ExOne Co
Form 10-K
March 20, 2014
Table of Contents

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, DC 20549

FORM 10-K

(Mark One)

x **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the fiscal year ended December 31, 2013

OR

¨ **TRANSITION REPORT PURSUANT TO SECTION 13 or 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the transition period from to

Commission file number 001-35806

The ExOne Company

(Exact Name of Registrant as Specified in its Charter)

Delaware	46-1684608
(State or Other Jurisdiction of Incorporation or Organization)	(I.R.S. Employer Identification No.)

127 Industry Boulevard North Huntingdon, PA 15642 (Address of Principal Executive Offices) (Zip Code)

(724) 863-9663 (Registrant s telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Title of Each Class	Name of Each Exchange On Which Registered
Common Stock, par value $0.01 per share	The NASDAQ Global Select Market

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

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

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 x

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

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

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

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 x (Do not check if a smaller reporting company)	Smaller reporting company ¨

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Securities Exchange Act of 1934). Yes ¨ No x

The aggregate market value of common stock held by non-affiliates for the last business day of the registrant s most recently completed second fiscal quarter was approximately $455.8 million.

As of March 20, 2014, 14,425,108 shares of common stock, par value $0.01 were outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant s definitive proxy statement to be filed pursuant to Regulation 14A of the general rules and regulations under the Securities Exchange Act of 1934, as amended, for its 2014 Annual Meeting of Stockholders (Proxy Statement) are incorporated by reference into Part III of this Form 10-K.

Table of Contents

TABLE OF CONTENTS

Glossary of Defined Terms and Abbreviations		1
Explanatory Note		2
Implications of Being an Emerging Growth Company		2
Trademarks, Service Marks and Trade Names		3
Cautionary Statement Concerning Forward Looking Statements		3
PART I		5
Item 1.	**Business**	5
Item 1A.	**Risk Factors**	19
Item 1B.	**Unresolved Staff Comments**	33
Item 2.	**Properties**	33
Item 3.	**Legal Proceedings**	33
Item 4.	**Mine Safety Disclosures**	33
PART II		34
Item 5.	**Market for Registrant s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities**	34
Item 6.	**Selected Financial Data**	39
Item 7.	**Management s Discussion and Analysis of Financial Condition and Results of Operations**	40
Item 7A.	**Quantitative and Qualitative Disclosures about Market Risk**	56
Item 8.	**Financial Statements and Supplementary Data**	57
Item 9.	**Changes in and Disagreements with Accountants on Accounting and Financial Disclosure**	87
Item 9A.	**Controls and Procedures**	87
Item 9B.	**Other Information**	88
PART III		89
Item 10.	**Directors, Executive Officers and Corporate Governance**	89
Item 11.	**Executive Compensation**	89
Item 12.	**Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters**	89
Item 13.	**Certain Relationships and Related Transactions, and Director Independence**	89
Item 14.	**Principal Accountant Fees and Services**	89
PART IV		90
Item 15.	**Exhibits and Financial Statement Schedules**	90

Table of Contents

GLOSSARY OF DEFINED TERMS AND ABBREVIATIONS

3D means three dimensional.

AM means additive manufacturing.

Amended MIT License Agreement means the amendment to the Amended and Restated Exclusive Patent License Agreement by and between MIT and ExOne, dated January 22, 2013.

Company means The ExOne Company.

ExMAL means ExOne Materials Application Laboratory.

ExOne Americas means ExOne Americas LLC, a Delaware limited liability company and wholly-owned subsidiary of the Company. ExOne Americas was formerly known as ProMetal.

ExTEC means ExOne Training and Education Center.

IPO means the initial public offering of the common stock of the Company, which was completed on February 12, 2013.

Lone Star means Lone Star Metal Fabrication, LLC.

Majority Member means affiliates of S. Kent Rockwell, our Chairman and Chief Executive Officer, who is the indirect, sole shareholder of RHI and RFP.

MAM means Machin-A-Mation, a specialty machine shop located in Chesterfield, Michigan, which ExOne Americas acquired on March 3, 2014.

MWT means MWT-Gesellschaft für Industrielle Mikrowellentechnik mbH, a leading designer and manufacturer of industrial grade microwaves based in Elz, Germany, which ExOne GmbH acquired on March 6, 2014.

MIT means Massachusetts Institute of Technology.

Plan means the 2013 Equity Incentive Plan.

ProMetal means ProMetal RCT, LLC, a Delaware limited liability company and wholly-owned subsidiary of the Company. The Company is the sole member of ProMetal. ProMetal s name was changed to ExOne Americas LLC on March 28, 2013.

PSCs means Production Service Centers.

Reorganization means on January 1, 2013, The Ex One Company, LLC, a Delaware limited liability company, merged with and into a Delaware corporation, which survived and changed its name to The ExOne Company.

RFP mean Rockwell Forest Products, Inc.

RHI means Rockwell Holdings, Inc.

TMF means Troy Metal Fabricating, LLC.

TRUST means the S. Kent Rockwell 1997 Irrevocable Trust.

Variable Interest Entities means Lone Star and TMF prior to March 27, 2013.

1

Table of Contents

EXPLANATORY NOTE

On January 1, 2013, The Ex One Company, LLC, a Delaware limited liability company, merged with and into a Delaware corporation, which survived and changed its name to The ExOne Company. We refer to this as the Reorganization. As a result of the Reorganization, The Ex One Company, LLC became the Company, a Delaware corporation, the common and preferred interest holders of The Ex One Company, LLC became holders of common stock and preferred stock, respectively, of the Company and the subsidiaries of The Ex One Company, LLC became the subsidiaries of the Company. The preferred stock of the Company was converted into common stock on a 9.5 to 1 basis (1,998,275 shares of common stock) immediately prior to the IPO.

On February 6, 2013, the Company s Registration Statement on Form S-1 (File No. 333-185933) was declared effective for the Company s IPO, pursuant to which the Company registered the offering and sale of 6,095,000 shares of our common stock at a public offering price of $18.00 per share for an aggregate offering price of $109.7 million. The IPO closed on February 12, 2013.

On September 9, 2013, we commenced a secondary public offering of 3,054,400 shares of our common stock at a price to the public of $62.00 per share, of which 1,106,000 shares were sold by us and 1,948,400 were sold by selling stockholders (including consideration of the exercise of the underwriters over-allotment option). The secondary offering closed on September 13, 2013.

All financial information in this Annual Report on Form 10-K includes The ExOne Company and its wholly-owned subsidiaries, ExOne Americas LLC (United States), ExOne GmbH (Germany), effective in August 2013, ExOne Property GmbH (formerly ExOne Holding Deutschland GmbH) (Germany) and ExOne KK (Japan). All financial information for periods prior to January 1, 2013 is of The Ex One Company, LLC, our predecessor company, and its subsidiaries, and all financial information for periods prior to March 27, 2013 include Troy Metal Fabricating, LLC and Lone Star Metal Fabrication, LLC, two variable interest entities in which ExOne was identified as the primary beneficiary.

As used in this Annual Report on Form 10-K, unless the context otherwise requires or indicates, the terms ExOne, our Company, the Company, we, our, ours, and us refer to The ExOne Company and its wholly-owned subsidiaries.

IMPLICATIONS OF BEING AN EMERGING GROWTH COMPANY

As a company with less than $1.0 billion in revenue during our last fiscal year, we qualify as an emerging growth company as defined in the Jumpstart our Business Startups Act of 2012 (the JOBS Act). An emerging growth company may take advantage of specified reduced reporting requirements and is relieved of certain other significant requirements that are otherwise generally applicable to public companies.

As an emerging growth company:

- we are exempt from the requirement to obtain an attestation and report from our auditors on the assessment of our internal control over financial reporting pursuant to the Sarbanes-Oxley Act of 2002, or the Sarbanes-Oxley Act;
- we are permitted to provide less extensive disclosure about our executive compensation arrangements;
- we are not required to give our stockholders non-binding advisory votes on executive compensation or golden parachute arrangements; and
- we have elected to use an extended transition period for complying with new or revised accounting standards.

Table of Contents

We will continue to operate under these provisions for up to five years or such earlier time that we are no longer an emerging growth company. We would cease to be an emerging growth company if we have more than $1.0 billion in annual revenues, qualify as a large accelerated filer under the Securities Exchange Act of 1934, as amended (which requires us to have more than $700 million in market value of our common stock held by non-affiliates), or issue more than $1.0 billion of non-convertible debt over a three-year period. We may choose to take advantage of some, but not all, of these reduced burdens.

TRADEMARKS, SERVICE MARKS AND TRADE NAMES

We have registrations in the United States for X1. We have filed for trademark registrations in the United States and in Canada, Europe, Japan, China, Korea and Brazil for ExOne and for a stylized form of X1 ExOne DIGITAL PART MATERIALIZATION. We have filed for trademark registrations in Canada and Japan for DIGITAL PART MATERIALIZATION. We have also filed for trademark registrations in the United States for ExCAST, ExMAL, ExTEC, and M-Flex. Additionally, in March 2014 we acquired the trade names for MAM and MWT. This prospectus also contains trademarks, service marks and trade names of other companies, which are the property of their respective owners. Solely for convenience, marks and trade names referred to in this prospectus may appear without the ® or TM symbols, but such references are not intended to indicate, in any way, that we will not assert, to the fullest extent under applicable law, our rights or the right of the applicable licensor to these marks and trade names. Third-party marks and trade names used herein are for informational purposes only and in no way constitute or are intended to be a commercial use of such names and marks. The use of such third-party names and marks in no way constitutes or should be construed to be an approval, endorsement or sponsorship of us, or our products or services, by the owners of such third-party names and marks.

CAUTIONARY STATEMENT CONCERNING FORWARD LOOKING STATEMENTS

This Annual Report on Form 10-K may contain forward-looking statements within the meaning of the Private Securities Litigation Reform Act with respect to our future financial or business performance, strategies, or expectations. Forward-looking statements typically are identified by words or phrases such as trend, potential, opportunity, pipeline, believe, comfortable, expect, anticipate, current, intention, e assume, outlook, continue, remain, maintain, sustain, seek, achieve, as well as similar expressions, or future or conditional verbs su would, should, could and may.

We caution that forward-looking statements are subject to numerous assumptions, risks and uncertainties, which change over time. Forward-looking statements speak only as of the date they are made and we assume no duty to and do not undertake to update forward-looking statements. Actual results could differ materially from those anticipated in forward-looking statements and future results could differ materially from historical performance.

In addition to risk factors previously disclosed in our reports and those identified elsewhere in this report, the following factors, among others, could cause results to differ materially from forward-looking statements or historical performance: our ability to qualify more industrial materials in which we can print; the availability of skilled personnel; the impact of increased operating expenses and expenses relating to proposed acquisitions, investments and alliances; our strategy, including the expansion and growth of our operations; the impact of loss of key management; our plans regarding increased international operations in additional international locations; sufficiency of funds for required capital expenditures, working capital, and debt service; the adequacy of sources of liquidity; expectations regarding demand for our industrial products, operating revenues, operating and maintenance expenses, insurance expenses and deductibles, interest expenses, debt levels, and other matters with regard to outlook; demand for aerospace, automotive, heavy equipment, energy/oil/gas and other industrial products; the scope, nature or impact of acquisitions, alliances and strategic investments and our ability to integrate acquisitions and strategic investments; liabilities under laws and regulations protecting the environment; the impact of governmental laws and regulations; operating hazards, war, terrorism and cancellation or unavailability of insurance coverage; the effect of litigation and contingencies; the impact of

Table of Contents

disruption of our manufacturing facilities or PSCs; the adequacy of our protection of our intellectual property; material weaknesses in our internal control over financial reporting.

These and other important factors, including those discussed under Risk Factors and Management s Discussion and Analysis of Financial Condition and Results of Operations in this Annual Report on Form 10-K, may cause our actual results of operations to differ materially from any future results of operations expressed or implied by the forward looking statements contained in this Annual Report on Form 10-K. Before making a decision to purchase our common stock, you should carefully consider all of the factors identified in this Annual Report on Form 10-K that could cause actual results to differ from these forward looking statements.

Table of Contents

PART I

Item 1. Business.

The Company

We are a global provider of 3D printing machines and printed products, materials and other services to industrial customers. Our business primarily consists of manufacturing and selling 3D printing machines and printing products to specification for our customers using our installed base of 3D printing machines. We offer pre-production collaboration and print products for customers through our seven PSCs, which are located in the United States, Germany and Japan. We build 3D printing machines at our facilities in the United States and Germany. We also supply the associated materials, including consumables and replacement parts, and other services, including training and technical support that is necessary for purchasers of our machines to print products. We believe that our ability to print in a variety of industrial materials, as well as our industry-leading printing capacity (as measured by build box size and printhead speed) uniquely position us to serve the needs of industrial customers.

Our 3D printing machines use our binder jetting technology, powdered materials, chemical binding agents and integrated software to print 3D products directly from computer models by repeatedly depositing very thin layers of powdered materials and selectively placing chemical binding agents to form the printed product. One of our key industry advantages is that our machines are able to print products in materials which we believe are desired by industrial customers. Currently, our 3D printing machines are able to manufacture casting molds and cores from specialty silica sand and ceramics, which are the traditional materials for these casting products. Of equal importance, our 3D printing machines are capable of direct product materialization by printing in industrial metals, including stainless steel, bronze, iron and bonded tungsten. We are in varying stages of qualifying additional industrial materials for printing, such as titanium, tungsten carbide, aluminum, and magnesium. We have also undertaken an analysis of safety precautions for printing reactive materials, including possible facility and machine modifications. Our current material development plan calls for the implementation of such modifications as soon as practicable. Our continued goal is to qualify an additional industrial material every six months.

We believe that we are a leader in providing 3D printing machines, 3D printed products, materials and other services to industrial customers in the aerospace, automotive, heavy equipment, energy/oil/gas and other industries. In an effort to further solidify this position, the net proceeds from our IPO have been earmarked or spent in order to (i) expand our PSC network to fifteen global locations by the end of 2015, (ii) increase capacity and upgrade technology in our production facilities in Germany, including consolidating our operations from five buildings located throughout the district of Augsburg to one purpose-built facility, (iii) expand our materials development initiatives and achieve our goal of one new industrial material qualified every six months, (iv) select and deploy an Enterprise Resource Planning (ERP) system to promote operational efficiency and financial controls globally, (v) pay off existing debt, and (vi) deploy working capital to support growth. These uses of proceeds and priorities are consistent with the plan outlined by us during our IPO and communicated to our stockholders thereafter.

Our revenue growth is driven by increasing customer acceptance of our 3D printing technology. We believe that we can accelerate customer adoption of our technology by delivering turnkey 3D printing services and products, from design through product completion. In developing our next generation 3D printing machine platforms, we successfully focused on achieving the volumetric output rate demanded by our industrial customers. Our refined strategic focus emphasizes all phases of the production cycle, notably enhancements to pre-print, such as Computer Aided Design (CAD), simulation, and design optimization, as well as post-print processing, including metal finishing technologies and precision casting capabilities. We are exploring a combination of acquisitions, strategic investments, and/or alliances, some of which we believe will promote advances in pre-print and post-print processing. We intend to use part or all of the proceeds from our September 2013 secondary offering to achieve these and other objectives to maximize and attain our growth potential.

