teitelbaum is an attorney, who prior to May 16, 2011, conducted his own private practice, the Law Offices of Martin J. Teitelbaum. Prior to establishing his own firm in 1988, Mr. Teitelbaum was a partner at Guberman and Teitelbaum from 1977 to 1987. In addition, Mr. Teitelbaum currently acts as our Assistant Secretary. Mr. Teitelbaum earned a B.A. in Political Science from the State University of New York at Buffalo and a Juris Doctor from Brooklyn Law School. Mr. Teitelbaum has served as our outside General Counsel for many years and his legal expertise makes him an asset to the Company’s board of directors.

Conrad J. Gunther

Conrad J. Gunther has served as a member of our Board of Directors since 2000. Mr. Gunther has extensive experience in mergers and acquisitions and in raising capital through both public and private means. He has been an executive officer and director of several banks, both public and private, and has served on the boards of two other public companies. He most recently served on the board of GVC Venture Corp., a public company from June 2004 until it merged with the Halo Companies in September 2009. Since January 2008, Mr. Gunther has served as an Executive Vice President and Senior Loan Officer for Community National Bank, a Long Island, New York based commercial bank, where he is responsible for all commercial lending. Mr. Gunther qualifies to serve on our board of directors as a result of his experience and expertise in the financial community.

Lawrence J. Waldman

Lawrence J. Waldman was appointed a member of the Board of Directors on October 5, 2016. Mr. Waldman has over forty years of experience in public accounting. He joined First Long Island Investors LLC, an investment and wealth management firm, as a Managing Director in May 2016. Prior to that Mr. Waldman served as an advisor to the accounting firm of EisnerAmper LLP, where he was previously the Partner-in-Charge of Commercial Audit Practice Development for Long Island since September 2011. Prior to joining EisnerAmper LLP, Mr. Waldman was the Partner-in-Charge of Commercial Audit Practice Development for Holtz Rubenstein Reminick, LLP from July 2006 to August 2011. Mr. Waldman was the Managing Partner of the Long Island office of KPMG LLP from 1994 through 2006, the accounting firm where he began his career in 1972. Mr. Waldman has served as a director of Bovie Medical since 2011 and he is currently the Chair of the audit committee and Lead Independent Director of the Board. Mr. Waldman serves as a member of the Board of Directors of Northstar/RXR Metro Income Fund, a non-traded Real Estate Investment Trust, and has served as a member of its audit committee since 2014. Mr. Waldman was elected to the Board of Directors of Comtech Telecommunications Corp. in August of 2015, and since December 2015, serves as Chair of its Audit Committee. Mr. Waldman is also a member of Supervisory Committee of Bethpage Federal Credit Union. Mr. Waldman also serves as a member of the State University of New York's Board of Trustees and as chair of its audit committee. He previously served as the Chairman of the Board of Trustees of the Long Island Power Authority and as Chair and a member of the finance and audit committee of its Board of Trustees. Mr. Waldman is a Certified Public Accountant.

Raymond Nielsen

Raymond Nielsen was appointed a member of the Board of Directors on October 5, 2016. Mr. Nielsen is currently the Director of Finance for The Beechwood Organization and has been responsible for Project and Corporate Finance including Strategic Planning Initiatives since 2014. He has been a member of the Board of Directors of Bridgehampton National Bank and Bridge Bancorp Inc., its Parent holding company since 2013, serving on the Compensation Committee, Corporate Governance & Nominating Committee, ALCO, Loan, and the Compliance, BSA & CRA Committees. Mr. Nielsen is the former CEO of Reliance Federal Savings Bank and Herald National Bank, and a 45 year veteran of the banking industry. Mr. Nielsen also served as a Director of North Fork Bancorporation and its subsidiary North Fork Bank for 6 years where he chaired both the Compensation Committee and Audit Committee as well as having served as Lead Independent Director. Mr. Nielsen’s extensive public company, banking and real estate development experience will provide a valuable resource to the Board of Directors and Executive Management.

Glen R. Charles

Glen R. Charles has been the Chief Financial Officer and Secretary of the Company since January, 2004. From 2002 until he joined the Company, he was the Director of Financial Reporting for Jennifer Convertibles, Inc., the owner and licensor of the largest group of sofabed specialty retail stores in the United States. From 1994 to 2002, he was the

Chief Financial Officer of Trans Global Services, Inc., a public company providing temporary technical services to the aerospace, aircraft, electronics and telecommunications markets. Mr. Charles has also had his own business in the private practice of accounting. Mr. Charles earned his B.S. in Accounting from the State University of New York at Buffalo.

Steven Aragon

Dr. Steven Aragon was appointed Chief Operating Officer by the Board of Directors on October 20, 2014. Dr. Aragon has over 25 years of thin-film process, materials, and system expertise applied to photovoltaic, optical, electronic, and magnetic device fabrication. He received his Ph.D. in Physical Chemistry from the University of California, Santa Cruz, in 1990 and his MBA from Santa Clara University in 1996. He is the holder of five process equipment design patents. Dr. Aragon was a co-founder of Optimus Energy Systems International Inc. and served as its Chief Technical Officer and Senior Vice-President – Engineering from November 2011 to October 2014. From June 2008 to October 2011, He has also served as Vice-President – Engineering at Stion Corp of San Jose, California, a maker of nanostructure-based CIGS (copper indium gallium sulphur-diselenide) thin-film photovoltaic panels and as the Vice President – Engineering at Day Star Technologies Inc. from June 2001 to June 2008.

Karlheinz Strobl

Dr. Karlheinz Strobl has been the Vice President of Business Development since October 2007. From 1997 to 2007, he was the founder and President of eele Laboratories, LLC, a technology and manufacturing solutions development company for a novel Light Engine for the video and data projection display market. Dr. Strobl holds over 14 patents and earned an MBA from Boston University, a PhD from the University of Innsbruck and an MS from both the University of Innsbruck and the University of Padova. He has also worked at the Max Plank Institute and at Los Alamos National Laboratory.

William S. Linss

William S. Linss is the Vice President, Operations for the CVD/First Nano Division of CVD. In addition to managing daily engineering and production operations, Bill is instrumental in expanding the company’s technology capabilities, developing new products and positioning CVD for growth. Prior to his promotion in 2013, Bill was the Division Manager for the CVD/First Nano Division since 2005. Bill has worked in semiconductor manufacturing and chemical vapor deposition for 25 years. From 1980 through 1988 Bill worked at Standard Microsystems Corp. in Hauppauge, NY, advancing to Equipment Engineering Manager with all capital equipment responsibilities for SMC’s MOS/VLSIC manufacturing. Bill was employed by CVD from 1988 through 1994, advancing through various positions as Electrical Systems Designer, Field Service Engineer and Production Manager. From 1994 through 2001 Bill served as a Software Quality Assurance (SQA) Manager with Otari Corporation, at their Long Island pro-audio R&D office; and later with AP Engines in Sacramento, CA, a Cable TV billing solutions start-up. In 2001, Bill re-joined CVD to head the newly acquired Research International Division for SMT reflow oven manufacturing, which then resulted in CVD’s acquisition of the Conceptronic product line.

Kevin R. Collins

Prior to his appointment as Vice President and General Manager-SDC Division, Mr. Collins served as the General Manager of CVD's SDC Division since 1999. From 1990 to 1999 he was employed by Stainless Design Corp. as Manager of Field Operations and Product Development Advisor. Mr. Collins attended Columbia University School of Engineering and Applied Science.

Emmanuel Lakios

Mr. Lakios has over thirty (30) years of experience serving the semiconductor, data storage and optical device industries and is the holder of several patents in the field of process equipment and device structure. From 2015 until earlier this year, Mr. Lakios was the President and Chief Executive Officer at Sensor Electronic Technology, Inc., overseeing that company's transition from R&D to a leading global commercial UV LED supplier. From 2003 to 2011 he was the Executive Vice President of Field Operations and President and Chief Operating Officer at Imago Scientific, bringing it from pre-revenue to a commercial leadership position in the 3D atomic scale tomography field. Mr. Lakios was previously employed at Veeco Instruments Inc. from 1984 until 2003, where he held several positions, including President of the Process Equipment Group and Executive Vice President of Field Operations. He has been involved in several acquisitions and numerous product line launches. He received his BE in Mechanical Engineering with focus in Material Science from SUNY Stony Brook in 1984.

Code Of Ethics

We have adopted a Corporate Code of Conduct and Ethics that applies to our employees, senior management and Board of Directors, including the Chief Executive Officer and Chief Financial Officer. The Corporate Code of Conduct and Ethics is available on our website, http://www.cvdequipment.com, by clicking on "About Us" and then clicking on "Corporate Overview."