Table of Contents

We conduct a significant portion of our business with a limited number of customers. Our top five customers represented approximately 25.5%, 31.7% and 40.9% of total revenue for 2013, 2012 and 2011, respectively. There were no customers for 2013 or 2012 that individually represented 10.0% or greater of total revenue. During 2011, we had one customer that individually represented 10.0% or greater of total revenue (Ryoyu Systems, a 3D printing machine customer). Sales of 3D printing machines are low volume, but generate significant revenue based on their per-unit pricing. Generally, sales of 3D printers are to different customers in each respective period, with the timing of such sales dependent on the customer s capital budgeting cycle, which may vary from period to period. The nature of the revenue from 3D printing machines does not leave us dependent upon a single or a limited number of customers. Sales of 3D printed products, materials and other services are high volume, but generally result in a significantly lower aggregate price per order as compared to 3D printing machine sales. The nature of the revenue from 3D printed products, materials and other services does not leave us dependent upon a single or a limited number of customers.

The Company manages its business globally in a single operating segment in which it develops, manufactures and markets 3D printing machines and micromachinery, printed products, materials and other services. Geographically, the Company conducts its business through wholly-owned subsidiaries in the United States, Germany and Japan.

Our History

Our business began as the advanced manufacturing business of the Extrude Hone Corporation, which manufactured its first 3D printing machine in 2003 using licensed technology developed by researchers at MIT. In 2005, our business assets were transferred to The Ex One Company, LLC, a Delaware limited liability company, when Extrude Hone Corp. was purchased by another company. In 2007, we were acquired by S. Kent Rockwell through his wholly-owned company RFP. On January 1, 2013, our Reorganization was completed when The Ex One Company, LLC was merged with and into a newly created Delaware corporation, which changed its name to The ExOne Company. On February 12, 2013, we completed our IPO, raising approximately $90.4 million in net proceeds after expenses to us. On September 13, 2013 we completed a secondary public offering, raising an additional $64.9 million in net proceeds after expenses to us.

The Additive Manufacturing Industry and 3D Printing

3D printing is the most common type of an emerging manufacturing technology that is broadly referred to as additive manufacturing. In general, AM is a term used to describe a manufacturing process that produces 3D objects directly from digital or computer models through the repeated deposit of very thin layers of material. 3D printing is the process of joining materials from a digital 3D model, usually layer by layer, to make objects using a printhead, nozzle, or other printing technology. The terms AM and 3D printing are increasingly being used interchangeably, as the media and marketplace have popularized the term 3D printing rather than AM, which is the industry term.

AM represents a transformational shift from traditional forms of manufacturing (e.g., machining or tooling), which are sometimes referred to as subtractive manufacturing. We believe that AM and 3D printing are poised to displace traditional manufacturing methodologies in a growing range of industrial applications. Our 3D printing process differs from other forms of 3D printing processes, in that we use a chemical binding agent and focus on industrial products and materials.

ExOne and 3D Printing

We provide 3D printed products, materials and other services primarily to industrial customers and end-market users. We believe that we are an early entrant into the AM industrial products market and are one of the few providers of 3D printing solutions to industrial customers in the aerospace, automotive, heavy equipment and energy/oil/gas industries.

Table of Contents

Our binder jetting 3D printing technology was developed over 15 years ago by researchers at MIT. Our machines build or print products from CAD by depositing successive thin layers of particles of materials such as silica sand or metal powder in a build box. A moveable printhead passes over each layer and deposits a chemical binding agent in the selected areas where the finished product will be materialized. Each layer can be unique.

Depending on the industrial material used in printing, printed products may need post-production processing. We generally use silica sand or foundry sand for casting, both of which require no additional processing. Products printed in other materials, such as glass or metals, need varying amounts of heat treating or other post-processing.

Pre-Print. We believe that our customers have the opportunity to take greater advantage of the design freedom that our 3D printing technology provides. While we collaborate with our customers to develop and refine CAD designs that meet our customers specifications and can be read and processed by our 3D printing machines, we believe that additional pre-print capabilities would empower our customers to fully exploit the design freedom of 3D printing. As a result, we are exploring ways to develop, through a combination of acquisitions, strategic investments, and/or alliances, advanced CAD, simulation and design optimization tools. With these enhanced pre-print capabilities, our customers will be able to imagine, design, optimize and produce their ideal products, unconstrained by the limitations imposed by traditional manufacturing technologies.

Industrial Materials. As we experience increased demand for our products globally, it is essential that the material supply chain and distribution channels match and be in close proximity to our current and prospective customers. To ensure that such a supply chain exists or quickly develops, we may vertically integrate the supply of our print media. In addition, for the highest quality printed products, the sand grains and metal particles used in the 3D printing process must be uniform in size and meet very specific tolerances. Vertically integrating would have the additional advantage of ensuring that our PSCs and machine customers have certainty of access to the highest quality print media, meeting the exact specifications of our 3D printing machines.

Our Machines. Our 3D printing machines consist of a build box that includes a machine platform and a computer processor controlling the printheads for applying layers of industrial materials and binding agents. We currently build our 3D printing machines in both Germany and the United States. Our machines are used to produce molds for castings, products for end users and prototypes. In some situations, we can make prototypes in metal rather than resin polymer, or make a part from a mold for the casting of a newly designed part, which we then cast at a qualified foundry. As a result, the prototype can be made from the same material as the final production part, which allows for more accurate testing of the prototype. We provide a broad spectrum of qualified materials for direct product materialization and are continuing to qualify additional materials for use in our printing process.

Table of Contents

Our machines are used primarily to manufacture industrial products that are ordered in relatively low volumes, are highly complex and have a high value to the customer. For example, the manufacture of an aircraft requires several complex parts, such as transmission housings (also known as gear-casings), which are needed in relatively low volume and have a high performance value in the aircraft. There are also a variety of machine parts made in traditional machining processes that can be made more cheaply using those processes. Over time, we may be able to manufacture some of those parts more cost effectively. Our technology is not appropriate for the mass production of simple parts, such as injection molded parts or parts made in metal stamping machines. Traditional manufacturing technology is more economical in making those parts. While we expect over time to be able to increase the kinds of parts that we can make more economically than using subtractive manufacturing, we do not ever expect to use our technology to make simple, low-cost, mass-produced parts.

The bulk of our machines are used to make complex sand molds, which are used to cast these kinds of parts for several industries; although, in some cases, we make the end part directly. We intend to expand the direct part production segment of our business as we grow. In addition, as our technologies advance and our unit cost of production decreases, we believe that we can increase the type and number of products that our 3D printing machines can manufacture in a cost-effective manner, expanding our addressable market.

Post-Print Processing. After a product is printed, the bound and unbound powder in the build box requires curing of the chemical binding agent. In the case of molds and cores, curing occurs at room temperature and the printed product is complete after the binder is cured. The mold or core is then poured at a foundry, yielding the finished metal product. We have identified and work with high quality foundries, and we are exploring ways to enhance the quality of precision castings in order to drive additional demand for our molds and cores and the machine platforms that print them. In conjunction with precision foundry capabilities, we believe that our casting technology offers a number of advantages over traditional casting methods, including increased yield, weight reduction and improved thermal range.

For other materials, such as stainless steel, bronze, iron and bonded tungsten, the product needs to be sintered, or sintered and infiltrated. With sintering, the product is placed into a vacuum furnace in an inert atmosphere to sinter the bonded particles and form a strong bonded porous structure. The porous structure can be further infiltrated with another material to fill the voids. After the sintering and infiltration, the product can be polished and finished with a variety of standard industrial methods and coatings. We believe that our direct materialization capabilities enable customers to develop the ideal design for products, free of the design constraints inherent in traditional manufacturing, in the industrial metal of choice and in a more efficient manner than traditional manufacturing methods.

Customers and Sales

Educating Our Customers.

Educating our customers and raising awareness in our target markets about the many uses and benefits of our 3D printing technology is an important part of our sales process. We believe that customers who experience the efficiency gains, decreased lead-time, increased design flexibility, and decreased cost potential of 3D printing, as compared to subtractive manufacturing, are more likely to purchase our machines and be repeat customers of our products. We educate our customers on the design freedom, speed, and other benefits of 3D printing by providing printing and design services and support through our growing number of PSCs. We also seek to expose key potential users to our products through our PSCs, installed machines at customers locations, university programs, and sales and marketing efforts.

Production Service Centers.

We have established a network of seven PSCs in North Huntingdon, Pennsylvania; Troy, Michigan; Houston, Texas; Auburn, Washington; North Las Vegas, Nevada; Augsburg, Germany; and Kanagawa, Japan. Through our PSCs, we provide sales and marketing and delivery of support and printing services to our

Table of Contents

customers. At our PSCs, our customers see our printing machines in operation and can evaluate their production capabilities before ordering a machine or a printed product. The PSCs are scalable and have a well-defined footprint that can be easily replicated to serve additional regional markets. As described below, placing our PSCs in strategic locations around the world is an important part of our business strategy.

For all customers, we offer the following support and services through our PSCs:

Pre-production Collaboration. Our pre-print services include data capture using software that enables customers to translate their product vision into a digital design format that can be used as an input to our 3D printing equipment. We help our customers successfully move from the design stage to the production stage, and help customers evaluate the optimal design and industrial materials for their production needs. For example, we worked with a customer to design and manufacture parts that eliminated significant weight from a helicopter, which was possible because of the precision of our AM process. Our machines are also able to deliver a replacement for a product broken by the customer rapidly or often immediately because we will already have the production computer file. Using subtractive manufacturing would take significantly longer.

Consumables. We provide customers with the inputs used in our 3D printing machines, including tools, printing media/industrial materials, and bonding agents.

Training and Technical Support. Our technicians train customers to use our machines through hands-on experience at our PSCs and provide field support to our customers, including design assistance, education on industrial materials, operations and printing training, instruction on cleaning, and maintenance and troubleshooting.

Replacement Parts and Service. For the first year after purchase of one of our machines, we provide complimentary service and support. Thereafter, we offer a variety of service and support plans.

Our Competitive Strengths

We believe that our competitive strengths include:

Volumetric Output Rate. We believe that our 3D printing machines provide us the highest rate of volume output per unit of time among competing AM technologies. Because of our early entrance into the industrial market for AM and our investment in our core 3D printing technology, we have been able to improve the printhead speed and build box size of our machines. As a result, we have made strides in improving the output efficiency of our machines, as measured by volume output per unit of time. For example, the machine cost per cubic inch for our mid-size Flex machine is approximately 5% of the comparable machine cost of its predecessor, the R 2, assuming a constant 80% utilization rate over a five-year period. With continued advances in our core 3D printing technologies, we believe that our cost of production will continue to decline, increasing our ability to compete with subtractive manufacturing processes, particularly for complex products, effectively expanding our addressable market.

Printing Platform Size. The size of the build box area and the platform upon which we construct a product is important to industrial customers, who may want to either make a high number of products per job run or make an industrial product that has large dimensions and is heavy in final form. Our 1,260-liter platform for our S-Max machine is one of the largest commercially available 3D printing build platforms. We believe that our technology and experience give us the potential to develop even larger build platforms to meet the production demands of current and potential industrial customers. In addition, we have created machine platforms in four size ranges in order to cater to the varying demands of our customers. Our two largest platforms, the Max and Print machines, are differentiated from the machines of our competitors in their ability to print in an industrial size and scale. Our Lab size platform provides a small build box for lab work and experimentation.

Table of Contents

Industrial Material. Currently, our 3D printing machines are able to manufacture casting molds and cores from specialty silica sand and ceramics, which are the traditional materials for these casting products. Of equal importance, our 3D printing machines are also capable of direct product materialization by printing in industrial metals, including stainless steel, bronze, iron and bonded tungsten. We are in varying stages of qualifying additional industrial materials for printing, such as titanium, tungsten carbide, aluminum, and magnesium. We have also undertaken an analysis of safety precautions for printing reactive materials, including possible facility and machine modifications. Our current material development plan calls for the implementation of such modifications as soon as practicable. Our continued goal is to qualify an additional industrial material every six months.

Chemical Binding. We use liquid chemical binding agents during the printing process. We believe that our unique chemical binding agent technology can more readily achieve efficiency gains over time than other AM technologies, such as laser-fusing technologies. For instance, in order to increase the print speed of laser-based technologies, another expensive industrial laser must be added to the manufacturing process, raising the unit cost of production.

International Presence. Since our inception, we have structured our business to cater to major international markets. We have established one or more PSCs in each of North America, Europe, and Asia. Because many of our current or potential customers are global industrial companies, it is important that we have a presence in or near the areas where these companies have manufacturing facilities.

Co-location of High Value Production. Over the last few years, many U.S. industrial manufacturers have outsourced products supply or otherwise created long, relatively inflexible supply chains for their high-complexity, high-value products. We believe that over the next few years, many of these companies will need to build these products in the United States, near their main manufacturing facilities, in order to be competitive nationally and internationally. We believe we are well positioned to help these manufacturers co-locate the production of products so as to optimize our customers supply chains.

Our Business Strategy

The principal elements of our growth strategy include:

Expand the Network of Production Service Centers. Our PSCs provide a central location for customer collaboration and provide customers with a direct contact point to learn about our 3D printing technology, buy products printed by us, and purchase our machines. By the end of 2015, we plan to expand our PSC network from the current seven locations to fifteen locations. Like our current PSCs, we plan to locate the additional PSCs in major industrial centers near existing and potential customers. Our current plan also includes opening two or more additional locations in the first half of 2014.

Qualify New Industrial Materials Printable In Our Systems. Currently, our 3D printing machines are capable of printing in silica sand, ceramics, stainless steel, bronze, iron, bonded tungsten and glass. We are in varying stages of qualifying additional industrial materials for printing, such as titanium, tungsten carbide, aluminum, and magnesium. We have also undertaken an analysis of safety precautions for printing reactive materials, including possible facility and machine modifications. Our current material development plan calls for the implementation of such modifications as soon as practicable. Our continued goal is to qualify an additional industrial material every six months. By expanding into these other materials, we believe we can expand our market share and better serve our industrial customer base. We established ExMAL, which focuses principally on materials testing. We believe ExMAL will assist us in increasing the rate at which we are able to qualify new materials. ExMAL is led by our Chief Technology Officer, Rick Lucas, whose background includes experience in materials testing and certification.

Table of Contents

Increase the Efficiency of Our Machines to Expand the Addressable Market. We intend to invest in further developing our machine technology so as to increase the volume output per unit of time that our machines can produce. In 2011, we began selling a new second generation mid-sized platform, the S-Print machine. In 2013, we began selling our new M-Flex machine. In both cases, the new machines are designed to increase the volume output per unit of time through advances in printhead speed and build box size. Achieving improved production speed and efficiency will expand our potential market for our machines and for products made in our PSCs.

Focus Upon Customer Training and Education to Promote Awareness. We use our regional PSCs to educate our potential customers. In addition, we have supplied 3D printing equipment to more than 20 universities and research institutions, in hopes of expanding the base of future adopters of our technology. We established ExTEC in our North Huntingdon, Pennsylvania headquarters. At ExTEC, technicians guide our current and prospective customers in the optimal use of 3D printing and customers gain digital access to our 3D printing knowledge database as it continues to evolve. We make ExTEC accessible to universities, individual customers, employees/trainees, designers, engineers, and others interested in 3D printing. We will continue to educate the marketplace about the advantages of 3D printing.

Achieve Revenue Balance and Diversification. Over the long-term, our goal is to balance revenue between machine sales and PSC production, service contracts and consumables. Machine sales tend to be seasonal, less predictable, and generally more heavily impacted by the macroeconomic cycle, as compared to PSC production, service contracts and consumables. As we sell more machines, the machine sales portion of our business will be supplemented by related sales of service, replacement parts and consumables. To avoid being overly dependent on economic conditions in one part of the world, we intend to develop our customer base so that our revenues are balanced across the Americas, Europe, and Asia. As overall revenues increase, maintaining this balance will largely be achieved by targeting specific customers and industries for machine sales and by establishing PSCs in each of our key regions.

Advance Pre-Print Design and Post-Print Processing Capabilities to Accelerate the Growth of Our 3D Printing Technology. Our next generation 3D printing machine platforms have achieved the volumetric output rate and quality necessary to serve industrial markets on a production scale. We believe that there is an opportunity to similarly advance the pre-print and post-print processing phases of product materialization to more fully exploit the transformative power of our 3D printing machines and drive growth. These opportunities relate to both direct and indirect product materialization. For direct metal production, we believe that enhancing pre-print processes, notably design optimization tools and suitable print material availability, can greatly accelerate our capture of market share in the near-term. Additionally, enhancements to post-print processing will increase the applications for printed products. Through ExMAL, we are developing post-print processing technologies to achieve fully dense metal product materialization without the need for infiltration, and we are exploring technology sharing partnerships to further this initiative. In indirect production utilizing 3D printed molds and cores, advanced performance casting technologies can be leveraged to increase yields and reduce weight of casted products. To address the market opportunity and fill the execution gap, we have developed a suite of processes, many of which are proprietary, for producing high-quality castings through a process that we call ExCAST. ExCAST provides industry guidance and support through all stages of production, from CAD at the design stage, through the 3D materialization of molds and cores, metal casting of the end product and rapid delivery to the end-user.

Pursue Growth Opportunities Through Acquisitions, Alliances and/or Strategic Investments. We intend to opportunistically identify and, through acquisitions, alliances and/or strategic investment, integrate and advance complementary businesses, technologies and capabilities. Our goal is to expand the functionality of our products, provide access to new customers and markets, and increase our production capacity. We are in active discussions with parties that we believe can contribute to a superior end-to-end manufacturing process. Additional information regarding recent acquisitions and strategic investments is described under **Item 1 Business 2014 Acquisitions**.

Table of Contents

Our Machines and Machine Platforms

We produce a variety of machines in order to enable designers and engineers to rapidly, efficiently, and cost-effectively design and produce industrial prototypes and production parts. The models of our machines differ based on the materials in which they print, build box size, and production speeds, but all utilize our advanced technology and designs. The variation in the models of machines that we produce allows for flexibility of use based on the needs of our customers.

We have created machine platforms in four size ranges in order to cater to the job sizes at the machine prices that the market demands. Our two largest platforms, the Max size platform and the Print size platform, are differentiated from those of our competitors in their ability to print on an industrial size and scale.

We further differentiate our model name by a prefix of either M or S before the platform name. The S prefix indicates that the machine is largely used for printing molds and cores for castings. The M prefix indicates that the machine is largely used for the direct printing of objects. The largest platform, the Max size, is generally used for castings, and therefore the current model in this platform is the S-Max. The Print size platform is broadly applicable in a variety of industrial uses, and therefore, we have introduced the platform with both M-Print and S-Print machines. We are currently offering the new Flex platform in an M-Flex machine. The Lab size platform is primarily sold and used as the X1-Lab machine (a direct printing machine).

Our machines come in a variety of sizes and are named for the size of print job they are able to produce. In descending order by capacity are our Max, Print, Flex, and Lab machines.

S-Max. The S-Max machine, the largest of our machines, has a build box size of 1.8 meters x 1 meter x 0.7 meters and sells for approximately $1.4 million (based upon average model options and exchange rates). The total time to produce an entire build box on the S-Max is approximately 24 hours. We introduced the S-Max machine in 2010 to provide improved size and speed over the predecessor model, the S-15. Our PSCs each generally have at least one S-Max or S-15 machine installed on-site, which provides our customers with the ability to print casting molds and cores on an industrial scale.

S-Print/M-Print. Our Print machine platform has been completely redesigned and is our current mid-sized machine platform. The S-Print machine provides the same cutting edge technology available in the S-Max platform, with an average price point of approximately $0.8 million (based upon average model options and exchange rates). The S-Print machine is used by customers interested in printing objects made from silica sand and ceramics, with a particular focus on industrial applications for smaller casting cores that are often required for the aerospace industry, especially in hydraulic applications. The build box size permits the use of exotic and expensive print materials, such as ceramics, that are required for high heat/high strength applications. The S-Print machine build box is approximately 125 liters. This same basic platform is used in the M-Print, which is used by customers interested in direct printing of objects made from metals and glass. The average price point of the M-Print is approximately $0.9 million (based upon average model options and exchange rates). We have installed both S-Print and M-Print machines in certain of our PSCs to complement the S-Max and S-15 machines currently in use.

M-Flex. We introduced our M-Flex machine platform in 2013. We expect the M-Flex to satisfy the demand for a large range of industrial customers that are interested in directly printing metals, ceramic and glass products. The average price point of approximately $0.4 million (based upon average model options and exchange rates) is designed to satisfy demand from industrial production houses. We have developed a collaborative process for assisting the users in production implementation through the ExTEC and ExMAL organizational efforts.

X1-Lab. The X1-Lab is the smallest of our build platforms. At an average price point of approximately $0.1 million (based upon average model options and exchange rates), it is primarily used as a development platform, as well as a teaching tool in an engineering environment. There are over 20 X1-Lab machines installed at universities and research institutions in the United States and Europe.

Table of Contents

Binding

We use liquid chemical binding agents during the printing process. We believe that our unique chemical binding agent technology can more readily achieve efficiency gains over time than other AM technologies such as laser-fusing technologies. For instance, in order to increase the print speed of laser-based technologies, another expensive industrial laser must be added to the manufacturing process, raising the unit cost of production.

We also announced in July 2013 that we have added phenolic and sodium silicate to our suite of binders for use in our 3D printing process. Phenolic binder, used with ceramic sand in the 3D printing of molds and cores, offers customers three benefits: (i) casting higher heat alloys; (ii) creating a higher strength mold or core; and (iii) improving the quality of the casting due to reduced expansion of the mold or core. These capabilities address challenges faced by the automotive, aerospace, heavy equipment and energy/oil/gas industries. We believe that the use of sodium silicate will reduce or eliminate the release of fumes and gas in the casting process, helping to reduce costs associated with air ventilation and electrical and maintenance equipment, which we believe will appeal to casting houses that are in search of cleaner environmental processes.

Laser Micromachining

In addition to manufacturing our 3D printing machines, we also manufacture the ExMicro Orion (Orion) machine, which is used for both conventional and exotic materials. Micromachining is an integrated process that combines the use of a short pulse laser with a patented trepanning (which is a type of laser drilling) head to capture and manipulate a laser beam. By controlling and manipulating the beam, the Orion machine, which we build in the United States, can remove microns of material from precise locations with thousands of pulses per second.

The beam manipulation capability allows us to shape design features like tapers, making the Orion machine an effective tool for production of automotive and aerospace components. The Orion machine sells for approximately $1.0 million, the first of which was sold to a production customer in 2013.

Marketing and Sales

We market our products under the ExOne brand name in our three major geographic regions the Americas, Europe and Asia. Our sales are made primarily by our global sales force. Our sales force is augmented, in certain territories, by representatives with specific industry or territorial expertise. Even where we are supported by a representative, all of our product and service offerings provided by our PSCs are sold directly to customers by us.

We believe that our direct selling relationship helps to create one of the building blocks for our business the creation of true collaboration between us and industrial customers who are interested in 3D printing. Increasingly, industrial producers are considering shifting from subtractive manufacturing techniques to 3D printing. Our marketing efforts include educating potential customers about 3D printing technology through collaboration starting with pre-production services and continuing with production and technical support at our PSCs. Currently, our sales people are based in North Huntingdon, Pennsylvania; Troy, Michigan; Houston, Texas; Auburn, Washington; North Las Vegas, Nevada; Augsburg, Germany; and Kanagawa, Japan. In addition, in 2013 we opened international sales offices or appointed individual sales representatives in each of China, Brazil, Italy, Russia, United Kingdom, Spain and Portugal expanding our machines sales efforts and laying the groundwork for future PSCs in these markets in the process.

2014 Acquisitions

On March 3, 2014, ExOne Americas purchased (i) substantially all the assets of Machin-A-Mation Corporation, a specialty machine shop located in Chesterfield, Michigan, and (ii) the real property on which Machin-A-Mation s business is located for an aggregate purchase price of approximately $5.0 million. The Machin-A-Mation business will remain in its current Michigan location, complementing our nearby PSC in Troy,

Table of Contents

Michigan. This PSC focuses on advanced 3D printed cores and molds for the aerospace and shipbuilding industries. In addition, we expect to continue to serve and expand the existing Machin-A-Mation industrial customer base. We believe that Machin-A-Mation s specialty precision machining expertise helps us address the finishing requirements for complex parts which are cast from our 3D printed sand molds.

On March 6, 2014, ExOne GmbH acquired all of the shares of MWT-Gesellschaft für Industrielle Mikrowellentechnik mbH, a pioneer in industrial grade microwaves with leading design and manufacturing experience based in Elz, Germany, for approximately $4.8 million. We believe that this acquisition enhances our position as the market leader of 3D sand production systems for industry. Industrial grade microwaves are used for thermally processing certain sand molds or cores that are 3D printed using binders, such as phenolic binder, that require a drying process. Importantly, microwave technology improves casting quality and reduces production costs for customers in specific industries, such as magnesium parts for aviation and steel alloy parts for hydraulic components. MWT designs and manufactures equipment that is currently employed in our PSC operations. We also plan to offer this technology to customers in future system sales. MWT s microwave operation will be operationally integrated with our Augsburg, Germany manufacturing operations.

Our Customers

Our customers are located primarily in the Americas, Europe, and Asia. We are a party to non-disclosure agreements with many of our customers, and therefore, are often prohibited from disclosing many of our customers identities. Our customers include several Fortune 500 companies that are leaders in their respective markets. The primary markets that we currently serve are:

- aerospace;
- automotive;
- heavy equipment; and
- energy/oil/gas.

We conduct a significant portion of our business with a limited number of customers. Our top five customers represented approximately 25.5%, 31.7% and 40.9% of total revenue for 2013, 2012 and 2011, respectively. There were no customers for 2013 or 2012 that individually represented 10.0% or greater of total revenue. During 2011, we had one customer that individually represented 10.0% or greater of total revenue (Ryoyu Systems, a 3D printing machine customer). Sales of 3D printing machines are low volume, but generate significant revenue based on their per-unit pricing. Generally, sales of 3D printers are to different customers in each respective period, with the timing of such sales dependent on the customer s capital budgeting cycle, which may vary from period to period. The nature of the revenue from 3D printing machines does not leave us dependent upon a single or a limited number of customers. Sales of 3D printed products, materials and other services are high volume, but generally result in a significantly lower aggregate price per order as compared to 3D printing machine sales. The nature of the revenue from 3D printed products, materials and other services does not leave us dependent upon a single or a limited number of customers.

Services and Warranty

We have fully trained service technicians to perform machine installations in the Americas, Europe, and Asia. We provide an industry standard one-year warranty on installed machines. Customers can purchase additional service contracts for maintenance and service. Finally, we sell spare parts which we maintain in stock worldwide to assist in providing service expeditiously to our customers.

Our terms of sale generally require payment within 30 to 60 days after shipment of a product, although we also recognize longer payment periods are customary in some countries where we transact business.

Table of Contents

Suppliers

Our largest suppliers in 2013, based upon dollar volume of purchases, were Bauer GmbH & Co KG, Erhardt & Leimer GmbH, Bosch Rexroth AG, MWT GmbH, Fuji Film Dimatix and T&S Materials.

We buy our industrial materials from several suppliers and, except as set forth below, the loss of any one would not materially adversely affect our business. We currently have a single supplier of printheads for our 3D printing machines. While we believe that our printhead supplier is replaceable, in the event of the loss of that supplier, we could experience delays and interruptions that might adversely affect the financial performance of our business. Additionally, we obtain certain preproduction services through design and data capture providers, and certain post-production services though vendors with whom we have existing and good relationships. The loss of any one of these providers or vendors would not materially adversely affect our business.

Research and Development

We spent approximately $5.1 million, $1.9 million and $1.5 million on research and development during 2013, 2012 and 2011, respectively. We expect to continue to invest significantly in research and development in the future.

A significant portion of our research and development expenditures have been focused upon the:

chemistry of print materials and binder formulation;

mechanics of droplet flight into beds of powder;

metallurgy of thermally processing metals that are printed through AM;

mechanics of spreading powders in a job box;

transfer of digital data through a series of software links, to drive a printhead; and

synchronizing all of the above to print ever-increasing volumes of material per unit time.

Intellectual Property

Patents and MIT Licenses. Our technology is covered by a variety of patents or licenses for use of patents. We are the worldwide licensee of certain patents of MIT for certain AM printing processes (the MIT Patents), with exclusive rights to practice the patents in certain fields including the application of the printing processes to metals (with sublicensing rights), and non-exclusive rights to practice the patents in certain fields including the application of the printing processes to certain non-metals (without sublicensing rights). Additionally, we hold patents solely or as majority owner as a result of our own technological developments and from the acquisition of Prometal RCT GmbH (subsequently renamed ExOne GmbH). Our patents are issued in the United States and in various foreign jurisdictions, including Germany and Japan. As a result of our commitment to research and development, we also hold process patents and have applied for other patents for equipment, processes, materials and 3D printing applications. The expiration dates of our patents range from 2015 to 2031. No current MIT Patents are scheduled to expire in the United States during 2014. The next MIT Patents scheduled to expire are in October 2015 and are directed to certain methods for removing powder from internal passages, certain mold configurations and making tools with internal passages. We believe that the expiration of patents in the near term will not impact our business.

The remaining MIT Patents under which we are licensed have expiration dates ranging from 2015 to 2021 in the United States. We believe that the expiration of these licenses will not impact our business; however, the expiration may allow our competitors that were previously prevented from doing so to utilize binder jetting 3D printing. Nonetheless, we have developed know-how and trade secrets relative to our 3D printing

technology and believe that our early entrance into the industrial market provides us with a timing and experience advantage.

Table of Contents

Through our investment in our technology, we have been able to qualify industrial materials for use in our 3D printing machines, and we intend to continue such efforts. In addition, we have taken steps to protect much of our technology as a trade secret. Given the significant steps that we have taken to establish our experience in AM for industrial applications, as well as our ongoing commitment to research and development, we intend to maintain our preeminent position in the AM industry market.

We entered into an Amended and Restated Exclusive Patent License Agreement with MIT in June 2011. The terms of the amended agreement required that we remit both license fees and royalties to MIT based upon net sales of licensed products, processes and consumables. The term of the agreement commenced on January 1, 2011, and was to remain in force until the expiration or abandonment of all issued patent rights.

On January 22, 2013, we agreed with MIT to an amendment of its exclusive patent license agreement. The Amended MIT License Agreement provides for, among other things, (i) a reduction in the term of the agreement between us and MIT from the date of expiration or abandonment of all issued patent rights to December 31, 2016, (ii) an increase in the annual license maintenance fees due for the years ended December 31, 2013 through December 31, 2016 from $50,000 annually to $100,000 annually, with amounts related to 2013 through 2016 guaranteed by us, (iii) a settlement of all past and future royalties on net sales of licensed products, processes and consumables for a one-time payment of $200,000 (paid in March 2013), and (iv) a provision for optional extension of the term of the arrangement between the parties for an annual license maintenance fee of $100,000 for each subsequent year beyond 2016.

Trademarks. We have registrations in the United States for X1. We have filed for trademark registrations in the United States and in Canada, Europe, Japan, China, Korea, and Brazil for ExOne and for a stylized form of X1 ExOne DIGITAL PART MATERIALIZATION. We have also filed for trademark registrations in Canada and Japan for DIGITAL PART MATERIALIZATION. We have also filed for trademark registrations in the United States for ExCAST, ExMAL, ExTEC, and M-Flex.