Audit Committee

Our Board of Directors has an Audit Committee that currently consists of Conrad J. Gunther, Lawrence J. Waldman and Raymond A. Nielsen. During the fiscal year ended December 31, 2016, the Audit Committee held four meetings. Pursuant to the Audit Committee Charter, the Audit Committee is directly responsible for the appointment, compensation, retention and oversight of the work of any independent registered public accounting firm engaged for the purpose of preparing or issuing an audit report or performing other audit, review or attest services for us, and each such independent auditor shall report directly to the Committee. The Audit Committee also reviews with management and the independent auditors, our annual audited financial statements (including the disclosures under "Management's Discussion and Analysis of Financial Condition and Results of Operations"), the scope and results of annual audits and the audit and non-audit fees of the independent registered public accounting firm. Furthermore, the Audit Committee reviews the adequacy of our internal control procedures, the structure of our financial organization and the implementation of our financial and accounting policies. Messrs. Gunther, Waldman and Nielsen are "independent" under the requirements of the NASDAQ Stock Market.

The Board of Directors has determined that each of Messrs. Gunther and Waldman is an “audit committee financial expert” as that term is defined in the rules and regulations of the Securities and Exchange Commission.

Section 16(a) Beneficial Ownership Reporting Compliance

The rules of the Securities and Exchange Commission require us to disclose late filings of reports of stock ownership and changes in stock ownership by our directors, officers and ten percent shareholders. To our knowledge, based solely on our review of (a) the copies of such reports and amendments thereto furnished to us and (b) written representations that no other reports were required, during our fiscal year ended December 31, 2016, all of the filings for our officers, directors and ten percent shareholders were made on a timely basis with the following exceptions: Lawrence Firestone, a former director of the Company, filed two late Form4’s; Bruce Swan, a former director of the Company, filed two late Form 4’s; Conrad Gunther filed two late Form 4’s; Lawrence Waldman filed one late Form 3; and Raymond A. Nielsen file one late Form 3.

Item 11. Executive Compensation.

Summary Compensation Table

The following table sets forth the compensation of our chief executive officer and chief financial officer, and our "named executive officers," for the years ended December 31, 2016 and 2015.

Name and principal position	Year	Salary ($)	Bonus ($)	Option Awards ($) (1)	Stock Awards ($) (1)	All Other Compensation	Total ($)
Leonard A. Rosenbaum	2016	302,742	20,000	-	37,949	-	360,691
President and Chief Executive Officer	2015	302,742	-	-		-	302,742
Glen R. Charles	2016	163,942	15,000	-	28,469		192,411
Secretary and Chief Financial Officer	2015	163,942	-	-	-		163,942
Steven Aragon	2016	193,462	15,000		53,469		218,459
Chief Operating Officer	2015	193,462		-	24,997		218,459
Martin J. Teitelbaum	2016	266,126	15,000	-	28,469		309,595
General Counsel and Assistant Secretary	2015	261,968	-	-	48,040		310,008

(1) Amounts shown do not reflect compensation actually received by the named executive officer. Instead, the amounts shown reflect the total remaining compensation on restricted stock and option awards granted, that have not previously been shown, as determined pursuant to ASC 718. The assumptions used to calculate the value of stock and option awards are set forth under Note 11 of the Notes to Consolidated Financial Statements. This column represents the grant date fair value of the awards as calculated in accordance with FASB ASC 718 (Stock Compensation). Pursuant to SEC rule changes effective February 28, 2010, we are required to reflect the total grant date fair values of the option grants in the year of grant, rather than the portion of this amount that was recognized for financial statement reporting purposes in a given fiscal year which was required under the prior SEC rules, resulting in a change to the amounts reported in prior Annual Reports, which was valued utilizing the grant date fair value in the year granted.

Employment Agreements and Potential Payments Upon Termination or Change in Control

There are no arrangements for compensation of directors and there are no employment contracts between the company and its directors or any change in control arrangements.

Outstanding Equity Awards at December 31, 2016

The following table sets forth the outstanding equity awards held by our named executive officers as of December 31, 2016.

	OPTION AWARDS				STOCK AWARDS				
Name	Number of Securities Underlying Options Exercisable (#)	Number of Securities Options Unexercisable (#)	Exercise Price ($)	Option Expiration Date	Number of shares or units of stock that have not Vested (#)	Market Value of shares or units of stock that have not Vested ($)	Equity Incentive Plan Awards: Number of unearned shares or units that have not vested (#)		Equity Incentive Plan Awards: Market or payout value of unearned shares or units that have not vested ($)
Leonard A Rosenbaum	24,000	-	3.65	12/12/2017	-	-	4,347	(1)	37,732

Steven Aragon	100,000	100,000	11.17	Various (6)			3,261	(2)	28,305
Glen R. Charles	-	-	-	-	-	-	6,811	(3)	59,119
							3,261	(2)	28,305
Karlheinz Strobl	-	-	-	-	-	-	6,009	(4)	52,158
							2,826	(5)	24,530
Martin J. Teitelbaum	-	-	-	12/12/2017	4,000	40,320	3,261	(2)	28,305
	5,310	-	4.25	1/15/2020	-	-	-		-
	1,400	-	7.90	1/15/2021	-	-	-		-

(1) Restricted stock units vest as to 1,449 shares respectively each July 1, 2017 through 2019.
(2) Restricted stock units vest as to 1,087 shares respectively each July 1, 2017 through 2019.
(3) Restricted stock units vest as to 3,205 shares and 3,606 shares respectively each on November 15, 2017 and November 15, 2018.
(4) Restricted stock units vest as to 2,804 shares and 3,205 shares respectively each on November 15, 2017 and November 15, 2018.
(5) Restricted stock units vest as to 942 shares respectively each July1, 2017 through 2019.
(6) Options vest as to 20,000 shares on October 20 each year consecutively through 2019 and expire 10 years from date of issuance.

2016 Director Compensation

The following table sets forth a summary of the compensation we paid to our non-employee directors in 2016.

Name	Fees Earned or Paid in Cash	Option Awards (1)	Restricted Stock Awards (1)	Total
Conrad J. Gunther	23,000	-	30,991	53,991
Bruce T. Swan (2)	15,000	-	22,728	37,728
Kelly S. Walters (3)	20,000	-	30,991	50,991
Lawrence D. Firestone (4)	15,000	-	22,728	37,728
Lawrence J. Waldman	5,000	-	7,227	12,227
Raymond A. Nielsen	5,000	-	7,227	12,227

(1) Amounts shown do not necessarily reflect compensation actually received by the named director. Instead, the amounts shown are the compensation costs recognized by CVD in fiscal 2016 for awards as determined pursuant to ASC 718. The assumptions used to calculate the value of option awards are set forth under Note 12 of the Notes to Consolidated Financial Statements.
(2) On August 27, 2016, Bruce T. Swan notified the Board of Directors of his retirement effective September 30, 2016
(3) On October 5, 2016, Kelly S. Walters notified the Board of Directors that would not run for re-election at the next Annual Meeting of Shareholders held on December 9, 2016.
(4) Lawrence D. Firestone resigned as a director effective October 5, 2016.

At a meeting of the Stock Option and Compensation Committee on November 19, 2008, a director compensation plan was adopted applicable to all nonemployee directors, providing for annual compensation in the sum of approximately

forty thousand dollars ($40,000) to be payable to each director in a combination of cash, restricted stock grant and stock options. In 2011, the Committee amended the annual compensation of non-employee directors beginning in 2012 to include a combination of a cash and stock grant. On May 9, 2016, the Board of Directors adopted a Director Compensation Plan for all non-employee directors, which retroactively from January 1, 2016, provided for annual compensation of approximately fifty thousand dollars ($50,000) to each non-employee director in a combination of 40% cash and 60% stock grant.

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

The following table sets forth, as of March 22, 2017, information regarding the beneficial ownership of our common stock by (a) each person who is known to us to be the owner of more than five percent (5%) of our common stock, (b) each of our directors, (c) each of the named executive officers, and (d) all directors and executive officers and executive employees as a group. For purposes of the table, a person or group of persons is deemed to have beneficial ownership of any shares that such person has the right to acquire within 60 days of March 22, 2017.