Trade Secrets. The development of our products, processes and materials has involved a considerable amount of experience, manufacturing and processing know-how and research and development techniques that are not easily duplicated. We protect this knowledge as a trade secret through the confidentiality and nondisclosure agreements which all employees, customers and consultants are required to sign at the time they are employed or engaged by us. Additional information related to the risks associated with our intellectual property rights are described within **Item 1A Risk Factors** of this Annual Report on Form 10-K.

Competition

Other companies are active in the market for 3D printing products and services. These companies use a variety of AM technologies, including:

- direct metal deposition;
- direct metal laser sintering;
- electron beam melting;
- fused deposition modeling;
- laser consolidation;
- laser sintering;
- multi-jet modeling;

polyjet;

selective laser melting;

Table of Contents

selective laser sintering; and

stereolithography.

Some of the companies that have developed and employ one or more AM technologies include: 3D Systems Corporation, Stratasys Inc., Voxeljet AG, EOS Optronics GmbH, EnvisionTEC GmbH and Solid Model Ltd.

Some of these processes and companies compete with some of the products and services that we provide. Despite the challenging competitive landscape, we believe that we are the only AM printing solutions provider that focuses primarily on industrial applications on a production scale. Our competitive advantages, including the size of our build platforms, the speed of our printing heads, the variety of materials used by industrial manufacturers in which we can print, the industry qualification of many of the materials we print in, our robust market capabilities, and our suite of machine system families offering scale and flexibility, also serve to differentiate us from the other competitors in the AM market.

We also compete with established subtractive manufacturers in the industrial products market. These companies often provide large-scale, highly capitalized facilities that are designed or built to fill specific production purposes, usually mass production. However, we believe that we are well positioned to expand our share of the industrial products market from these manufacturers as AM gains recognition. As our technologies improve and our unit cost of production decreases, we expect to be able to compete with subtractive manufacturing on a wide range of products, thereby expanding our addressable market.

Seasonality

Purchases of our 3D printing machines often follow a seasonal pattern owing to the capital budgeting cycles of our customers. Generally, machine sales are higher in our third and fourth quarters than in our first and second quarters.

Backlog

At December 31, 2013, our backlog was approximately $10.9 million. We expect to fulfill our December 31, 2013 backlog during the next twelve months. This is compared to a backlog of $5.1 million at December 31, 2012.

Environmental Matters

Compliance with federal, state and local laws and regulations relating to the discharge of materials into the environment or otherwise relating to the protection of the environment has not had a material impact on capital expenditures, earnings or the competitive position of us and our subsidiaries. We are not the subject of any legal or administrative proceeding relating to the environmental laws of the United States or any country in which we have an office. We have not received any notices of any violations of any such environmental laws.

Employees

As of December 31, 2013, we employed a total of 229 (190 full time) employees at our seven locations. None of these employees is a party to a collective bargaining agreement, and we believe our relations with them are good.

Geographic Information

Geographic information for revenue (based upon the country where the sale originated) for 2013 was United States 37.0%, Germany 37.3% and Japan 25.7%. Geographic information for revenue for 2012 was United States 27.2%, Germany 48.7% and Japan 24.1%. Geographic information for revenue for 2011 was United States 30.0%, Germany 37.1% and Japan 32.9%.

Refer to Note 18 to the consolidated financial statements included in Part II Item 8 of this Annual Report on Form 10-K for geographic information related to our long-lived assets (based on the physical location of assets).

Table of Contents

Executive Offices

Our principal executive offices are located at 127 Industry Boulevard, North Huntingdon, Pennsylvania 15642 and our telephone number is (724) 863-9663.

Available Information

Our website address is *http://www.exone.com.* Information contained on our website is not incorporated by reference into this Form 10-K unless expressly noted.

We file reports with the Securities and Exchange Commission (the SEC), which we make available on our website free of charge at http://www.exone.com/financials.cfm. These reports include quarterly reports on Form 10-Q and current reports on Form 8-K, each of which is provided on our website as soon as reasonably practicable after we electronically file such materials with or furnish them to the SEC. We also make, or will make, available through our website other reports filed with or furnished to the SEC under the Exchange Act, including our Proxy Statements and reports filed by officers and directors under Section 16(a) of that Act. You can also read and copy any materials we file with the SEC at the SEC s Public Reference Room at 100 F Street, N.E., Washington, DC 20549. You can obtain additional information about the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. In addition; the SEC maintains a website (http://www.sec.gov) that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC, including us.

You can obtain copies of exhibits to our filings electronically at the SEC s website at www.sec.gov or by mail from the Public Reference Section of the SEC at 100 F Street, N.E., Washington, D.C. 20549 at prescribed rates. The exhibits are also available as part of the Annual Report on Form 10-K for the year ended December 31, 2013, which is available on ExOne s corporate website at www.exone.com. Stockholders may also obtain copies of exhibits without charge by contacting our Chief Legal Officer and Corporate Secretary at (724) 863-9663.

Table of Contents

Item 1A. Risk Factors.

RISK FACTORS

You should carefully consider the following risks, together with all of the other information in this annual report, including our consolidated financial statements and related notes, in evaluating our business, future prospects and an investment in our common stock. If any of the following risks and uncertainties develops into actual events, our business, financial condition, results of operations and cash flows could be materially adversely affected. In that case, the price of our common stock could decline and you may lose all or part of your investment.

Risks Related to Our Business and Industry

We may not be able to significantly increase the number of materials in which we can print products fast enough to meet our business plan.

Our business plan is heavily dependent upon our ability to steadily increase the number of qualified materials in which our machines can print products, because this will increase our addressable market, both as to customers and products for customers. We are in varying stages of qualifying additional industrial materials for printing, such as titanium, tungsten carbide, aluminum, and magnesium. We have also undertaken an analysis of safety precautions for printing reactive materials, including possible facility and machine modifications. Our current material development plan calls for the implementation of such modifications as soon as practicable. Our continued goal is to qualify an additional industrial material every six months. However, qualifying new materials is a complicated engineering task, and there is no way to predict whether, or when, any given material will be qualified. If we cannot hire people with sufficient technical skills to work on qualifying new materials for printing, or if we lack the resources necessary to create a steady flow of new materials, we will not be able to meet our business plan goals and a competitor may emerge that is better at qualifying new materials, either of which would have an adverse effect on our business results.

Our future success in qualifying new materials for printing may attract more competitors into our markets, some of which may be much larger than we are.

If we succeed in qualifying a growing number of materials for use in our 3D printing machines, that will increase our addressable market. However, as we create a larger addressable market, our market may become more attractive to other 3D printing companies or large companies that are not 3D printing companies, but which may see an economic opportunity in the markets we have created. Because we are a supplier of 3D printed products to industrial companies, an increase in the number of competitors for our addressable market is likely to adversely affect our business and financial results.

We may not be able to adequately increase demand for our products.

Our business plan is built around a steady increase in the demand for our products. However, only a relatively small number of our potential customers know of the existence of AM and are familiar with its capabilities, and even fewer understand the potential benefits of using AM to manufacture products. If we do not develop effective strategies to raise awareness among potential customers of the benefits of AM and 3D printing, we may be unable to achieve our planned rate of growth, which could adversely affect our results of operations.

We may not be able to hire the number of skilled employees that we need to achieve our business plan.

For our business to grow in accordance with our business plan, we will need to hire and retain additional employees with the technical competence and engineering skills to operate our machines, improve our technology and processes and expand our technological capability to print using an increasing variety of

Table of Contents

materials. People with these skills are in short supply and may not be available in sufficient numbers to allow us to meet the goals of our business plan. If we cannot obtain the services of a sufficient number of technically skilled employees, we may not be able to achieve our planned rate of growth, which could adversely affect our results of operations.

Our revenues and operating results may fluctuate.

Our revenues and operating results may fluctuate from quarter-to-quarter and year-to-year and are likely to continue to vary due to a number of factors, many of which are not within our control. A significant portion of our machine orders are typically received during the third or fourth quarter of the fiscal year as a result of the timing of capital expenditures of our customers. Thus, revenues and operating results for any future period are not predictable with any significant degree of certainty. We also typically experience weaker demand for our machines in the first and second quarters. For these reasons, comparing our operating results on a period-to-period basis may not be meaningful. You should not rely on our past results as an indication of our future performance.

Fluctuations in our operating results and financial condition may occur due to a number of factors, including, but not limited to, those listed below and those identified throughout this Risk Factors section:

- the degree of market acceptance of our products;
- the mix of products that we sell during any period;
- our long sales cycle;
- generally weaker demand for machines in the first and second quarters;
- development of competitive systems by others;
- our response to price competition;
- delays between our expenditures to develop and market new or enhanced machines and products and the generation of sales from those products;
- changes in the amount we spend to promote our products and services;
- the geographic distribution of our sales;
- changes in the cost of satisfying our warranty obligations and servicing our installed base of products;
- our level of research and development activities and their associated costs and rates of success;

general economic and industry conditions that affect end-user demand and end-user levels of product design and manufacturing, including the adverse effects of the current economic crisis affecting Europe;

changes in accounting rules and tax laws; and

changes in interest rates that affect returns on our cash balances and short-term investments.

Due to the foregoing factors, you should not rely on quarter-to-quarter or year-to-year comparisons of our operating results as an indicator of future performance.

We may not be able to generate operating profits.

Since our inception, we have not generated operating profits. In the event that we are unable to execute on our business plan, we may be unable to generate profits in the future.

Table of Contents

Our operating expenses (which include research and development and selling, general and administrative expenses) were approximately $21.2 million, $20.2 and $8.8 million for 2013, 2012 and 2011, respectively. Increases in our research and development expenses are due primarily to continued investment in our 3D printing machine and micromachinery technology and increased costs associated with our materials qualification activities, including additional research and development headcount. Increases in our selling, general and administrative expenses are due primarily to increased expenses in professional service fees (including legal, audit and other consulting expenses) and increased personnel costs associated with an increased headcount (including salaries and related benefits) in making the transition from a private company to a publicly traded company. We expect that our operating expenses will continue to increase in future periods as we pursue our growth strategies. Any future increases in our research and development expenses and selling, general and administrative expenses will directly affect our future results of operations and may have an effect on our financial condition.

We may not be able to introduce new machines and related industrial materials acceptable to the market or to improve the technology and industrial materials used in our current machines.

Our revenues are derived from the sale of machines for, and products manufactured using, AM. Our market is subject to innovation and technological change. A variety of technologies have the capacity to compete against one another in our market, which is, in part, driven by technological advances and end-user requirements and preferences, as well as the emergence of new standards and practices. Our ability to compete in the industrial AM market depends, in large part, on our success in enhancing and developing new machines, in enhancing our current machines, in enhancing and adding to our technology, and in developing and qualifying new industrial materials in which we can print. We believe that to remain competitive we must continuously enhance and expand the functionality and features of our products and technologies. However, we may not be able to:

Enhance our existing products and technologies;

Continue to leverage advances in industrial printhead technology;

Develop new products and technologies that address the increasingly sophisticated and varied needs of prospective end-users, particularly with respect to the physical properties of industrial materials and other consumables;

Respond to technological advances and emerging industry standards and practices on a cost-effective and timely basis;

Develop products that are cost-effective or that otherwise gain market acceptance; and

Adequately protect our intellectual property as we develop new products and technologies.

If the market does not develop as we expect, our revenues may stagnate or decline.

The marketplace for industrial manufacturing is dominated by conventional manufacturing methods that do not involve AM technology. If AM technology does not gain market acceptance as an alternative for industrial manufacturing, or if the marketplace adopts AM based on a technology other than our technology, we may not be able to increase or sustain the level of sales of our products and machines and our results of operations would be adversely affected as a result.

Loss of key management or sales or customer service personnel could adversely affect our results of operations.

Our future success depends to a significant extent on the skills, experience and efforts of our management and other key personnel. We must continue to develop and retain a core group of management individuals if we are to realize our goal of continued expansion and growth. While we have not previously experienced significant problems attracting and retaining members of our management team and other key personnel, there can be no

21

Table of Contents

assurance that we will be able to continue to retain these individuals and the loss of any or all of these individuals could materially and adversely affect our business. We do not carry key-man insurance on any member of management.

Our international operations pose currency risks, which may adversely affect our operating results.

Our operating results may be affected by volatility in currency exchange rates and our ability to effectively manage our currency transaction and translation risks. In general, we conduct our business, earn revenue and incur costs in the local currency of the countries in which we operate. As a result, our international operations present risks from currency exchange rate fluctuations. The financial condition and results of operations of each of our foreign operating subsidiaries are reported in the relevant local currency and then translated to U.S. dollars at the applicable currency exchange rate for inclusion in our combined consolidated financial statements. We do not manage our foreign currency exposure in a manner that would eliminate the effects of changes in foreign exchange rates. Therefore, changes in exchange rates between these foreign currencies and the U.S. dollar will affect the recorded levels of our foreign assets and liabilities, as well as our revenues, cost of sales, and operating margins, and could result in exchange losses in any given reporting period.

In the future, we may not benefit from favorable exchange rate translation effects, and unfavorable exchange rate translation effects may harm our operating results. In addition to currency translation risks, we incur currency transaction risks whenever we enter into either a purchase or a sale transaction using a different currency from the currency in which we receive revenues. In such cases we may suffer an exchange loss because we do not currently engage in currency swaps or other currency hedging strategies to address this risk.

Given the volatility of exchange rates, we can give no assurance that we will be able to effectively manage our currency transaction and/or translation risks or that any volatility in currency exchange rates will not have an adverse effect on our results of operations.

One of our principal stockholders is able to exert substantial influence.

S. Kent Rockwell, our Chairman and Chief Executive Officer, beneficially owns approximately 22.0% of our outstanding shares of common stock and may have effective control over the election of our Board of Directors and the direction of our affairs. As a result, he could exert considerable influence over the outcome of any corporate matter submitted to our stockholders for approval, including the election of directors and any transaction that might cause a change in control, such as a merger or acquisition. Any stockholders in favor of a matter that is opposed by Mr. Rockwell would have to obtain a significant number of votes to overrule the votes of Mr. Rockwell.

We may need to raise additional capital from time to time if we are going to meet our growth strategy and may be unable to do so on attractive terms.

Expanding our business to meet the growth strategy may require additional investments of capital from time to time, and our existing sources of cash and any funds generated from operations may not provide us with sufficient capital. For various reasons, including any current noncompliance with existing or future lending arrangements, additional financing may not be available when needed, or may not be available on terms favorable to us. If we fail to obtain adequate capital on a timely basis or if capital cannot be obtained at reasonable costs, we will not be able to achieve our planned rate of growth, which will adversely affect our results of operations.

We are highly dependent upon sales to certain industries.

For 2013, our revenues of machines and products were concentrated to companies in the aerospace, automotive , heavy equipment, and energy/oil/gas industries and those industries respective suppliers. To the extent any of these industries experience a downturn, our results of operations may be adversely affected.

Table of Contents

Additionally, if any of these industries or their respective suppliers or other providers of manufacturing services develop new technologies or alternatives to manufacture the products that are currently manufactured using our machines, it may adversely affect our results of operations.

We are dependent on a single supplier of printheads.

We currently rely on a single source to supply the printheads used by our machines. While we believe that there are other suppliers of printheads upon which we could rely, we could experience delays and interruptions if our supply is interrupted that might temporarily impact the financial performance of our business.

We may not be able to manage the expansion of our operations effectively in order to achieve our projected levels of growth.

We have expanded our operations significantly in recent periods, and our business plan calls for further expansion over the next several years. We anticipate that further development of our infrastructure and an increase in the number of our employees will be required to achieve our planned broadening of our product offerings and client base, improvements in our machines and materials used in our machines, and our planned international growth. In particular, we must increase our marketing and services staff to support new marketing and service activities and to meet the needs of both new and existing customers. Our future success will depend in part upon the ability of our management to manage our growth effectively. If our management is unsuccessful in meeting these challenges, we may not be able to achieve our anticipated level of growth which would adversely affect our results of operations.

We may not be able to consummate and/or effectively integrate acquisitions.

We may from time to time engage in strategic acquisitions and partnerships with third parties if we determine that they will provide future financial and operational benefits. Successful completion of any strategic transaction depends on a number of factors that are not entirely within our control, including our ability to negotiate acceptable terms, conclude satisfactory agreements and obtain all necessary regulatory approvals. In addition, our ability to effectively integrate an acquisition into our existing business and culture may not be successful, which could jeopardize future operational performance for the combined businesses. We completed two acquisitions in the first quarter of 2014 and are currently exploring a combination of acquisitions, strategic investments, and/or alliances, some of which we believe will promote advances in pre-print and post-print process. With respect to acquisitions, strategic investments, and/or alliances we are currently pursuing, there is no guarantee that we will complete such transactions on favorable terms or at all. The exploration, negotiation, and consummation of acquisitions, strategic investments and/or alliances may involve significant expenditures by us, which may adversely affect our results of operations at the time such expenses are incurred. We may not be able to successfully negotiate and complete a specific acquisition, investment, or alliance. In addition, any acquisition, investment or alliance may not be accretive to ExOne for a period of time which may be significant following the completion of such acquisition, investment or alliance.

Our planned expansion of our international sales is subject to various risks, and failure to manage these risks could adversely affect our results of operations.

Our business is subject to certain risks associated with doing business globally. Sales outside of the United States were 63.0%, 72.8% and 70.0%, for 2013, 2012 and 2011, respectively. One of our growth strategies is to pursue opportunities for our business in several areas of the world outside of the United States, any or all of which could be adversely affected by the risks set forth below. Our operations outside of the United States are subject to risks associated with the political, regulatory and economic conditions of the countries in which we operate, such as:

- fluctuations in foreign currency exchange rates;
- potentially longer sales and payment cycles;

Table of Contents

potentially greater difficulties in collecting accounts receivable;

potentially adverse tax consequences;

reduced protection of intellectual property rights in certain countries;

difficulties in staffing and managing foreign operations;

laws and business practices favoring local competition;

costs and difficulties of customizing products for foreign countries;

compliance with a wide variety of complex foreign laws, treaties and regulations;

tariffs, trade barriers and other regulatory or contractual limitations on our ability to sell or develop our products in certain foreign markets; and

becoming subject to the laws, regulations and court systems of many jurisdictions.

Any of these factors could materially adversely affect sales of our products to global customers or harm our reputation, which could adversely affect our results of operations.

Global economic, political and social conditions have adversely impacted our sales and may continue to do so.

The uncertain direction and relative strength of the global economy, difficulties in the financial services sector and credit markets, continuing geopolitical uncertainties and other macroeconomic factors all affect spending behavior of potential end-users of our products. The prospects for economic growth in the United States and other countries remain uncertain and may cause end-users to further delay or reduce technology purchases. In particular, a substantial portion of our sales are made to customers in countries in Europe, which continues to experience a significant economic crisis. If global economic conditions remain volatile for a prolonged period, or if European economies experience further disruptions, our results of operations could be adversely affected. The global financial crisis affecting the banking system and financial markets has resulted in a tightening of credit markets, lower levels of liquidity in many financial markets and extreme volatility in fixed income, credit, currency and equity markets. These conditions may make it more difficult for our end-users to obtain financing.

Due to our plan to increase our global business activities, we may be adversely affected by violations of the FCPA, similar anti-bribery laws in other jurisdictions in which we currently or may in the future operate, or various international trade and export laws.

Our business plan envisions that we will conduct increasing amounts of business outside of the United States, which will create various domestic and foreign regulatory challenges. The Foreign Corrupt Practices Act of 1977, as amended (the FCPA), and similar anti-bribery laws in other jurisdictions generally prohibit U.S.-based companies and their intermediaries from making improper payments to non-U.S. officials for the purpose of obtaining or retaining business. We have policies and controls in place designed to ensure internal and external compliance with these and other anti-bribery laws. To ensure compliance, our anti-bribery policy and training on a global basis provides our employees with procedures, guidelines and information about anti-bribery obligations and compliance. Further, we require our partners, subcontractors, agents and others who work for us or on our behalf to comply with anti-bribery laws. We also have procedures and controls in place designed to ensure internal and external compliance. However, such anti-bribery policy, training, internal controls, and procedures will not always protect us from reckless, criminal or unintentional acts committed by our employees, agents or other persons associated with us. If we are found to be in violation of the FCPA or other anti-bribery laws (either due to the intentional or inadvertent acts of our employees, or due to the intentional or inadvertent acts of others), we could suffer criminal or civil penalties or other sanctions, which could have a material adverse effect on our

business. In addition, actual or alleged violations could damage our reputation and adversely affect our results of operations.

Table of Contents

We rely on our information technology systems to manage numerous aspects of our business and customer and supplier relationships, and a disruption of these systems could adversely affect our results of operations.

We depend on our information technology, or IT, systems to manage numerous aspects of our business and provide analytical information to management. Our IT systems allow us to efficiently purchase products from our suppliers, provide procurement and logistic services, ship products to our customers on a timely basis, maintain cost-effective operations and provide superior service to our customers. Our IT systems are an essential component of our business and growth strategies, and a disruption to our IT systems could significantly limit our ability to manage and operate our business efficiently. These systems are vulnerable to, among other things, damage and interruption from power loss, including as a result of natural disasters, computer system and network failures, loss of telecommunication services, operator negligence, loss of data, security breaches and computer viruses. Any such disruption could adversely affect our results of operations. ExOne has not experienced a material impact as a result of cybersecurity issues.

New regulations related to conflict-free minerals may cause us to incur additional expenses and may create challenges with our customers.

The Dodd-Frank Wall Street Reform and Consumer Protection Act contains provisions to improve transparency and accountability regarding the use of conflict minerals mined from the Democratic Republic of Congo (the DRC) and adjoining countries. The SEC has established new annual disclosure and reporting requirements for those companies who use conflict minerals sourced from the DRC and adjoining countries in their products. We are currently conducting due diligence efforts in order to adhere to the initial disclosure requirements beginning in May 2014. These new requirements could adversely affect the sourcing, supply and pricing of materials used in our products. As there may be only a limited number of suppliers offering conflict-free minerals, we cannot ensure that we will be able to obtain these conflict-free minerals in sufficient quantities or at competitive prices. Compliance with these new requirements may also increase our costs, including costs that may be incurred in conducting due diligence procedures to determine the sources of certain minerals used in our products and other potential changes to products, processes or sources of supply as a consequence of such verification activities. In addition, we may face challenges with our customers if we are unable to sufficiently verify the origins of the minerals used in our products.

We could be subject to personal injury, property damage, product liability, warranty and other claims involving allegedly defective products that we supply.

The products we supply are sometimes used in potentially hazardous applications, such as the assembled parts of an aircraft or automobile, that could result in death, personal injury, property damage, loss of production, punitive damages and consequential damages. While we have not experienced any such claims to date, actual or claimed defects in the products we supply could result in our being named as a defendant in lawsuits asserting potentially large claims. Any such lawsuit, regardless of merit, could result in material expense, diversion of management time and efforts, and damage to our reputation, and could cause us to fail to retain or attract customers, which could adversely affect our results of operations.

We may not have adequate insurance for potential liabilities.

In the ordinary course of business, we may be subject to various product and non-product related claims, lawsuits and administrative proceedings seeking damages or other remedies arising out of our commercial operations. We maintain insurance to cover our potential exposure for most claims and losses. However, our insurance coverage is subject to various exclusions, self-retentions and deductibles, may be inadequate or unavailable to protect us fully, and may be cancelled or otherwise terminated by the insurer. Furthermore, we face the following additional risks under our insurance coverage:

- we may not be able to continue to obtain insurance coverage on commercially reasonable terms, or at all;

Table of Contents

- we may be faced with types of liabilities that are not covered under our insurance policies, such as environmental contamination or terrorist attacks, and that exceed any amounts what we may have reserved for such liabilities;

- the amount of any liabilities that we may face may exceed our policy limits and any amounts we may have reserved for such liabilities; and

- we may incur losses resulting from interruption of our business that may not be fully covered under our insurance policies.

Even a partially uninsured claim of significant size, if successful, could materially adversely affect our business, financial condition, results of operations and liquidity. However, even if we successfully defend ourselves against any such claim, we could be forced to spend a substantial amount of money in litigation expenses, our management could be required to spend valuable time in the defense against these claims and our reputation could suffer, any of which could adversely affect our results of operations.

If any of our manufacturing facilities or PSCs are disrupted, sales of our products may be disrupted, which could result in loss of revenues and an increase in unforeseen costs.

We manufacture our machines at our facilities in Augsburg, Germany and North Huntingdon, Pennsylvania. Our PSCs are located in North Huntingdon, Pennsylvania; Houston, Texas; Troy, Michigan; Auburn, Washington; North Las Vegas, Nevada; Augsburg, Germany; and Kanagawa, Japan.

If the operations of these facilities are materially disrupted, we would be unable to fulfill customer orders for the period of the disruption, we would not be able to recognize revenue on orders, and we might need to modify our standard sales terms to secure the commitment of new customers during the period of the disruption and perhaps longer. Depending on the cause of the disruption, we could incur significant costs to remedy the disruption and resume product shipments. Such a disruption could have an adverse effect on our results of operations.

Under applicable employment laws, we may not be able to enforce covenants not to compete and therefore may be unable to prevent our competitors from benefiting from the expertise of some of our former employees.

We generally enter into non-competition agreements with our employees. These agreements prohibit our employees, if they cease working for us, from competing directly with us or working for our competitors or clients for a limited period. We may be unable to enforce these agreements under the laws of the jurisdictions in which our employees work, including Germany and Japan, and it may be difficult for us to restrict our competitors from benefitting from the expertise of our former employees or consultants developed while working for us. If we cannot demonstrate that our legally protectable interests will be harmed, we may be unable to prevent our competitors from benefiting from the expertise of our former employees or consultants and our ability to remain competitive may be diminished.

Risks Related to Our Intellectual Property

We may not be able to protect our trade secrets and intellectual property.

While some of our technology is licensed under patents belonging to others or is covered by process patents which are owned or applied for by us, much of our key technology is not protected by patents. Since we cannot legally prevent one or more other companies from developing similar or identical technology to our unpatented technology, it is likely that, over time, one or more other companies may be able to replicate our technology, thereby reducing our technological advantages. If we do not protect our technology or are unable to develop new technology that can be protected by patents or as trade secrets, we may face increased competition from other companies, which may adversely affect our results of operations.

Table of Contents

We enjoy license rights and exclusivity of certain patents and intellectual property and cannot adequately estimate the effects of their expiration upon the entrance or advancement of competitors into the AM industrial market.

We have exclusive license and non-exclusive license rights to certain patents that we utilize in the industrial market. Some of these patents expired in 2013 and others are scheduled to expire in 2015. We cannot adequately estimate the effect that the expiration of these patents will have upon the entrance or advancement of other AM manufacturers into the industrial market.

We may not be able to obtain patent protection or otherwise adequately protect or enforce our intellectual property rights, which could impair our competitive position.

Our success and future revenue growth will depend, in part, on our ability to protect our intellectual property. We rely primarily on patents, trademarks, and trade secrets, as well as non-disclosure agreements and other methods, to protect our proprietary technologies and processes globally. Despite our efforts to protect our proprietary technologies and processes, it is possible that competitors or other unauthorized third parties may obtain, copy, use, or disclose our technologies and processes. We cannot assure you that any of our existing or future patents or other intellectual property rights will not be challenged, invalidated, or circumvented or will otherwise provide us with meaningful protection. We may not be able to obtain foreign patents corresponding to our U.S. or foreign patent applications. Even if foreign patents are granted, effective enforcement in foreign countries may not be available. If our patents and other intellectual property protections do not adequately protect our technology, our competitors may be able to offer products similar to ours. We may not be able to detect the unauthorized use of our proprietary technology and processes or take appropriate steps to prevent such use. Our competitors may also be able to develop similar technology independently or design around our patents. Any of the foregoing events would lead to increased competition and lower revenue or gross profits, which would adversely affect our results of operations.

We may be subject to alleged infringement claims.

We may be subject to intellectual property infringement claims from individuals, vendors, and other companies who have acquired or developed patents in the field of AM for purposes of developing competing products or for the sole purpose of asserting claims against us. Any claims that our products or processes infringe the intellectual property rights of others, regardless of the merit or resolution of such claims, could cause us to incur significant costs in responding to, defending, and resolving such claims, and may prohibit or otherwise impair our ability to commercialize new or existing products. If we are unable to effectively defend our technologies and processes, our market share, sales and profitability could suffer, which could adversely affect our results of operations.

Certain of our employees and patents are subject to German law.

Many of our employees work in Germany and are subject to German employment law. Ideas, developments, discoveries and inventions made by such employees and consultants are subject to the provisions of the German Act on Employees Inventions (Gesetz über Arbeitnehmererfindungen), which regulates the ownership of, and compensation for, inventions made by employees. We face the risk that disputes can occur between us and our employees or ex-employees pertaining to alleged non-adherence to the provisions of this act that may be costly to defend and take up our management s time and efforts whether we prevail or fail in such dispute. In addition, under the German Act on Employees Inventions, certain employees retained rights to patents they invented or co-invented prior to 2009. Although most of these employees have subsequently assigned their interest in these patents to us, there is a risk that the compensation we provided to them may be deemed to be insufficient in the future and we may be required under German law to increase the compensation due to such employee for the use of their patent. In those cases where employees have not assigned their interests to us, we may need to pay compensation for the use of those patents. If we are required to pay additional compensation or face other disputes under the German Act on Employees Inventions, our results of operations could be adversely affected.

Table of Contents

Risks Related to the Securities Markets and Ownership of Our Common Stock

We have broad discretion as to the use of the net proceeds from our February 2013 IPO and September 2013 secondary public offering and may not use them effectively.

We cannot specify with certainty how we will use the net proceeds that we have received from our February 2013 IPO and September 2013 secondary public offering. Our management has broad discretion in the application of the net proceeds, and we may use these proceeds in ways with which you may disagree or for purposes other than those contemplated at the time of the offering. The failure by our management to apply these funds effectively could have a material adverse effect on our business, financial condition and results of operations. Pending their use, we may invest the net proceeds from our IPO and secondary offering in a manner that does not produce income or that loses value.

The market price of our common stock may fluctuate significantly.

The market price and liquidity of the market for shares of our common stock may fluctuate and may be significantly affected by numerous factors, some of which are beyond our control and may not be directly related to our operating performance. These factors include:

- significant volatility in the market price and trading volume of securities of companies in our sector, which is not necessarily related to the operating performance of these companies;
- the mix of products that we sell, and related services that we provide, during any period;
- delays between our expenditures to develop and market new products and the generation of sales from those products;
- changes in the amount that we spend to develop, acquire or license new products, technologies or businesses;
- changes in our expenditures to promote our products and services;
- changes in the cost of satisfying our warranty obligations and servicing our installed base of systems;
- success or failure of research and development projects of us or our competitors;
- announcements of acquisitions by us or one of our competitors;
- the general tendency towards volatility in the market prices of shares of companies that rely on technology and innovation;
- changes in regulatory policies or tax guidelines;
- changes or perceived changes in earnings or variations in operating results;

any shortfall in revenue or earnings from levels expected by investors or securities analysts; and

general economic trends and other external factors.

If equity research analysts do not publish research or reports about our business, or if they issue unfavorable commentary or downgrade our shares, the price of our shares could decline.