Name and Address of Beneficial Owner(1)	Amounts and Nature of Beneficial Ownership (2)	Percent of Class (%)
Leonard A. Rosenbaum	821,870 (3)	13.3
Martin J. Teitelbaum	79,046 (4)	1.3
Conrad J. Gunther	59,963 (5)	*
Lawrence J. Waldman	1,675 (6)	*
Raymond A. Nielsen	1,675 (6)	*
Glen R. Charles	17,685 (7)	*
Steven Aragon	43,976 (8)	*
Karlheinz Strobl	117,233 (9)	1.9
William S. Linss	9,819 (10)	*
Kevin R. Collins	66,814 (11)	1.0
All directors and executive officers and executive employees as a group (ten (10) persons)	1,204,606	19.4

*Less than 1% of the outstanding common stock or less than 1% of the voting power

(1) The address of Messrs. Rosenbaum, Teitelbaum, Gunther, Waldman, Nielsen, Charles, Strobl, Linss, Collins and Aragon is c/o CVD Equipment Corporation, 355 South Technology Drive, Central Islip, New York 11722.

(2) All of such shares are owned directly with sole voting and investment power, unless otherwise noted below.

(3) Includes options to purchase 24,000 shares of our common stock. Does not include 4,347 shares of unvested restricted stock units.

(4) Includes 2,000 shares held by Mr. Teitelbaum's wife as to which beneficial ownership thereof is disclaimed by Mr. Teitelbaum. Also includes options to purchase 6,710 shares of our common stock. Does not include 3,261 shares

of unvested restricted common stock units.

(5) Includes options to purchase 18,110 shares of our common stock. Does not include 2,325 shares of unvested restricted common stock.

(6) Does not include 2,325 shares of unvested restricted common stock.

(7) Does not include 10,072 shares of unvested restricted common stock units.

(8) Does not include unvested options to purchase 60,000 shares of our common stock. Does not include 3,261 shares of unvested restricted common stock units.

(9) Does not include 8,835 shares of unvested restricted common stock units.

(10) Does not include 16,150 shares of unvested restricted common stock units.

(11) Does not include 10,723 shares of unvested restricted common stock units.

See Item 5, Market for Registrant's Common Equity, Related Stockholder Matters, and Issuer Purchases of Equity Securities under the heading "Equity Compensation Plan Information" for information regarding our securities authorized for issuance under equity compensation plans.

Item 13. Certain Relationships and Related Transactions, and Director Independence.

Transactions with related persons, promoters and certain control persons.

None.

Director Independence

The current members of our Board of Directors are Leonard A. Rosenbaum, Martin J. Teitelbaum, Conrad J. Gunther, Lawrence J. Waldman and Raymond A. Nielsen. Messrs. Gunther, Waldman and Nielsen have been determined to be "independent" as defined under Rule 4200 of the Nasdaq Stock Market.

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Item 14. Principal Accountant Fees and Services.

The following presents fees for professional audit services rendered by MSPC, Certified Public Accountants and Advisors, A Professional Corporation ("MSPC"), for the audit of our financial statements for the years ended December 31, 2016 and December 31, 2015.

	Year Ended December 31, 2016	Year Ended December 31, 2015
Audit Fees	$132,000	$132,000
Audit-Related Fees (1)	10,000	10,000
Tax Fees	--	--
All Other Fees	--	--
Total Fees	$142,000	$142,000

Audit-Related Fees

Audit-related fees consisted of the audit of the Company's Defined Contribution Plan 401(k) for the years 2016 and 2015 by MSPC.

Tax Fees

Tax fees consisted of the preparation of the tax returns by Baker, Tilley, Virchow Krause, LLP. The aggregate fees billed in 2016 were $20,000. The aggregate fees billed in 2015 were $19,500.

All Other Fees

We did not incur any other fees in 2016. In 2015, the firm of Baker, Tilley, Virchow and Krause, LLP was retained to prepare a comprehensive appraisal report to determine the fair value of certain stock options granted to an officer of the corporation for a fee of $10,000.

Audit Committee Approval

The engagement of the Company's independent registered public accounting firm is pre-approved by the Company's Audit Committee. The Audit Committee pre-approves all fees billed and all services rendered by the Company's independent registered public accounting firm.

PART IV

Item 15. Exhibits, Financial Statement Schedules

3.1	Certificate of Incorporation dated October 12, 1982 of Certificate of Corporation incorporated herein by reference to Exhibit 3.1 to our Form S-1 filed on July 3, 2007.
3.2	Certificate of Amendment dated April 25, 1985 of Certificate of Corporation incorporated herein by reference to Exhibit 3.1 to our Form S-1 filed on July 3, 2007.
3.3	Certificate of Amendment dated August 12, 1985 of Certificate of Corporation incorporated herein by reference to Exhibit 3.1 to our Form S-1 filed on July 3, 2007.
3.4	Certificate of Amendment of the Certificate of Incorporation, dated December 9, 2016 incorporated herein by reference to Exhibit 3.1 on our Current Report on Form 8-K filed on December 14, 2016.
3.5	Bylaws of CVD Equipment Corporation, incorporated herein by reference to Exhibit 3.2 to our Form S-1 filed on July 3, 2007.
3.6	Amended and restated By-laws of CVD Equipment Corporation, dated as of October 5, 2016, incorporated herein by reference to Exhibit 3.5 to our Current Report on Form 8-K filed on October 11, 2016.
10.1	Form of Non-Qualified Stock Option Agreement with certain directors, officers and employees of CVD Equipment Corporation incorporated herein by reference to our Registration Statement on Form S-8 No. 33-30501, filed August 15, 1989.*
10.2	Purchase Agreement relating to a 22,000 square foot facility from Kidco Realty incorporated herein by reference to our Form 8-K filed on December 31, 1998.
10.3	CVD Equipment Corporation 2001 Stock Option Plan incorporated herein by reference to Exhibit 3.1 to our Form S-1 filed on July 3, 2007.*
10.4	Form of Non-Qualified Stock Option Agreement incorporated herein by reference to Exhibit 3.1 to our Form 10-KSB filed on March 26, 2007.*

10.5 1989 Key Employee Stock Option Plan incorporated herein by reference to Amendment No. 1 to our Form S-1 filed on August 7, 2007.

10.6 CVD Equipment Corporation 2007 Share Incentive Plan incorporated herein by reference to our Schedule 14A filed November 5, 2007.

10.7 Lease Agreement, dated February 9, 2012, by and between FAE Holdings 411519R, LLC and the Company incorporated by reference from the Company's Report on Form 10-Q filed with the Commission on May 15, 2012.

10.8 Assignment Agreement, dated February 9, 2012, by and between FAE Holdings 411519R, LLC and the Company incorporated by reference from the Company's Report on Form 10-Q filed with the Commission on May 15, 2012.

10.9	Qualified Exchange Accommodation Agreement, dated February 9, 2012, by and between FAE Holdings 411519R, LLC and the Company incorporated by reference from the Company's Report on Form 10-Q filed with the Commission on May 15, 2012.
10.10	Joint and Several Hazardous Material Guaranty and Indemnification Agreement, dated March 15, 2012, by and between FAE Holdings 411519R, LLC and the Company incorporated by reference from the Company's Report on Form 10-Q filed with the Commission on May 15, 2012.
10.11	Assignment of Leases and Rents, dated March 15, 2012, by and among FAE Holdings 411519R, LLC, the Town of Islip Industrial Development Agency and HSBC Bank USA, National Association incorporated by reference from the Company's Report on Form 10-Q filed with the Commission on May 15, 2012.
10.12	Amended and Restated Fee and Leasehold Mortgage, dated March 15, 2012, by and among FAE Holdings 411519R, LLC, the Town of Islip Industrial Development Agency and HSBC Bank USA, National Association incorporated by reference from the Company's Report on Form 10-Q filed with the Commission on May 15, 2012.
10.13	Amended and Restated Note, dated March 15, 2012, by and among FAE Holdings 411519R, LLC, the Town of Islip Industrial Development Agency and HSBC Bank USA, National Association incorporated by reference from the Company's Report on Form 10-Q filed with the Commission on May 15, 2012.
10.14	Note and Mortgage Assumption Agreement, dated March 15, 2012, by and among FAE Holdings 411519R, LLC, the Town of Islip Industrial Development Agency and HSBC Bank USA, National Association incorporated by reference from the Company's Report on Form 10-Q filed with the Commission on May 15, 2012.
10.15	Guaranty of Payment, dated March 15, 2012, by the Company incorporated by reference from the Company's Report on Form 10-Q filed with the Commission on May 15, 2012.
10.16	Credit Agreement dated August 5, 2011, by and between CVD Equipment Corporation and HSBC Bank, USA, National Association incorporated by reference to our Report on form 10-Q filed on November 14, 2011.
10.17	Contract of Sale, dated May 31, 2012, between CVD Equipment Corporation and Glomel LLC incorporated by reference to our Report on Form 10-Q filed on August 14, 2012.
10.18	Amendment No. 3 and waiver to Credit Agreement dated September 4, 2015 incorporated by reference to the Company's Current Report on Form 8-K filed with the Commission on September 10, 2015.