The trading market for our shares will rely in part on the research and reports that equity research analysts publish about us and our business. We do not have control over these analysts, and we do not have commitments from them to write research reports about us. The price of our shares could decline if one or more equity research analysts downgrades our shares, issues other unfavorable commentary, or ceases publishing reports about us or our business.

Table of Contents

Future sales of our shares could reduce the market price of our shares.

The price of our shares could decline if there are substantial sales of our common stock, particularly by our directors, their affiliates or our executive officers, or when there is a large number of shares of our common stock available for sale. The perception in the public market that our stockholders might sell our shares also could depress the market price of our shares. From time to time, we may conduct offerings of our securities and our executive officers, directors and selling stockholders would be subject to lock-up agreements that restrict their ability to transfer their shares following the offering. The market price of our shares may drop significantly when the restrictions on resale by our existing stockholders lapse and these stockholders are able to sell their shares into the market. If this occurs, it could impair our ability to raise additional capital through the sale of securities, should we desire to do so.

We are incurring increased costs as a result of operating as a public company, and our management is required to devote substantial time to new compliance initiatives.

As a public company whose shares are listed on The NASDAQ Global Market, we incur significant accounting, legal and other expenses that we did not incur as a private company, and these expenses will increase even more after we are no longer an emerging growth company (as described below). We incur significant costs associated with our compliance with the public company reporting requirements of the Securities and Exchange Act of 1934, as amended (the Exchange Act), requirements imposed by the Sarbanes-Oxley Act (most notably Section 404), the Dodd Frank Wall Street Reform and Protection Act, and other rules adopted, and to be adopted, by the SEC and the NASDAQ Global Select Market. Compliance with these rules and regulations have increased our legal and financial compliance costs, introduced new costs (including stock exchange listing fees and costs related to investor relations and stockholder reporting), and made certain activities more time-consuming and costly. They also make it more difficult for us to obtain director and officer liability insurance, and we may incur substantial costs to maintain sufficient coverage.

In addition, changing laws, regulations and standards relating to corporate governance and public disclosure are creating uncertainty for public companies generally, increasing legal and financial compliance costs and making some activities more time consuming. These laws, regulations and standards are subject to varying interpretations, in many cases due to their lack of specificity, and, as a result, their application in practice may evolve over time as new guidance is provided by regulatory and governing bodies. This could result in continuing uncertainty regarding compliance matters and higher costs necessitated by ongoing revisions to disclosure and governance practices. We have invested resources to comply with evolving laws, regulations and standards, and this investment may result in increased general and administrative expenses and a diversion of management s time and attention from revenue-generating activities to compliance activities. If our efforts to comply with new laws, regulations and standards differ from the activities intended by regulatory or governing bodies due to ambiguities related to their application and practice, regulatory authorities may initiate legal proceedings against us and our business may be adversely affected. We cannot predict or estimate the amount or timing of additional costs we may incur in the future to respond to these constantly evolving requirements. The impact of these requirements could also make it more difficult for us to attract and retain qualified persons to serve on our Board of Directors, our board committees or as executive officers.

As long as we remain an emerging growth company as defined in the JOBS Act, we may take advantage of certain exemptions from various reporting requirements that are applicable to other public companies that are not emerging growth companies . These exemptions include, but are not limited to, not being required to comply with the auditor attestation requirements of Section 404(b) of the Sarbanes-Oxley Act, less extensive disclosure obligations regarding executive compensation in our periodic reports and proxy statements, exemptions from the requirements to hold a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved and an extended transition period for complying with new or revised accounting standards. We will continue to operate under these provisions for up to five years or such earlier time that we are no longer an emerging growth company. We would cease to be an emerging growth company if we have more than $1.0 billion in annual revenues, qualify as

Table of Contents

a large accelerated filer under the Securities Exchange Act of 1934, as amended (which requires us to have more than $700 million in market value of our common stock held by non-affiliates at the end of our second fiscal quarter), or issue more than $1.0 billion of non-convertible debt over a three-year period.

We have never paid cash dividends on our common stock, and we do not anticipate paying any cash dividends in the foreseeable future. Therefore, if our share price does not appreciate, our investors may not gain and could potentially lose on their investment in our shares.

We have never declared or paid cash dividends on our common stock, nor do we anticipate paying any cash dividends on our share capital in the foreseeable future. We currently intend to retain all available funds and any future earnings to fund the development and growth of our business. As a result, capital appreciation, if any, of our shares will be investors sole source of gain for the foreseeable future.

As an emerging growth company, we intend to follow certain permitted corporate governance practices instead of the otherwise applicable SEC and NASDAQ requirements, which may result in less protection than is accorded to investors in a non-emerging growth company.

As an emerging growth company, we will be permitted, and intend to follow, certain corporate governance practices instead of those otherwise required by the SEC and under the listing requirements of the NASDAQ Global Market. Following our emerging growth company governance practices, as opposed to the requirements that would otherwise apply to a company listed on the NASDAQ Global Market, may provide less protection to you than what is accorded to investors under the Listing Rules of the NASDAQ Global Market applicable to non-emerging growth company issuers.

As an emerging growth company, we will delay adoption of new or revised accounting standards, which may make our stock less attractive and our trading price more volatile.

Pursuant to the JOBS Act, as an emerging growth company, we have elected to take advantage of an extended transition period for any new or revised accounting standards that may be issued by the Financial Accounting Standards Board (FASB) or the SEC, which means that when a standard is issued or revised and it has different application dates for public or private companies, we, as an emerging growth company, will delay adoption of the standard until it applies to private companies. This may make a comparison of our financial statements with any other public company that is either not an emerging growth company or is an emerging growth company that has opted out of using the extended transition period difficult, as different or revised standards may be used. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock and our stock price may be more volatile and could decline.

If we fail to maintain an effective system of internal control over financial reporting in the future, we may not be able to accurately report our financial condition, results of operations or cash flows, which may adversely affect investor confidence in us and, as a result, the value of our common stock.

The Sarbanes-Oxley Act requires, among other things, that we maintain effective internal controls for financial reporting and disclosure controls and procedures. The term disclosure controls and procedures, as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act, means controls and other procedures of a company that are designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the SEC s rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the company s management, including its principal executive and principal financial officers, as appropriate to allow timely decisions regarding required disclosure. Beginning with our Annual Report on Form 10-K for the year ending

Table of Contents

December 31, 2013, we are now required, under Section 404(a) of the Sarbanes-Oxley Act, to furnish a report by management on, among other things, the effectiveness of our internal control over financial reporting. This assessment includes disclosure of any material weaknesses identified by our management in our internal control over financial reporting.

In connection with the preparation of our consolidated financial statements for the year ended December 31, 2013, we concluded that there are material weaknesses in the design and operating effectiveness of our internal control over financial reporting as defined in SEC Regulation S-X. A material weakness is a control deficiency, or combination of deficiencies, in internal control over financial reporting such that there is a reasonable possibility that a material misstatement of annual or interim financial statements will not be prevented or detected on a timely basis. A description of the identified material weaknesses in internal control over financial reporting are as follows:

The design and operating effectiveness of internal controls related to our financial reporting process were not sufficient to allow for accurate and timely reporting of our consolidated financial results. We did not maintain adequate control with respect to the application of accounting principles generally accepted in the United States (GAAP). This was principally due to a lack of personnel with adequate knowledge and experience in GAAP. As a result, we recorded certain manual, post-close adjustments in order to prepare the consolidated financial statements included in this Annual Report on Form 10-K.

The design and operating effectiveness of internal controls related to our information technology systems was not sufficient to allow for accurate and timely reporting of our consolidated financial results. Each of our primary locations (United States, Germany and Japan) utilizes separate and distinct information technology platforms to record, process and summarize transactions. As a result, our process to consolidate and report financial information is substantially a manual process and inherently subject to error.

The design and operating effectiveness of internal controls related to our consolidation process and management s review of our consolidated financial results did not operate at a level of precision sufficient to allow for accurate and timely reporting of our consolidated financial results. Our consolidation process is substantially a manual process and inherently subject to error. Further, because of internal control weaknesses identified with respect to our financial reporting process and information technology systems, management was unable to complete an adequate review of either subsidiary or consolidated financial results at a sufficient level of precision to prevent or detect misstatements. As a result, we recorded certain manual, post-close adjustments in order to prepare the consolidated financial statements included in this Annual Report on Form 10-K.

With the oversight of senior management and our audit committee, we continue to take steps and additional measures to remediate the underlying causes of the identified material weaknesses, including (i) enhancing our global accounting and reporting process by designing and strengthening the operating effectiveness of internal controls over financial reporting, (ii) evaluating our information technology systems to further integrate existing systems or invest in improvements to our technology sufficient to generate accurate and timely financial information, and (iii) adding financial personnel with adequate knowledge and experience in GAAP.

We documented and evaluated our internal control over financial reporting in order to report on the effectiveness of our internal controls as of December 31, 2013 and, as described in **Item 9A Controls and Procedures**, management has determined that our internal control over financial reporting was ineffective as of December 31, 2013. Furthermore, as our business continues to grow internationally, our internal controls will become more complex and will require significantly more resources and attention to remediate existing control deficiencies and improve the effectiveness of our internal controls over financial reporting. If our management cannot favorably assess the effectiveness of our internal controls over financial reporting, investor confidence in our financial results may weaken, and our share price may suffer.

Table of Contents

Notwithstanding the identified material weaknesses, management believes the consolidated financial statements included in this Annual Report on Form 10-K fairly present in all material respects our financial condition, results of operations and cash flows as of and for the periods presented in accordance with GAAP.

Additionally, Section 404(b) of the Sarbanes-Oxley Act requires an attestation from our independent registered public accounting firm on the effectiveness of our internal control over financial reporting. As an emerging growth company, we will not be required to comply with Section 404(b) until we file our Annual Report on Form 10-K for the year ended December 31, 2018 with the SEC, provided we maintain our status as an emerging growth company for the full five-year period.

The additional measures necessary to remediate the underlying causes of our identified material weaknesses and our future compliance with Section 404(b) will require that we incur substantial accounting expense and expend significant management efforts. We currently do not have an internal audit group, and we will need to hire additional accounting and financial staff with appropriate public company experience and technical accounting knowledge. We cannot assure you that there will not be material weaknesses or significant deficiencies in our internal control over financial reporting in the future. Any failure to maintain internal control over financial reporting could severely inhibit our ability to accurately report our financial condition, results of operations or cash flows. If we are unable to conclude that our internal control over financial reporting is effective, or if our independent registered public accounting firm determines we have a material weakness or significant deficiency in our internal control over financial reporting once that firm begins its Section 404(b) attestations, we could lose investor confidence in the accuracy and completeness of our financial reports, the market price of our common stock could decline, and we could be subject to sanctions or investigations by NASDAQ, the SEC or other regulatory authorities. Failure to remedy any material weakness in our internal control over financial reporting, or to implement or maintain other effective control systems required of public companies, could also restrict our future access to the capital markets.

Provisions in our charter documents or Delaware law may inhibit a takeover, which could adversely affect the value of our common stock.

Our certificate of incorporation and bylaws contain, and Delaware corporate law contains, provisions that could delay or prevent a change of control or changes in our management. These provisions will apply even if some of our stockholders consider the offer to be beneficial or favorable. If a change of control or change in management is delayed or prevented, the market price of our common stock could decline.

Raising additional capital by issuing securities may cause dilution to our stockholders.

We may need or desire to raise substantial additional capital in the future. Our future capital requirements will depend on many factors, including, among others:

Our degree of success in capturing a larger portion of the industrial products production market;

The costs of establishing or acquiring sales, marketing, and distribution capabilities for our products;

The costs of preparing, filing, and prosecuting patent applications, maintaining and enforcing our issued patents, and defending intellectual property-related claims;

The extent to which we acquire or invest in businesses, products, or technologies and other strategic relationships; and

The costs of financing unanticipated working capital requirements and responding to competitive pressures.

If we raise additional funds by issuing equity or convertible debt securities, we will reduce the percentage ownership of our then-existing stockholders, and the holders of those newly-issued equity or convertible debt

32

Table of Contents

securities may have rights, preferences, or privileges senior to those possessed by our then-existing stockholders. Additionally, future sales of a substantial number of shares of our common stock or other equity-related securities in the public market could depress the market price of our common stock and impair our ability to raise capital through the sale of additional equity or equity-linked securities. We cannot predict the effect that future sales of our common stock or other equity-related securities would have on the market price of our common stock.

Item 1B. Unresolved Staff Comments.

None.

Item 2. Properties.

We have eight locations. Note the following with respect to these locations:

Location	Nature of Facility	Owned or Leased	Approximate Square Footage
North Huntingdon, Pennsylvania	Corporate Headquarters, Machine Building and PSC	Owned	45,525
Troy, Michigan*	PSC	Owned	19,646
Houston, Texas*	PSC	Owned	12,000
North Las Vegas, Nevada	PSC	Owned	17,240
Auburn, Washington	PSC	Leased	11,600
St. Clairsville, Ohio	Research and Development	Leased	3,264
Augsburg, Germany	European Headquarters, Machine Building and PSC	Leased	77,500
Kanagawa, Japan	PSC	Leased	11,293

* As further described in Note 1 and Note 3 to the consolidated financial statements included in Part II Item 8 of this Annual Report on Form 10-K, prior to March 27, 2013, we leased these properties from our variable interest entities. On March 27, 2013, we purchased the Troy, Michigan and Houston, Texas facilities.

On August 1, 2013, we entered into an agreement for purchase of land in Gersthofen, Germany, in the district of Augsburg to build a new multi-use facility. The facility will comprise approximately 150,700 square feet of production, warehouse, service and research and development space as well as approximately 27,600 square feet for offices. We intend to consolidate our five existing leased facilities in Augsburg, which currently occupy an aggregate of approximately 77,500 square feet, into the new facility, providing expansion capacity to support its global growth strategy. We estimate that we will complete construction of the new facility in the fourth quarter of 2014. We plan to fully exit our leased facilities in Augsburg, Germany by the first quarter of 2015.

Item 3. Legal Proceedings.

ExOne and its subsidiaries are subject to various litigation, claims, and proceedings which have been or may be instituted or asserted from time to time in the ordinary course of business. Management does not believe that the outcome of any pending or threatened matters will have a material adverse effect, individually or in the aggregate, on our financial position, results of operations or cash flows.

Item 4. Mine Safety Disclosures.

Not applicable.

Table of Contents

PART II

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

Market Information

Our common stock has been listed on the NASDAQ Global Market since February 7, 2013 under the symbol XONE. Prior to that date, there was no public market for our common stock. Shares sold in our IPO were priced at $18.00 per share. The following table sets forth the ranges of high and low sales prices per share of our common stock as reported on the NASDAQ Global Market for the periods indicated. Such quotations represent inter-dealer prices without retail markup, markdown or commission and may not necessarily represent actual transactions.

Year Ended December 31, 2013	High	Low
First quarter (beginning February 7, 2013)	$ 34.28	$ 23.50
Second quarter	$ 64.50	$ 29.41
Third quarter	$ 78.80	$ 42.16
Fourth quarter	$ 64.70	$ 42.01

Stockholders

As of March 7, 2014, there were 16 stockholders of record, which excludes stockholders whose shares were held in nominee or street name by brokers. The actual number of common stockholders is greater than the number of record holders, and includes stockholders who are beneficial owners and whose shares are held in street name by brokers and other nominees. This number of holders of record also does not include stockholders whose shares may be held in trust by other entities.

Dividend Policy

We do not anticipate that we will declare or pay regular dividends on our common stock in the foreseeable future, as we generally intend to invest any future earnings in the development and growth of our business. Future dividends, if any, will be at the discretion of our Board of Directors and will depend on many factors, including general economic and business conditions, our strategic plans, our financial results and conditions, legal requirements, any contractual obligations or limitations, and other factors that our Board of Directors deems relevant.

Table of Contents

Securities Authorized for Issuance Under Equity Compensation Plans

Our 2013 Equity Incentive Plan was adopted on January 24, 2013 and approved by our stockholders on August 19, 2013. The table below sets forth information with regard to securities authorized for issuance under the Plan as of December 31, 2013.

Plan Category	Number of Securities to be Issued Upon Exercise of Outstanding Options, Warrants and Rights	Weighted-Average Exercise Price of Outstanding Options, Warrants and Rights	Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in the First Column)[1]
Equity Compensation Plans Approved by Security Holders	173,333	$ 18.00	1,798,909
Equity Compensation Plans Not Approved by Security Holders	N/A	N/A	N/A

(1) A maximum of 500,000 shares of common stock were reserved for issuance under the Plan for 2013, and awards of stock options and restricted stock were made in 2013 for a total of 200,000 shares of common stock, of which 6,667 were forfeited by participants through December 31, 2013. The Plan provides for automatic increases in the reserve available annually on January 1 from 2014 through 2023 equal to the lesser of (i) 3.0% of the total outstanding shares of common stock as of December 31 of the immediately preceding year or (ii) a number of shares of common stock determined by our Board of Directors, provided that the maximum number of shares authorized under the Plan will not exceed 1,992,242 shares, subject to certain adjustments. Based on 14,387,608 shares outstanding on December 31, 2013, an additional 431,628 shares of common stock may be reserved for issuance under the Plan for 2014 for a total of 738,295 being available for issuance under the Plan for 2014.

Table of Contents

Stock Performance Graph

The following graph compares the performance of ExOne s common stock with (i) the NASDAQ Composite Index and (ii) the S&P 1500 Industrial Machinery Index. Such information shall not be deemed to be filed.

Company/Index	February 7, 2013	March 31, 2013	June 30, 2013	September 30, 2013	December 31, 2013
The ExOne Company	**$ 100**	**$ 126**	**$ 233**	**$ 161**	**$ 228**
Nasdaq Composite Index	**$ 100**	**$ 103**	**$ 108**	**$ 120**	**$ 134**
S&P 1500 Industrial Machinery Index	**$ 100**	**$ 103**	**$ 106**	**$ 121**	**$ 134**

Source: S&P Capital IQ

Unregistered Sales of Equity Securities

On January 1, 2013, we merged our predecessor company, The Ex One Company, LLC, a Delaware limited liability company (the LLC), with and into a Delaware corporation (the Corporation), which changed its name to The ExOne Company. At the time the Reorganization became effective, by operation of the Delaware corporation law and in accordance with the Agreement and Plan of Merger by and between the LLC and the Corporation, each common unit of LLC membership interest was converted into 0.58 shares of our common stock for a total of 5,800,000 shares of common stock and each preferred unit of LLC membership interest was converted into 1 share of our Class A preferred stock or a total of 18,984,000 shares of Class A preferred stock. There were no underwriters. The persons who acquired shares of our common stock and our Class A preferred stock were those persons who were the owners of the equivalent class of LLC membership interests in our predecessor company prior to the Reorganization. The shares of common stock and Class A preferred stock were

Table of Contents

not sold for cash, and we received no consideration in the transaction. The conversion of securities in the Reorganization was exempt from registration under Section 4(2) of the Securities Act as a private placement.

On February 6, 2013, we issued 2,500 shares of our common stock to each of Ms. Wachtel and Messrs. Semple, Sellier and Kilmer in connection with their appointment to our Board of Directors and their future service to us. These shares are subject to certain restrictions until certain vesting requirements are met. These shares vest, and the restrictions on transfer lapse, in one-third increments on the first, second and third anniversaries of the grant date, respectively. The issuance of these shares was exempt from registration under Section 4(2) of the Securities Act as a private placement.

Use of Proceeds from IPO

On February 6, 2013, our Registration Statement on Form S-1 (File No. 333-185933) was declared effective for our IPO, pursuant to which we offered and sold 5,483,333 shares of common stock at a public offering price of $18.00 per share; and RHI also offered and sold 611,667 shares of common stock at a public offering price of $18.00 per share. S. Kent Rockwell, our Chairman and Chief Executive Officer, is the beneficiary of the S. Kent Rockwell Revocable Trust, which is the indirect, sole stockholder of RHI. Accordingly, S. Kent Rockwell is deemed to have beneficial ownership of our common stock owned by RHI. The managing underwriter was FBR Capital Markets & Co. and the co-managers were BB&T Capital Markets and Stephens Inc.

As a result of the completion of our IPO on February 12, 2013, we received net proceeds of approximately $92.0 million, after deducting underwriting discounts and commissions. We did not receive any proceeds from the sale of 611,667 shares of common stock by RHI, although we bore the costs, other than underwriting discounts and commissions, associated with the sale of these shares. We incurred approximately $1.6 million in total associated offering costs in connection with the IPO of which $0.7 million were previously paid and deferred by us at December 31, 2012.

Except as described below, none of such payments were direct or indirect payments to any of our directors or officers or their associates or to persons owning 10.0 percent or more of our common stock or direct or indirect payments to others.

Rockwell Line of Credit (Demand Note Payable to Member)

On February 14, 2013, we paid approximately $9.9 million of the net proceeds from the IPO to repay a revolving line of credit that we had with RFP for working capital (the Rockwell Line of Credit). The Rockwell Line of Credit provided for borrowing, repayment and reborrowing from time to time. While no limit was specified, borrowings were subject to RFP s approval. Borrowings under the Rockwell Line of Credit bore interest at the rate of 8.0% per annum and were repayable, in whole or part, upon demand of RFP. As of February 14, 2013, we had approximately $9.9 million in borrowings and accrued interest outstanding under the Rockwell Line of Credit. S. Kent Rockwell, our Chairman and Chief Executive Officer, is the beneficiary of the S. Kent Rockwell Revocable Trust, which is the indirect, sole stockholder of RFP. The Company no longer maintains the Rockwell Line of Credit.

Acquisition of Net Assets of Variable Interest Entities

On March 27, 2013, our wholly-owned subsidiary, ExOne Americas LLC, acquired certain assets, including property and equipment (principally land, buildings and machinery and equipment) held by our two variable interest entities, TMF and Lone Star and assumed all outstanding debt of the VIEs. Payment of approximately $1.9 million and $0.2 million was made to TMF and Lone Star, respectively, including a return of capital to these entities of approximately $1.4 million. These payments were made using a portion of the net proceeds from the IPO. Simultaneous with the completion of this transaction, we also repaid all of the outstanding debt assumed from the VIEs, resulting in a payment of approximately $4.7 million using net proceeds from the IPO.

Table of Contents

Other

On February 14, 2013, we paid approximately $0.3 million of the net proceeds from the IPO to retire our building note payable to an unrelated third party with respect to our facility in North Huntingdon, Pennsylvania. There were no prepayment penalties or gains or losses associated with this early retirement of debt.

On April 4, 2013, we paid approximately $1.4 million of the net proceeds from the IPO to settle a financing lease obligation (including accrued interest) for a 3D printing machine with a related party. There were no prepayment penalties or gains or losses associated with this settlement.

On August 1, 2013, ExOne Property GmbH entered into an agreement with the Municipality of Gersthofen, Germany to purchase certain real property from the Municipality. We paid approximately $4.0 million (3.0 million) of the net proceeds from the IPO to acquire this property.

On August 14, 2013, ExOne Property GmbH entered into a construction services contract with a turnkey provider of construction services for the design and construction of a new manufacturing facility to be located in the Municipality of Gersthofen, Germany. At December 31, 2013, we have used approximately $10.3 million (7.5 million) of net proceeds from the IPO to fund this project. We expect to spend an additional $11.2 million (8.1 million) of the net proceeds from the IPO in 2014 on this project.

On August 15, 2013, we entered into a purchase agreement for approximately one acre of land and a 17,240 square foot manufacturing facility in North Las Vegas, Nevada. We paid approximately $1.4 million of the net proceeds from the IPO to acquire this property for a total purchase price of approximately $1.4 million. This amount was subsequently paid in-full by us in September 2013 with net proceeds from the IPO.

In addition to the amounts identified above, we have used approximately $23.5 million in net proceeds from the IPO during 2013 for general corporate purposes, principally to support working capital and our operations (including expected capital expenditures and long-term debt and capital and financing lease repayments).

We had previously disclosed in our IPO an intention to assume the liabilities of our VIEs. Other than our payment of such liabilities described above, rather than the assumption of their debt, there has been no material change in the planned use of the net proceeds from our IPO as described in our final prospectus filed with the SEC pursuant to Rule 424(b). As of December 31, 2013, we held the remainder of the net proceeds from the IPO as cash and cash equivalents.

Table of Contents

Item 6. Selected Financial Data.

The data presented in the Selected Financial Data table should be read in conjunction with the information required to be provided in Management s Discussion and Analysis of Financial Condition and Results of Operations in Part II Item 7 and the consolidated financial statements and related notes thereto in Part II Item 8 of this Annual Report on Form 10-K. As the Company qualifies as an emerging growth company per the JOBS Act, certain selected financial data as ordinarily required under SEC Regulation S-K Item 301 for 2009 has been omitted. (See Explanatory Note Implications of Being an Emerging Growth Company of this Annual Report on Form 10-K for further information.)

	For the years ended December 31,			
(dollars in thousands except per share amounts and machine unit data)	**2013**	**2012**	**2011**	**2010**
Statement of consolidated operations and comprehensive loss data:				
Revenue	$ 39,480	$ 28,657	$ 15,290	$ 13,440
Gross profit	$ 15,573	$ 12,143	$ 3,643	$ 3,066
Research and development	$ 5,127	$ 1,930	$ 1,531	$ 1,153
Selling, general and administrative expense	$ 16,119	$ 18,285	$ 7,286	$ 5,978
Interest expense	$ 372	$ 842	$ 1,570	$ 1,114
Net loss attributable to ExOne	$ (6,455)	$ (10,168)	$ (8,037)	$ (5,508)
Net loss attributable to ExOne per common share:				
Basic	$ (0.51)	N/A*	N/A*	N/A*
Diluted	$ (0.51)	N/A*	N/A*	N/A*
Consolidated balance sheets data:				
Working capital (deficit)	$ 114,814	$ (4,682)	$ (979)	$ (13,253)
Cash and cash equivalents	$ 98,445	$ 2,802	$ 3,496	$ 1,021
Property and equipment net	$ 32,772	$ 12,467	$ 7,919	$ 7,990
Total assets	$ 158,435	$ 33,075	$ 18,615	$ 15,233
Line of credit	$	$ 528	$	$
Demand note payable to member	$	$ 8,666	$	$ 15,045
Long-term debt and financing lease obligations	$ 3,233	$ 10,566	$ 5,429	$ 3,839
Redeemable preferred units	$	$	$ 18,984	$
Preferred units	$	$ 18,984	$	$
Common units	$	$ 10,000	$ 10,000	$ 10,000
Common stock	$ 144	$	$	$
Additional paid-in capital	$ 153,363	$	$	$
Total stockholders / members equity (deficit)	$ 146,700	$ 41	$ (15,599)	$ (8,277)
Other data:				
Machine units sold:				
S-Max	13	9	1	2
S-Print	3	3	1	
S-15	1	1	2	2
M-Flex	6			
X1-Lab	5		1	1
Micromachinery	1			
	29	13	5	5

* Information not comparable for 2012 and 2011 as a result of the Reorganization of the Company as a corporation on January 1, 2013 (Refer to Note 1 Summary of Significant Accounting Policies).

Table of Contents

Item 7. Management s Discussion and Analysis of Financial Condition and Results of Operations.
(dollars in thousands, except per-share amounts)

The following discussion and analysis should be read in conjunction with the Selected Financial Data in Part II Item 6 and our consolidated financial statements and related notes thereto in Part II Item 8 of this Annual Report on Form 10-K. Certain statements contained in this discussion may constitute forward looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (the Securities Act) and, Section 21E of the Securities Exchange Act of 1934, as amended. These statements involve a number of risks, uncertainties and other factors that could cause actual results to differ materially from those reflected in any forward looking statements, as a result of a variety of risks and uncertainties, including those described under Cautionary Statements Concerning Forward Looking Statements and Risk Factors.

Overview

Business and Strategy

We are a global provider of 3D printing machines and printed products, materials and other services to industrial customers. Our business primarily consists of manufacturing and selling 3D printing machines and printing products to specification for our customers using our installed base of 3D printing machines. We offer pre-production collaboration and print products for customers through our seven production PSCs, which are located in the United States, Germany and Japan. We build 3D printing machines at our facilities in the United States and Germany. We also supply the associated materials, including consumables and replacement parts, and other services, including training and technical support, necessary for purchasers of our machines to print products. We believe that our ability to print in a variety of industrial materials, as well as our industry-leading printing capacity (as measured by build box size and printhead speed) uniquely position us to serve the needs of industrial customers.

As an additive manufacturer, we are an early entrant into an evolving manufacturing technology and marketplace. Our strategy has been to position our manufacturing assets, both in terms of our ability and capacity, to prepare for an anticipated increase of customer acceptance of this form of manufacturing. We have made financial support of this growth strategy a priority. We have invested in both our research and development and infrastructure, including capital investment in 3D printing machines, and hiring key personnel.

As our infrastructure grows, we intend to shift our strategic focus to opening additional PSCs in order to broaden our potential global customer base and to expand our 3D printing capability in an increasing variety of industrial materials. Our growth strategy focuses on growing our PSCs in order to print more products for our existing customers and gain new customers. By the end of 2015, we plan to expand our PSC network from the current seven locations to fifteen locations. Like our current PSCs, we plan to locate the additional PSCs in major industrial centers near existing and potential customers. While we may adjust based upon market considerations, our current plan includes opening two or more additional PSC locations in the first half of 2014.

Our growth strategy includes using our printed products as an introduction of our technology to facilitate 3D printing machine sales. An important part of reaching these goals is to increase our capability to print in a growing number of industrial materials and increase the job box sizes and production speeds (volumetric output) available to our potential customers, which will increase the efficiency and usefulness of our technology. In addition, we use our regional PSCs to educate our potential customers and the marketplace about the advantages of 3D printing.

We also believe expanding the location of our PSCs to high-growth economies and geographic regions that are readily accessible by a significant number of potential customers will help us to increase sales. To better balance our business, we intend to develop our customer base so that revenue is not dependent on any one region

Table of Contents

(North America, South America and Latin America (collectively, the Americas), Europe and Asia). Likewise, we intend to balance revenue between our 3D printing machines and 3D printed products, materials and other services.

Our next generation 3D printing machine platforms have achieved the volumetric output rate and quality necessary to serve industrial markets on a production scale. We believe that there is an opportunity to similarly advance the pre-print and post-print processing phases of product materialization to more fully exploit the transformative power of our 3D printing machines and drive growth. These opportunities relate to both direct and indirect part materialization. For direct metal production, we believe that enhancing pre-print processes, notably design optimization tools and suitable print material availability, can greatly accelerate our capture of market share in the near-term. Additionally, enhancements to post-print processing will increase the applications for printed parts. Through ExMAL, we are developing post-print processing technologies to achieve fully dense metal product materialization without the need for infiltration, and we are exploring technology-sharing partnerships to further this initiative. In indirect production utilizing 3D printed molds and cores, advanced performance casting technologies can be leveraged to increase yields and reduce weight of casted products. To address the market opportunity and fill the execution gap, we have developed a suite of processes, many of which are proprietary, for producing high-quality castings through a process that we call ExCAST. ExCAST provides industry guidance and support through all stages of production, from CAD at the design stage, through the 3D materialization of molds and cores, metal casting of the end product and rapid delivery to the end-user.