21.1 List of Subsidiaries.

23.1 Consent of MSPC, Certified Public Accountants and Advisors, A Professional Corporation (S-1).

23.2 Consent of MSPC, Certified Public Accountants and Advisors, A Professional Corporation (S-8).

23.3 Consent of MSPC, Certified Public Accountants and Advisors, A Professional Corporation (S-8).

23.4 Consent of MSPC, Certified Public Accountants and Advisors, A Professional Corporation (S-3).

31.1 Rule 13a-14(a)/15d-14(a) Certification of Chief Executive Officer.

31.2 Rule 13a-14(a)/15d-14(a) Certification of Chief Financial Officer.

32.1 Section 1350 Certification of Principal Executive Officer.

32.2 Section 1350 Certification of Principal Financial Officer.

101.INS** XBRL Instance

101.SCH** XBRL Taxonomy Extension Schema

101.CAL** XBRL Taxonomy Extension Calculation

101.DEF** XBRL Taxonomy Extension Definition

101.LAB** XBRL Taxonomy Extension Labels

101.PRE** XBRL Taxonomy Extension Presentation

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* Management contract or compensatory plan or arrangement required

** XBRL information is furnished and not filed or a part of a registration statement or prospectus for purposes of sections 11 or 12 of the Securities Act of 1933, as amended, is deemed not filed for purposes of section 18 of the Securities Exchange Act of 1934 , as amended, and otherwise is not subject to liability under these sections.

SIGNATURES

In accordance with Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

DATE: March 30, 2017
CVD EQUIPMENT CORPORATION

By: /s/ Leonard A. Rosenbaum
Name: Leonard A. Rosenbaum
Title: President and Chief Executive Officer

By: /s/ Glen R. Charles
Name: Glen R. Charles
Title: Chief Financial Officer and Secretary
Principal Financial and Accounting Officer

In accordance with the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated below.

NAME	POSITION	DATE
/s/ Leonard A Rosenbaum Leonard A. Rosenbaum	President, Chief Executive Officer and Director (Principal Executive Officer)	March 30, 2017
/s/ Martin J. Teitelbaum Martin J. Teitelbaum	Director, General Counsel and Assistant Secretary	March 30, 2017
/s/ Conrad J. Gunther Conrad J. Gunther	Director	March 30, 2017
/s/ Lawrence J. Waldman Lawrence J. Waldman	Director	March 30, 2017

/s/ Raymond A. Nielsen Raymond A. Nielsen	Director	March 30, 2017

CVD EQUIPMENT CORPORATION AND SUBSIDIARies

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders

CVD Equipment Corporation and Subsidiaries

Central Islip, New York

We have audited the accompanying consolidated balance sheets of CVD Equipment Corporation and Subsidiaries as of December 31, 2016 and 2015, and the related statements of operations, changes in stockholders' equity, and cash flows for each of the two years in the two-year period ended December 31, 2016. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audit included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the company’s internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the consolidated financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of CVD Equipment Corporation and Subsidiaries as of December 31, 2016 and 2015, and the results of their operations and their cash flows for each of the years in the two-year period ended December 31, 2016, in conformity with accounting principles generally accepted in the United States of America.

/s/ MSPC
Certified Public Accountants and
Advisors,
A Professional Corporation

New York, New York

March 30, 2017

The accompanying notes are an integral part of the consolidated financial statements

CVD EQUIPMENT CORPORATION AND SUBSIDIARIES

Consolidated Balance Sheets

As of December 31,

	2016	2015
ASSETS		
Current Assets		
Cash and cash equivalents	$21,677,186	$13,073,331
Accounts receivable, net	607,522	3,091,251
Costs and estimated earnings in excess of billings on contracts in progress	2,596,518	4,635,018
Inventories, net	3,286,539	2,986,430
Restricted cash	--	200,000
Deferred income taxes	428,355	398,009
Other current assets	235,537	167,056
Total Current Assets	28,831,657	24,551,095
Property, plant and equipment, net	14,344,924	14,793,923
Construction in progress	94,058	33,306
Deferred income taxes	2,011,979	1,606,830
Other assets	68,450	86,215
Intangible assets, net	253,624	60,335
Total Assets	$45,604,692	$41,131,704
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current Liabilities		
Accounts payable	$743,132	$308,004
Accrued expenses	1,942,818	3,445,880
Current maturities of long-term debt	300,000	580,000
Billings in excess of costs and estimated earnings on contracts in progress	5,262,339	---
Deferred revenue	77,633	307,683
Total Current Liabilities	8,325,922	4,641,567
Long-term debt, net of current portion	2,965,508	3,265,508
Total Liabilities	11,291,430	7,907,075
Commitments and Contingencies (Note 16)	-	-
Stockholders' Equity:		
Common stock - $0.01 par value – 20,000,000 shares authorized at December 31, 2016 and 10,000,000 authorized at December 31, 2015: issued and outstanding 6,346,590 at December 31, 2016 and 6,198,135 shares at December 31, 2015	63,466	61,981

Additional paid-in capital	24,131,474	22,895,202
Retained earnings	10,118,322	10,267,446
Total Stockholders' Equity	34,313,262	33,224,629
Total Liabilities and Stockholders' Equity	$45,604,692	$41,131,704

The accompanying notes are an integral part of the consolidated financial statements

CVD EQUIPMENT CORPORATION AND SUBSIDIARIES

Consolidated Statements of Operations

Years ended December 31,

	2016	2015
Revenue	$20,955,347	$38,965,387
Cost of revenue	13,850,824	23,819,864
Gross profit	7,104,523	15,145,523
Operating expenses		
Research and development	433,844	605,264
Selling and shipping	1,097,661	1,208,174
General and administrative	6,926,487	7,745,092
Litigation settlement	--	995,000
Gain on settlement	(628,905)	--
Total operating expenses	7,829,087	10,553,530
Operating (loss)/income	(724,564)	4,591,993
Other income (expense):		
Interest income	28,233	24,540
Interest expense	(79,861)	(92,101)
Other income/(expense)	123,006	759
Total other (expense)/income net	71,378	(66,802)
(Loss)/income before income tax (benefit)/expense	(653,186)	4,525,191
Income tax (benefit)/expense	(504,061)	1,320,195
Net (loss)/income	$(149,124)	$3,204,996
Basic (loss)/income per common share	$(0.02)	$0.52
Diluted (loss)/income per common share	$(0.02)	$0.51
Weighted average common shares Outstanding-basic	6,285,815	6,175,254
Weighted average common shares Outstanding-diluted	6,285,815	6,283,307

The accompanying notes are an integral part of the consolidated financial statements

CVD EQUIPMENT CORPORATION AND SUBSIDIARIES

Consolidated Statements of Changes in Stockholders' Equity

	Common Stock Shares	Amount	Additional Paid-In Capital	Retained Earnings	Total Stockholders' Equity
Balance – January 1, 2015	6,162,027	$61,620	$22,144,805	$7,062,450	$29,268,875
Exercise of stock options	---	---	---		---
Stock-based compensation	36,108	361	750,397		750,758
Net income				3,204,996	3,204,996
Balance – December 31, 2015	6,198,135	61,981	22,895,202	10,267,446	33,224,629
Exercise of stock options	100.000	1,000	461,000		462,000
Stock-based compensation	48,455	485	775,272		775,757
Net (loss)				(149,124)	(149,124)
Balance – December 31, 2016	6,346,590	$63,466	$24,131,474	$10,118,332	$34,313,262

The accompanying notes are an integral part of the consolidated financial statements

CVD EQUIPMENT CORPORATION AND SUBSIDIARIES

Consolidated Statements of Cash Flows

Years ended December 31,

	2016	2015
Cash flows from operating activities:		
Net (loss)/income	$(149,124)	$3,204,996
Adjustments to reconcile net (loss)/income to net cash used in operating activities		
Stock-based compensation	775,757	750,758
Depreciation and amortization	813,657	826,529
Deferred income tax benefit	(435,495)	1,633,254
Provision for doubtful accounts	(16,395)	(30,826)
Increase/(decrease) in operating assets		
Accounts receivable	2,500,124	3,402,625
Cost in excess of billings on contracts in progress	2,038,500	(2,136,356)
Inventories, net	(290,109)	1,855,628
Other current assets	(68,473)	27,700
Increase/(decrease) in operating liabilities		
Accounts payable	435,129	(1,374,835)
Accrued expenses	(1,503,062)	148,856
Current maturities of long-term debt	(280,000)	(140,000)
Billings in excess of costs and estimated earnings on contracts in progress	5,262,339	(1,328,508)
Accrued litigation settlement	---	(4,925,000)
Deferred revenue	(230,050)	(181,008)
Total adjustments	9,001,922	(1,471,183)
Net cash provided by operating activities	8,852,798	1,733,813
Cash flows from investing activities:		
Restricted cash	200,000	200,000
Capital expenditures	(112,493)	(248,305)
Purchase of assets Tantaline A/S	(500,000)	---
Deposits	1,550	960
Net cash (used in) investing activities	(410,943)	(47,345)
Cash flows from financing activities		
Net proceeds from stock options exercised	462,000	---
Payments of long-term debt	(300,000)	(580,000)
Net cash provided by/(used in) financing activities	162,000	(580,000)
Net increase in cash and cash equivalents	8,603,855	1,106,468
Cash and cash equivalents at beginning of year	13,073,331	11,966,863
Cash and cash equivalents at end of year	$21,677,186	$13,073,331

Supplemental disclosure of cash flow information:		
Income taxes paid	$101,352	427,078
Interest paid	$79,861	92,101

The accompanying notes are an integral part of the consolidated financial statements

CVD EQUIPMENT CORPORATION AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

December 31, 2016 and 2015

Note 1 – Business Description

CVD Equipment Corporation and its subsidiaries (the “Company”), a New York corporation, was organized and commenced operations in October 1982. Its principal business activities include the manufacturing of chemical vapor deposition equipment, customized gas control systems, the manufacturing of process equipment suitable for the synthesis of a variety of one-dimensional nanostructures and nanomaterials and a line of furnaces, all of which are used primarily to produce semiconductors and other electronic components. The Company engages in business throughout the United States and internationally.

Note 2 - Summary of Significant Accounting Policies

Principles of Consolidation

The consolidated financial statements include the accounts of CVD Equipment Corporation and its wholly owned subsidiaries. In December 1998, a subsidiary, Stainless Design Concepts, Ltd., was formed as a New York Corporation. In April 1999, this subsidiary was merged into CVD Equipment Corporation. The Company has two wholly owned subsidiaries: CVD Materials Corporation, which provides marketing for our Application Laboratory and FAE Holdings 411519R, LLC, a real estate holding company whose sole asset is its interest in the real estate and building housing our corporate headquarters. All significant intercompany accounts and transactions have been eliminated in consolidation.

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

The Company's significant estimates are the accounting for certain items such as revenues on long-term contracts recognized on the percentage-of-completion method, depreciation and amortization, valuation of inventories at the lower of cost or market; allowance for doubtful accounts receivable; valuation allowances for deferred tax assets, impairment considerations of long-lived assets and stock-based compensation and costs associated with product warranties.

Revenue Recognition

Product and service sales, including those based on time and materials type contracts, are recognized when persuasive evidence of an arrangement exists, product delivery has occurred or services have been rendered, pricing is fixed or determinable, and collection is reasonably

CVD EQUIPMENT CORPORATION AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

December 31, 2016 and 2015

Note 2 - Summary of Significant Accounting Policies (continued)

assured. Service sales, principally representing repair, maintenance and engineering activities are recognized over the contractual period or as services are rendered.

Revenues from fixed price contracts are recognized on the percentage of completion method, measured on the basis of incurred costs to estimated total costs for each contract. This “cost to cost” method is used because management considers it to be the best available measure of progress on these contracts.

Contract costs include all direct material and labor costs and those indirect costs related to contract performance, such as indirect labor, supplies, tools, repairs and depreciation costs.

Provisions for estimated losses on uncompleted contracts are made in the period in which such losses are determined. Changes in job performance, job conditions, and estimated profitability, and final contract settlements may result in revisions to costs and income and are recognized in the period in which the revisions are determined.

The asset “Costs and estimated earnings in excess of billings on contracts in progress” represents gross revenues recognized in excess of amounts billed.

The liability “Billing in excess of costs and estimated earnings on contracts in progress” represents gross amounts billed in excess of revenues recognized.

Inventories

Inventories are valued at the lower of cost (determined on the first-in, first-out method) or market.

Income Taxes

Deferred tax assets and liabilities are determined based on the estimated future tax effects of temporary differences between the financial statements and tax bases of assets and liabilities, as measured by using the future enacted tax rates. Deferred tax expense (benefit) is the result of changes in the deferred tax assets and liabilities. The Company records a valuation allowance against deferred tax assets when it is more likely than not that future tax benefits will not be utilized based on a lack of sufficient positive evidence.

Investment tax credits are accounted for by the flow-through method, reducing income taxes currently payable and the provision for income taxes in the period the assets giving rise to such credits are placed in service. To the extent such credits are not currently utilized on the

CVD EQUIPMENT CORPORATION AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

December 31, 2016 and 2015

Note 2 - Summary of Significant Accounting Policies (continued)

Company's tax return, deferred tax assets, subject to considerations about the need for a valuation allowance, are recognized for the carryforward amount.

The Company recognizes the tax benefit from an uncertain tax position only if it is more-likely-than-not that the tax position will be sustained on examination by taxing authorities, based on the technical merits of the position. The tax benefits recognized in the financial statements from such

a position are measured based on the largest benefit that has a greater than 50% likelihood of being realized upon ultimate settlement. The accounting guidance on accounting for uncertainty in income taxes also addresses derecognition, classification, interest and penalties on income taxes, and accounting in interim periods. The Company does not believe it has any uncertain tax positions through the year ending December 31, 2016 which would have a material impact on the Company's consolidated financial statements.

The Company and its subsidiaries file combined income tax returns in the U.S. Federal and New York State jurisdiction. In addition, the parent company files standalone tax returns in California, Michigan, Minnesota, New Hampshire and Wisconsin. The Company is no longer subject to U.S. federal and state income tax examinations for tax periods before 2013.

The Company recognizes interest and penalties accrued related to unrecognized tax benefits, if any, in its income tax provision. The Company had no interest and penalties accrued at December 31, 2016 and 2015.

Long Lived Assets

Long-lived assets consist primarily of property, plant and equipment. Long-lived assets are reviewed for impairment whenever events or circumstances indicate their carrying value may not be recoverable. When such events or circumstances arise, an estimate of the future undiscounted cash flows produced by the asset, or the appropriate

grouping of assets, is compared to the asset's carrying value to determine if impairment exists pursuant to the requirements of the Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("ASC") 360-10-35, "Impairment or Disposal of Long-Lived Assets." If the asset is determined to be impaired, the impairment loss is measured on the excess of its carrying value over its fair value. Assets to be disposed of are reported at the lower of their carrying value or net realizable value. The Company had no recorded impairment charges in the consolidated statement of operations during each of the years ended December 31, 2016 and 2015.

CVD EQUIPMENT CORPORATION AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

December 31, 2016 and 2015

Note 2 - Summary of Significant Accounting Policies (continued)

Construction in Progress

Construction in progress consists of amounts expended for renovating the facility which was purchased on March 15, 2012, and equipment that is built internally for company use. Expenditures for maintenance and repairs are charged to operations as incurred; additions, renewals and betterments are capitalized.

Computer Software

The Company follows ASC 350-40, “Internal Use Software.” This standard requires certain direct development costs associated with internal-use software to be capitalized including external direct costs of material and services and payroll costs for employees devoting time to the software projects. These costs totaled $2,000 and $21,000 for the years ended December 31, 2016 and 2015, respectively, and are included in Other Assets. All computer software is amortized using the straight-line method over its estimated useful life of three to five years. Amortization expense related to computer software totaled $18,000 and $16,000 for the years ended December 31, 2016 and 2015, respectively.

Intangible Assets

The cost of intangible assets is being amortized on a straight-line basis over their estimated initial useful lives which ranged from 5 to 20 years. Amortization expense recorded by the Company in 2016 and 2015 totaled $31,000 and $24,000, respectively.

Research & Development

Research and development costs are expensed as incurred. In 2012 we expanded our laboratory staff and began conducting research and development independent of customer orders. In 2016 we incurred approximately $2,448,000 of research and development expenses of which $434,000 were independent of external customer orders compared to 2015, when we incurred approximately $1,727,000 of research and development expenses of which approximately $605,000 were independent of external customer orders.

Accounts Receivable

Accounts receivable is presented net of an allowance for doubtful accounts of $2,000 and $19,000 as of December 31, 20165 and 2015, respectively. The allowance is based on historical experience and management's evaluation of the collectability of accounts receivable. Management believes the allowance is adequate. However, future estimates may fluctuate based on changes in economic and customer conditions. The Company doesn't require collateral from its customers.

CVD EQUIPMENT CORPORATION AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

December 31, 2016 and 2015

Note 2 - Summary of Significant Accounting Policies (continued)

Product Warranty

The Company records warranty costs as incurred and does not provide for possible future costs. Management estimates such costs are immaterial, based on historical experience. However, it is reasonably possible that this estimate may differ in future periods.

Earnings Per Share

Basic earnings per common share is computed by dividing the net income by the weighted average number of shares of common stock outstanding during each period. When applicable, diluted earnings per common share is determined using the weighted-average number of common shares outstanding during the period, adjusted for the dilutive effect of common stock equivalents, consisting of shares that might be adjusted upon exercise of common stock options and warrants.

Potential common shares issued are calculated using the treasury stock method, which recognizes the use of proceeds that could be obtained upon the exercise of options and warrants in computing diluted earnings per share. It assumes that any proceeds would be used to purchase common stock at the average market price of the common stock during the period.

Cash and Cash Equivalents

The Company had cash and cash equivalents of $21.7 million and $13.7 million respectively at December 31, 2016 and 2015.

Concentration of Credit Risk

Financial instruments that potentially subject the Company to concentrations of credit risk consist primarily of cash, cash equivalents, and accounts receivable. The Company places its cash equivalents with high credit-quality financial institutions and invests its excess cash primarily in money market instruments. The Company has established guidelines relative to credit ratings and maturities that seek to maintain stability and liquidity. The Company sells products and services to various companies across several industries in the ordinary course of business. The Company routinely assesses the financial strength of its customers and maintains allowances for anticipated losses based upon historical experience.

CVD EQUIPMENT CORPORATION AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

December 31, 2016 and 2015

Note 2 - Summary of Significant Accounting Policies (continued)

Fair value of Financial Instruments

The carrying amounts of financial instruments including cash and cash equivalents, accounts receivable, net, accounts payable and accrued expenses, deferred revenue and customer deposits approximate fair

Note 2 - Summary of Significant Accounting Policies (continued)

value due to the relatively short-term maturity of these instruments. The carrying value of long-term debt approximates fair value based on prevailing borrowing rates currently available for loans with similar terms and maturities.

Stock-Based Compensation

The Company records stock-based compensation in accordance with the provisions set forth in ASC 718, “Stock Compensation” using the modified prospective method. ASC 718 requires companies to recognize the cost of employee services received in exchange for awards of equity instruments based upon the grant date fair value of those awards.

Shipping and Handling

It is the Company’s policy to include freight charges billed to customers in total revenue. The amount included in revenue was $28,000 and $57,000 for the years ended December 31, 2016 and 2015, respectively.

Recently Adopted Accounting Pronouncement

In May 2014, The Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") No. 2014-09, "Revenue from Contracts with Customers" (Topic 606), which changes the criteria for recognizing revenue. The standard requires an entity which recognizes revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. The standard requires a five-step process for recognizing revenues including identifying the contract with the customer, identifying the performance obligations in the contract, determining the transaction prices, allocating the transaction price to the performance obligations in the contract, and recognizing revenue when (or as) the entity satisfies a performance obligation. Publicly-traded companies were initially required to adopt the ASU for reporting periods beginning after December 15, 2016; however, the FASB, in August 2015, then issued Accounting Standards Update ("ASU") No. 2015-14 to defer the effective date of ASU 2014-09 for all entities by one year. Currently companies may choose among different transition alternatives. Management is currently evaluating the impact that ASU 2014-09 will have on the Company's

CVD EQUIPMENT CORPORATION AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

December 31, 2016 and 2015

Note 2 - Summary of Significant Accounting Policies (continued)

consolidated financial statements and have not yet determined which method of adoption will be selected.

In April 2015, the FASB issued ASU No. 2015-03, “Interest-imputation of interest (Subtopic 835-30): Simplifying the Presentation of Debt Issuance Costs”, which requires that debt issuance costs be presented in the balance sheet as a direct deduction from the carrying amount of the related debt liability, rather than as a deferred charge asset. ASU No. 2015-03 is effective for the Company beginning January 1, 2016 and is to be applied retroactively. Management is currently evaluating the effect that this ASU will have on the Company’s consolidated financial statements and related disclosures.

In November 2015, the FASB issued ASU No. 2015-17, “Balance sheet Classification of Deferred Taxes”, which simplifies the presentation of deferred income taxes by requiring that deferred income tax liabilities and assets be classified as noncurrent in our consolidated balance sheet. ASU No. 2015-17 is effective for reporting periods beginning after December 15, 2016, with early application permitted. The Company will adopt this method beginning in 2017.

In March 2016, the FASB issued ASU No. 2016-09, “Stock Compensation Improvements to Employee Share-Based Payment Accounting”, which simplifies several aspects of the accounting for share-based payments. ASU 2016-09 is effective for reporting periods beginning after December 15, 2016. Management is currently evaluating the effect that this ASU will have on the Company’s consolidated financial statemetns and related disclosures.

We believe there is no additional new accounting guidance adopted, but not yet effective that is relevant to the readers of our financial statements. However, there are numerous new proposals under development which, if and when enacted, may have a significant impact on our financial reporting.

Note 3 – Contracts in Progress

Costs and estimated earnings in excess of billings on percentage of completion type contracts in progress are summarized as follows:

	2016	2015
Costs incurred on contracts in progress	$4,678,192	$7,695,281
Estimated earnings	10,733,826	7,635,114
	15,412,018	15,330,395
Billings to date	(18,077,839)	(10,695,377)
	$(2,665,821)	$4,635,018

	2016	2015
Included in accompanying balance sheets		
Under the following captions:		
Costs and estimated earnings in excess of billings on contracts in progress	$2,596,518	$4,635,018
Billings in excess of costs and estimated earnings on contracts in progress	$(5,262,339)	$---

CVD EQUIPMENT CORPORATION AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

December 31, 2016 and 2015

Note 4 - Inventories

Inventories consist of:

	2016	2015
Raw materials	$3,062,830	$2,718,328
Work-in-process	159,482	174,698
Finished goods	64,227	93,404

Totals	$3,286,539	$2,986,430

Note 5 – Property, Plant and Equipment

Major classes of property, plant and equipment consist of the following:

	2016	2015
Land	$2,220,000	$2,220,000
Buildings	6,631,039	6,631,039
Building improvements	5,615,823	5,615,823
Machinery and equipment	2,671,333	2,381,964
Furniture and fixtures	547,144	721,919
Computer equipment	479,534	701,367
Transportation equipment	65,994	65,994
Lab equipment	1,975,533	1,972,838
Totals at cost	20,206,400	20,310,944
Less: Accumulated depreciation and amortization	(5,861,476)	(5,517,021)
Property, plant and equipment, net	$14,344,924	$14,793,923
Depreciation and amortization expense (1)	$813,657	$826,529

(1) Includes amortization expense of $31,356 and $24,759 for the years ending December 31, 2016 and 2015, respectively. Such amortization expense relates to other capitalized and intangible assets.

Note 6 – Intangible Assets

2016

Intangible Assets	Weighted Average Amortization Period	Cost	Accumulated Amortization	Carrying Amount
Patents, Copyrights and Intellectual Property	18	396,757	143,133	253,624
Licensing Agreement	5	10,000	10,000	0
Certifications	3	58,722	58,722	0
Other	5	21,492	21,492	0
Totals		$486,971	$ 233,347	$253,624

CVD EQUIPMENT CORPORATION AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

December 31, 2016 and 2015

2015

Intangible Assets	Weighted Average Amortization Period	Cost	Accumulated Amortization	Carrying Amount
Patents, Copyrights and Intellectual Property	16	$190,327	$ 129,992	$60,335
Licensing Agreement	5	10,000	10,000	0
Certifications	3	58,722	58,722	0
Other	5	21,492	21,492	0
Totals		$280,451	$ 220,206	$60,335

The estimated amortization expense related to intangible assets for each of the five succeeding fiscal years and thereafter as of December 31, 2016 is as follows:

Year Ended	
2017	$16,977
2018	15,311
2019	15,310
2020	15,311
2021	15,310
Thereafter	175,405
Total	$253,624

Note 7 – Financing Arrangements

The Company has a revolving credit facility with HSBC Bank, USA, N.A. (“HSBC”) providing up to $7 million, although the Company has never utilized this facility. This credit facility remains available until September 1, 2018. The credit agreement also contains certain financial covenants, all of which the Company was in compliance with at December 31, 2016.

CVD EQUIPMENT CORPORATION AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

December 31, 2016 and 2015

Note 7 – Financing Arrangements (continued)

The Company has a loan agreement with HSBC which is secured by a mortgage against our Central Islip facility. The loan is payable in 120 consecutive equal monthly installments of $25,000 in principal plus interest and a final balloon payment upon maturity in March 2022. The balances as of December 31, 2016 and December 31, 2015 were approximately $3.3 million and $3.6 million respectively. Interest accrues on the Loan, at our option, at the variable rate of LIBOR plus 1.75% which was 2.1765% and 1.9455% at December 31, 2016 and 2015 respectively.

Note 8 – Long-term Debt

Long-term debt as of December 31 consists of the following:

	2016	2015
HSBC $2,100,000 5 year term loan payable in monthly installments of $35,000 plus interest on the unpaid principal balance which accrues at a fixed rate of 3.045%. This term loan was secured by $1 million, provided that, so long as no event of default occurred and is then continuing, HSBC would release $200,000 of the collateral on each anniversary of the closing date. As of December 31, 2016, this term loan had been paid in full.	$---	$280,000
HSBC $6,000,000 Mortgage payable secured by real property Buildings and improvements at 355 South Technology Drive, Central Islip, NY payable in monthly principle installments of $25,000 plus interest. Interest presently accrues at our option, at the variable rate of LIBOR plus 1.75% or HSBC's prime rate minus 0.50% The loan matures on March 1, 2022.	3,265,508	3,565,508
Total long-term debt	3,265,508	3,845,508
Less: Current maturities	300,000	580,000
Long-term debt	$2,965,508	$3,265,508

Future maturities of long-term debt as of December 31, 2016 are as follows:

2017	$300,000
2018	300,000
2019	300,000
2020	300,000
2021	300,000
Thereafter	1,765,508
Total long-term debt	$3,265,508

CVD EQUIPMENT CORPORATION AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

December 31, 2016 and 2015

Note 9 – Earnings per Share

The calculation of basic and diluted weighted average common shares outstanding is as follows:

	2016	2015
Weighted average common shares outstanding basic earnings per share	6,285,815	6,175,254
Effect of potential common share issuance:		
Stock options	---	108,053
Weighted average common shares outstanding		
Diluted earnings per share	6,285,815	6,283,307

Stock options to purchase 284,730 shares of common stock were outstanding and 124,730 were exercisable at December 31, 2016. At December 31, 2016 none of the outstanding options were included in the diluted earnings per share calculation as their effect would have been anti-dilutive. At December 31, 2015 all outstanding options were included in the diluted earnings per share calculation because the average market price was higher than the exercise price.

Note 10 – Income Taxes

At December 31, 2016, the Company had approximately $27,000 in capital loss carryforwards, and $1,279,000 of federal research and development tax credits.

If not utilized, the investment tax credits expire from 2016 through 2030 and the research and development tax credits expire from 2031-2036. Based on the available objective evidence, including the Company’s history of taxable income and the character of that income, management believes it is more likely than not that these components of the Company’s deferred tax assets will be fully utilized. The Company has provided for a partial valuation allowance against its total net deferred tax assets at December 31, 2016 and December 31, 2015 of approximately $475,000 attributable to these components.

CVD EQUIPMENT CORPORATION AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

December 31, 2016 and 2015

Note 10 – Income Taxes (continued)

The expense/(benefit) for income taxes includes the following:

	2016	2015
Current:		
Federal	$(71,070)	$---
State	2,504	3,070
Total current tax provision	(68,566)	3,070
Deferred:		
Federal	(435,495)	1,317,125
State	-	---
Total deferred tax provision	(435,495)	1,317,125
Income tax (benefit)/expense	$(504,061)	$1,320,195

In March 2014, New York State eliminated the state income tax for qualified manufacturing companies such as CVD.

The tax effects of temporary differences giving rise to significant portions of the net deferred taxes are as follows:

	2016	2015
Allowance for doubtful accounts	$771	$6,345
Inventory capitalization	19,071	11,540
Depreciation and amortization	(211,014)	(228,610)
Investment tax credits	475,000	475,000
Research & development tax credits	1,278,690	1,134,168
Compensation costs	1,000,073	730,909
Vacation accrual	333,396	323,860
Accrued loss on legal settlement	--	--
Net operating loss carryforward	(7,280)	--
Capital loss carryforward	26,627	26,627
Gross deferred tax asset	2,915,334	2,479,839
Less valuation allowance	(475,000)	(475,000)

Net deferred tax asset	$2,440,334	$2,004,839
Net current deferred tax asset	428,355	398,009
Net long-term deferred tax asset	2,011,979	1,606,830
Net deferred tax asset	$2,440,334	$2,004,839

CVD EQUIPMENT CORPORATION AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

December 31, 2016 and 2016

Note 10 – Income Taxes (continued)

The reconciliation of the federal statutory income tax rate to our effective tax rate is as follows:

	2016	2015
Expected provision at federal statutory tax rate (34%)	$(222,083)	$1,538,565
State taxes, net of federal benefit	2,504	3,070
Stock-based compensation expense	(269,163)	(252,288)
Net operating loss carryforward	(21,412)	954,581
Federal research & development credit	(144,522)	(437,303)
Other permanent differences	150,615	(486,430)
Income tax (benefit)/expense	$(504,061)	$1,320,195

NOTE 11 – Stockholders' equity

1989 Non-Qualified Stock Option Plan

On June 15, 1989, the Company instituted a non-qualified stock option plan (the "Plan"). In connection therewith, 700,000 shares of the Company's common stock were reserved for

issuance pursuant to options granted under the Plan through June 30, 2009. All options granted vested over a four-year period and expire between five to seven years after the date of grant. This 1989 Non-Qualified Stock Option Plan expired in June 2009.

2001 Non-Qualified Stock Option Plan

In November 2006, the Company registered a non-qualified stock option plan that the shareholders had approved in July 2001, covering key employees, officers, directors and other persons that may be considered as service providers to the Company. Options were awarded by the Board of Directors or by a committee appointed by the Board. Under the plan, an aggregate of 300,000 shares of Company common stock, $.01 par value, were reserved for issuance or transfer upon the exercise of options which were granted. Unless otherwise provided in the option agreement, options granted under the plan would vest over a four year period commencing one year from the anniversary date of the grant. The stock option plan expired on July 22, 2011.

CVD EQUIPMENT CORPORATION AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

December 31, 2016 and 2015

NOTE 11 – Stockholders' equity (continued)

2007 Share Incentive Plan

On December 12, 2007, shareholders approved the Company's 2007 Share Incentive Plan ("Incentive Plan"), in connection therewith, 750,000 shares of the Company's common stock are reserved for issuance pursuant to options or restricted stock that may be granted under the Share

Incentive Plan through December 12, 2017. In 2016, 42,320 shares of stock were granted and issued to directors and key employees, additionally, options were granted to a key employee for 100,000 shares of the Company's common stock. In 2015, 36,108 shares of stock were granted and issued to directors and key employees.

The purchase price of the common stock under each option plan shall be determined by the Committee, provided, however, that such purchase price shall not be less than the fair market

value of the shares on the date such option is granted. The stock options generally expire seven to ten years after the date of grant. The Company recorded stock-based compensation of $776,000 and $751,000 for the years ended December 31, 2016 and 2015, respectively.

A summary of the stock option activity related to the 1989 and 2001 Stock Option Plans and the 2007 Share Incentive Plan for the period from January 1, 2015 through December 31, 2016 is as follows:

1989 Non-Qualified Stock Option Plan

Beginning Balance Outstanding	Granted During Period	Exercised During Period	Canceled During Period	Ending Balance Outstanding	Exercisable

Year ended December 31, 2015						
Number of shares	35,250	-0-	-0-	0	35,250	35,250
Weighted average exercise price						
Per share	$ 4.62	-0-	-0-	-0-	$ 4.62	$ 4.62
Year ended December 31, 2016						
Number of shares	35,250	-0-	35,250	-0-	-0-	-0-
Weighted average exercise price						
Per share	$ 4.62	-0-	$ 4.62	-0-	-0-	-0-

CVD EQUIPMENT CORPORATION AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

December 31, 2016 and 2015

NOTE 11 – Stockholders' equity (continued)

2001 Non-Qualified Stock Option Plan

	Beginning Balance Outstanding	Granted During Period	Exercised During Period	Canceled During Period	Ending Balance Outstanding	Exercisable
Year ended December 31, 2015						
Number of shares	124,480	-0-	-0-	-0-	124,480	124,480
Weighted average exercise price						
Per share	$ 4.57	-0-	-0-	-0-	$ 4.57	$ 4.57
Year ended December 31, 2016						
Number of shares	124,480	-0-	64,750	-0-	59,730	59,730
Weighted average exercise price						
Per share	$ 4.57	-0-	4.62	-0-	$ 4.51	$ 4.51

2007 Share Incentive Plan

	Beginning Balance Outstanding	Granted During Period	Exercised During Period	Canceled During Period	Ending Balance Outstanding	Exercisable
Year ended December 31, 2015						
Number of shares	100,000	-0-	-0-	-0-	100,000	20,000
Weighted average exercise price						
Per share	$ 11.17	-0-	-0-	-0-	$ 11.17	$ 11.17
Year ended December 31, 2016						
Number of shares	100,000	125,000	-0-	-0-	225,000	65,000
Weighted average exercise price						
Per share	$ 11.17	8.04	-0-	-0-	$ 9.43	$ 9.97

The Company has 284,730 of outstanding stock options under the three plans at December 31, 2016.

CVD EQUIPMENT CORPORATION AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

December 31, 2016 and 2015

NOTE 11 – Stockholders' equity (continued)

The following table summarizes information about the outstanding and exercisable options at December 31, 2016.

	Options Outstanding				Options Exercisable		
Exercise Price Range	Number Outstanding	Weighted Average Remaining Contractual	Weighted Average Exercise Price	Intrinsic Value	Number Exercisable	Weighted Average Exercise Price	Intrinsic Value
$3.00-3.99	34,000	1.95	$ 3.65	$171,020	34,000	$ 3.65	$171,020
$4.00-4.49	15,930	4.04	$ 4.25	$70,570	15,930	$ 4.25	$70,570
$5.00-7.99	9,800	5.04	$ 7.90	$7,644	9,800	$ 7.90	$7,644
$8.00-12.00	225,000	6.64	$ 9.43	$0	65,000	$ 9.43	$0

The intrinsic value of the 100,000 options exercised during the year ended December 31, 2016 was $203,000. There were no options exercised during the year ended December 31, 2015.

Restricted Stock Awards

The following table summarizes restricted stock awards for the years ended December 31, 2016 and 2015:

	Shares of Restricted Stock	Weighted Average Grant Date Fair Value
Unvested outstanding at January 1, 2015	8,000	$ 10.97

Granted	9,211	$ 13.66
Vested	(13,211)	$ 12.84
Forfeited/Cancelled	-	
Unvested outstanding at December 31, 2015	4,000	$ 10.97
Granted	17,524	$ 8.45
Vested	(21,524)	$ 12.84
Forfeited/Cancelled	-	
Unvested outstanding at December 31, 2016	-0-	

The total fair value of shares of restricted stock awards vested for the years ended December 31, 2016 and 2015 was approximately $276,000 and $170,000 respectively.

CVD EQUIPMENT CORPORATION AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

December 31, 2016 and 2015

NOTE 11 – Stockholders' equity (continued)

The fair value of the outstanding restricted stock awards will be recorded as stock compensation expense over the vesting period. As of December 31, 2015 there was $44,000 of unrecognized compensation costs related to restricted stock awards, which is to be recognized over a period of 0.35 years.

Restricted Stock Units

The following table summarizes restricted stock units for the years ended December 31, 2016 and December 31, 2015:

	Shares of Restricted Stock Units	Weighted Average Grant Date Fair Value
Unvested outstanding at January 1, 2015	103,319	$ 11.71
Granted	24,210	$ 14.61
Vested	(24,892)	$ 11.55
Forfeited/Cancelled	(8,057)	$ 10.54
Unvested outstanding at December 31, 2015	94,580	$ 12.55
Granted	60,400	$ 8.56
Vested	(33,890)	$ 12.43
Forfeited/Cancelled	(7,000)	$ 11.68
Unvested outstanding at December 31, 2016	114,090	$ 10.47

The total fair value of vested restricted stock units was $421,000 and $288,000 respectively for the years ended December 31, 2016 and 2015.

The fair value of the outstanding restricted stock units will be recorded as stock compensation expense over the vesting period. As of December 31, 2016, there was $1,194,000 of total unrecognized compensation costs related to restricted stock units, which is expected to be recognized over a weighted-average period of 1.18 years.

During the years ended December 31, 2016 and 2015, the Company recorded into selling and general administrative expense approximately $776,000 and $751,000 for the cost of employee and director services received in exchange for equity instruments based on the grant-date fair value of those instruments in accordance with the provisions of ASC 718.

CVD EQUIPMENT CORPORATION AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

December 31, 2016 and 2015

NOTE 12 – Defined Contribution Plan

On August 1, 1998, the Company adopted a 401(k) Plan for the benefit of all eligible employees. All employees as of the effective date of the 401(k) Plan became eligible. An employee is eligible to become a participant after three months of continuous service.

Participants may elect to contribute from their compensation any amount up to the maximum deferral allowed by the Internal Revenue Code. Employer contributions are optional. During the years ended December 31, 2016 and 2015, the Company incurred administrative and audit fees totaling $14,636 and $13,080, respectively. No discretionary employer contribution has been made for 2016 and 2015.

Note 13 – Significant Risks and Uncertainties

Cash and Cash Equivalents

The Company places most of its temporary cash investments with financial institutions, which from time to time may exceed the Federal Deposit Insurance Corporation limit. The amount at

risk at December 31, 2016 and at December 31, 2015 was $20,157,000 and $11,966,000 respectively.

Sales Concentrations

Revenue to a single customer in any one year can exceed 10.0% of our total sales. One customer represented 45.3% and 49.6% respectively, of our annual revenues in fiscal years 2016 and 2015. Another customer represented 13.7% of our revenue in 2015. Previously, we have not been generally dependent on any single customer, and the loss of any customer would be replaced by others, however, the dynamic has changed and although, we believe that our

relationship with our current largest customers will provide us with ongoing continuous sustainability for years to come, the loss of current key customers would have to be replaced by others, and our inability to do so may have a material adverse effect on our business and financial condition.

Export sales to unaffiliated customers represented approximately 11.9% and 9.0% of sales for the years ended December 31, 2016 and 2015, respectively. Export sales in both 2016 and 2015 were primarily to customers in Europe and Asia. All contracts are denominated in U.S. dollars. The Company does not enter into any foreign exchange contracts.

CVD EQUIPMENT CORPORATION AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

December 31, 2016 and 2015

Note 14 – Segment Reporting

The Company adopted ASC 280, "Segment Reporting." The Company operates through (2) segments, CVD and SDC. The CVD division is utilized for silicon, silicon germanium, silicon carbide and gallium arsenide processes. SDC is the Company's ultra-high purity manufacturing division in Saugerties, New York. The accounting policies of CVD and SDC are the same as those described in the summary of significant accounting policies (see Note 2). The Company evaluates performance based on several factors, of which the primary financial measure is earnings before taxes.

The following table presents certain information regarding the Company's segments as of December 31, 2016 and for the year then ended:

	CVD	SDC	Eliminations	Consolidated
Assets	$44,783,126	$4,558,111	$(3,680,845)	$45,660,392
Revenue	$18,568,132	$2,934,831	$(547,616)	$20,955,347
Interest Expense	78,322	1,539		79,861
Depreciation and Amortization	750,680	62,978		813,658
Capital expenditures		5,850		
Pretax earnings/(loss)		(441,610)		

The following table presents certain information regarding the Company's segments as of December 31, 2015 and for the year then ended:

	CVD	SDC	Eliminations	Consolidated
Assets	$39,529,971	$3,619,304	$(2,017,571)	$41,131,704
Revenue	$35,473,057	$5,674,258	$(2,181,928)	$38,965,387
Interest Expense	85,765	6,336		92,101
Depreciation and Amortization	764,467	62,062		826,529
Capital expenditures	212,140	36,165		248,305
Pretax (loss)/earnings	3,616,280	1,046,911		4,663,191

CVD EQUIPMENT CORPORATION AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

December 31, 2016 and 2015

Note 15 Purchase of assets

On December 16, 2016, we purchased certain assets formerly owned by Tantaline A/S of Nordborg, Denmark through our wholly owned subsidiary, CVD Materials Corporation. Formed in 2007, as a spin off from The Danfoss Group, Tantaline A/S established itself as a leader in the commercialization of tantalum treated parts for corrosion resistance. We have now established in Nordborg a new and wholly owned CVD subsidiary operating under the name Tantaline CVD Aps (“Tantaline”).