Finally, we intend to opportunistically identify and, through acquisitions, alliances and/or strategic investment, integrate and advance complementary businesses, technologies and capabilities. Our goal is to expand the functionality of our products, provide access to new customers and markets, and increase our production capacity.

2013 Developments

Several important corporate developments occurred in 2013 that have had a significant impact on the presentation of our consolidated financial results.

ExOne was formed on January 1, 2013, when The Ex One Company, LLC, a Delaware limited liability company, merged with and into a Delaware corporation, which survived and changed its name to The ExOne Company. As a result of our Reorganization on January 1, 2013, The Ex One Company, LLC became ExOne, the common and preferred interest holders of The Ex One Company, LLC became holders of common stock and preferred stock, respectively, of ExOne, and the subsidiaries of The Ex One Company, LLC became the subsidiaries of ExOne.

The consolidated financial statements include the accounts of ExOne, its wholly-owned subsidiaries, ExOne Americas LLC (United States), ExOne GmbH (Germany), effective in August 2013, ExOne Property GmbH (formerly ExOne Holding Deutschland GmbH) (Germany), ExOne KK (Japan) and through March 27, 2013 two variable interest entities in which ExOne was identified as the primary beneficiary, Lone Star Metal Fabrication, LLC and Troy Metal Fabricating, LLC. On March 27, 2013, ExOne Americas LLC acquired certain assets, including property and equipment (principally land, buildings and machinery and equipment) held by the two VIEs, and assumed all outstanding debt of such VIEs. Following this transaction, neither of the entities continued to meet the definition of a VIE with respect to ExOne, and as a result, the remaining assets and liabilities of both entities were deconsolidated following the transaction.

On February 6, 2013, we commenced an initial public offering of 6,095,000 shares of our common stock at a price to the public of $18.00 per share, of which 5,483,333 shares were sold by us and 611,667 were sold by a selling stockholder (including consideration of the exercise of the underwriters over-allotment option). Following completion of the offering on February 12, 2013, we received net proceeds of approximately $91,996 (net of underwriting commissions). In addition, we incurred associated offering costs of approximately $1,625, including approximately $712 in offering costs previously paid and deferred by us at December 31, 2012.

Table of Contents

On September 9, 2013, we commenced a secondary public offering of 3,054,400 shares of our common stock at a price to the public of $62.00 per share, of which 1,106,000 shares were sold by us and 1,948,400 were sold by selling stockholders (including consideration of the exercise of the underwriters over-allotment option). Following completion of the offering on September 13, 2013, we received net proceeds of approximately $65,315 (net of underwriting commissions). In addition, associated offering costs of approximately $1,012 were incurred in connection with this offering. Associated offering costs incurred by us in connection with the secondary public offering ($367) were based on our pro-rata sale of shares as compared to selling stockholders, who were responsible for their pro-rata portion ($645).

2014 Developments

On March 3, 2014, ExOne Americas purchased (i) substantially all the assets of Machin-A-Mation, a specialty machine shop located in Chesterfield, Michigan, and (ii) the real property on which Machin-A-Mation s business is located for an aggregate purchase price of approximately $5.0 million. The Machin-A-Mation business will remain in its current Michigan location, complementing our nearby PSC in Troy, Michigan. This PSC focuses on advanced 3D printed cores and molds for the aerospace and shipbuilding industries. In addition, we expect to continue to serve and expand the existing Machin-A-Mation industrial customer base. We believe that Machin-A-Mation s specialty precision machining expertise helps us address the finishing requirements for complex parts which are cast from our 3D printed sand molds.

On March 6, 2014, ExOne GmbH acquired all of the shares of MWT-Gesellschaft für Industrielle Mikrowellentechnik mbH, a pioneer in industrial grade microwaves with leading design and manufacturing experience based in Elz, Germany, for approximately $4.8 million. We believe that this acquisition enhances our position as the market leader of 3D sand production systems for industry. Industrial grade microwaves are used for thermally processing certain sand molds or cores that are 3D printed using binders, such as phenolic binder, that require a drying process. Importantly, microwave technology improves casting quality and reduces production costs for customers in specific industries, such as magnesium parts for aviation and steel alloy parts for hydraulic components. MWT designs and manufactures equipment that is currently employed in our PSC operations. We also plan to offer this technology to customers in future system sales. MWT s microwave operation will be operationally integrated with our Augsburg, Germany manufacturing operations.

On March 6, 2014, we entered into an agreement with proALPHA Consulting GmbH to deploy an ERP system to promote operational efficiency and financial controls globally, including the supply of standard and individual software, customized programming and related services.

How We Measure Our Business

We use several financial and operating metrics to measure our business. We use these metrics to assess the progress of our business, make decisions on where to allocate capital, time and technology investments, and assess longer-term performance within our marketplace. The key metrics are as follows:

Revenue. Our revenue consists primarily of sales of our 3D printing machines and micromachinery and 3D printed products, materials and other services.

3D printing machines and micromachinery. 3D printing machine and micromachinery sales are influenced by a number of factors including, among other things, (i) the adoption rate of our 3D printing technology, (ii) end-user product design and manufacturing activity, (iii) the capital expenditure budgets of end-users and potential end-users and (iv) the mix of products sold, all of which may be significantly influenced by macroeconomic factors. Purchases of our 3D printing machines and micromachinery, especially our higher-end, higher-priced systems, typically involve long sales cycles. Our 3D printing machine and micromachinery prices generally include machine installation, training, maintenance and the value of a

Table of Contents

warranty. Several factors can significantly affect revenue reported for our 3D printing machines and micromachinery for a given period including, among others, (i) the overall low unit volume of 3D printing machine and micromachinery sales, (ii) the long lead times of our customers purchasing decisions and (iii) the acceleration or delay of orders and shipments of a small number of machines.

3D printed products, materials and other services. 3D printed products revenue is derived from our network of PSCs located in the United States (5), Germany (1) and Japan (1). The PSCs utilize our 3D printing machine technology to print products. In addition, our PSCs are also full-service operations that provide support and services such as pre-production collaboration prior to printing products for a customer. Revenue of materials depends upon the volume of consumables that we sell. Sales of our consumables are linked to the number of our 3D printing machines that are installed and active worldwide. Sales of consumables are also driven by our customers machine usage, which is generally a function of the size of the particular machine and the habits and budget of the particular end-user. Larger machines generally use larger amounts of consumables due to their greater capacity and the higher levels of design and manufacturing activity that are typical of an end-user who utilizes a larger machine.

Cost of Sales and Gross Profit. Our cost of sales consists primarily of labor (including service labor), materials (including consumables) and overhead to produce 3D printing machines and 3D printed products, materials and other services. Also included in cost of sales are license fees (based upon a percentage of revenue of qualifying products and processes) for the use of intellectual properties, warranty costs and other overhead associated with our production processes. Our 3D printing machines and micromachinery are manufactured at our facilities in Germany and the United States. The cost to manufacture machines consists of component parts, labor and production overhead. The cost of 3D printed products, materials and other services consist primarily of the material cost of our printed products, labor and overhead (including facilities expense and other conversion costs).

Our gross profit is influenced by a number of factors, the most important of which is the volume and mix of our 3D printing machines and micromachinery, products, materials and other services sold.

As 3D printing machine and micromachinery sales are cyclical, we will seek to achieve an equal balance in revenue from 3D printing machines and micromachinery and 3D printed products, materials and other services in order to maximize gross profit while managing business risk. In addition, we expect to reduce our cost of sales over time by continued research and development activities directed towards achieving increased efficiencies in the production of 3D printing machines and micromachinery. Our PSCs will also seek to achieve lower material cost and improve throughput.

We are continuously analyzing our supply chain to identify opportunities for better management, in partnership with our customers, in order to reduce the overall cost as a percentage of revenue in this area.

Operating Expenses. Our operating expenses consist of research and development expenses and selling, general and administrative expenses.

Research and development expenses. Our research and development expenses consist primarily of salaries and related personnel expenses aimed at developing new machinery and materials. Additional costs include the related software and materials, laboratory supplies, and costs for facilities and equipment. Research and development expenses are charged to operations as they are incurred. We capitalize the cost of materials, equipment and facilities that have future alternative uses in research and development projects or otherwise.

Selling, general and administrative expenses. Our selling, general and administrative expenses consist primarily of employee-related costs (salaries and benefits) of our executive officers, sales and marketing, finance, accounting, information technology and human resources personnel. Other significant general and administrative costs include the facility costs related to our headquarters in North Huntingdon, Pennsylvania and external costs for legal, accounting, consulting and other professional services.

Table of Contents

Interest Expense. Interest expense consists of the interest cost associated with outstanding long-term debt and financing lease arrangements. We expect our interest expense to continue to decrease as our outstanding debt is lowered over time. Included in our business strategy is the consideration of early retirement of debt (where practicable).

Provision for Income Taxes. Prior to our Reorganization, we were organized as a limited liability company. Under the provisions of the Internal Revenue Code and similar state provisions, we were taxed as a partnership and were not liable for income taxes. Instead, earnings and losses were included in the tax returns of our members. Therefore, for periods prior to Reorganization, the consolidated financial statements do not reflect a provision for U.S. federal or state income taxes.

Following our Reorganization, we are taxed as a corporation for U.S. federal, state, local and foreign income tax purposes. Current statutory tax rates in the jurisdictions in which we operate, the United States, Germany and Japan, are approximately 39.0% (including state taxes), 29.5% and 38.0%, respectively.

Results of Operations

Summary

Net loss attributable to ExOne for 2013 was $6,455 or $0.51 per basic and diluted share, compared with a net loss attributable to ExOne of $10,168 for 2012. The decrease in our net loss was principally due to an increase in our revenue and gross profit as a result of a significant increase in 3D printing machine and micromachinery sales for 2013 compared to 2012.

Net loss attributable to ExOne for 2012 was $10,168 compared with a net loss attributable to ExOne of $8,037 in 2011. The increase in our net loss was due to an increase in our operating expenses from 2012 compared to 2011, principally due to a non-recurring equity-based compensation charge and professional service fees incurred in preparation for our initial public offering. Offsetting the impact of the increase in operating expenses were (i) increases in our revenue and gross profit as a result of a significant increase in 3D printing machine sales for 2012 compared to 2011 and a reduction in license fee expense as a result of the amendment to our agreement with MIT and (ii) a decrease in interest expense as a result of a lower average outstanding debt balance.

Revenue

The following table summarizes revenue by product line for each of the years ending December 31:

	2013		2012		2011	
3D printing machines and micromachinery	$ 24,851	62.9%	$ 15,668	54.7%	$ 5,406	35.4%
3D printed products, materials and other services	14,629	37.1%	12,989	45.3%	9,884	64.6%
	$ 39,480	100.0%	$ 28,657	100.0%	$ 15,290	100.0%

Revenue for 2013 was $39,480 compared with revenue of $28,657 for 2012, an increase of $10,823, or 37.8%. This increase was due principally to a higher volume of sales of 3D printing machines and micromachinery (29 for 2013 as compared to 13 for 2012), as well as 3D printed products, materials and other services based on a continued increase in customer acceptance of our additive manufacturing technologies. Offsetting increases in volume were decreases attributed to sales mix of machines, as a higher percentage of machines sold for the 2012 period were S-Max units, our highest price point machine, and net negative foreign currency movements associated with the devaluation of the Japanese Yen.

Table of Contents

The following table summarizes the significant components of the change in revenue by product line for 2013 compared to 2012:

	3D printing machines and micromachinery	3D printed products, materials and other services	Total
2012	$ 15,668	$ 12,989	$ 28,657
Change in revenue attributed to:			
Volume	19,572	1,920	21,492
Pricing and sales mix	(10,101)		(10,101)
Foreign currency	(288)	(280)	(568)
	9,183	1,640	10,823
2013	$ 24,851	$ 14,629	$ 39,480

Revenue for 2012 was $28,657 compared with revenue of $15,290 in 2011, an increase of $13,367, or 87.4%. This increase was principally due to a higher volume of sales of 3D printing machines (13 in 2012 as compared to 5 in 2011) as well as 3D printed products, materials and other services.

The following table summarizes the significant components of the change in revenue by product line for 2012 compared to 2011:

	3D printing machines and micromachinery	3D printed products, materials and other services	Total
2011	$ 5,406	$ 9,884	$ 15,290
Change in revenue attributed to:			
Volume	10,360	3,388	13,748
Pricing and sales mix	95		95
Foreign currency	(193)	(283)	(476)
	10,262	3,105	13,367
2012	$ 15,668	$ 12,989	$ 28,657

The following table summarizes 3D printing machines sold by type for each of the years ending December 31 (please refer to the Our Machines and Machine Platforms section of Part I Item 1 of this Annual Report on Form 10-K for a description of 3D printing machines by type):

	2013	2012	2011
Machine units sold:			
S-Max	13	9	1
S-Print	3	3	1
S-15	1	1	2
M-Flex	6		
X1-Lab	5		1
Micromachinery	1		

29 13 5

Cost of Sales and Gross Profit

Cost of sales for 2013 was $23,907 compared with cost of sales of $16,514 for 2012, an increase of $7,393, or 44.8%. Cost of sales as a percentage of revenue was 60.6% for 2013 compared with 57.6% for 2012, an increase of 3.0%.

Table of Contents

Cost of sales for 2012 was $16,514 compared with cost of sales of $11,647 in 2011, an increase of $4,867, or 41.8%. Cost of sales as a percentage of revenue was 57.6% for 2012 compared with 76.2% in 2011, a decrease of 18.6%.

Gross profit for 2013 was $15,573 compared with gross profit of $12,143 for 2012, an increase of $3,430, or 28.2%. Gross profit percentage was 39.4% for 2013, compared with 42.4% for 2012, a decrease of 3.0%. This decrease was due principally to our sales mix of products in 2013 compared to 2012, as well as an overall increase in our fixed overhead costs (as a result of opening two new production service centers and a general increase in our productive workforce in anticipation of future increased volume output).

Gross profit for 2012 was $12,143 compared with gross profit of $3,643 in 2011, an increase of $8,500, or 233.4%. Gross profit percentage was 42.4% for 2012 compared with 23.8% in 2011, an increase of 18.6%. This increase was principally due to the increase in 3D printing machine volume for 2012 compared with 2011 (see table above) and a reduction in our license fees of $625 mostly due to the amendment to our agreement with MIT.

Operating Expenses

The following table summarizes the significant components of operating expenses for each of the years ending December 31:

	2013	2012	2011
Research and development	$ 5,127	$ 1,930	$ 1,531
Selling, general and administrative	16,119	18,285	7,286
	$ 21,246	$ 20,215	$ 8,817

Operating expenses for 2013 were $21,246 compared with operating expenses of $20,215 for 2012, an increase of $1,031, or 5.1%. Operating expenses as a percentage of revenue were 53.8% for 2013, compared with 70.5% for 2012, a decrease of 16.7%.

Research and development expenses for 2013 were $5,127 compared with research and development expenses of $1,930 for 2012, an increase of $3,197, or 165.6%. This increase was due primarily to (i) increased costs associated with our materials qualification activities, including additional research and development headcount, materials usage and facilities costs associated with our new materials development laboratory in the United States and (ii) continued investment in enhancing our 3D printing machine and micromachinery technology for both direct (metal) and indirect (sand) printing.

Selling, general and administrative expenses for 2013 were $16,119 compared with selling, general and administrative expenses of $18,285 for 2012, a decrease of $2,166, or 11.8%. This decrease was due principally to a net decrease in equity-based compensation expense for 2013 compared to 2012. The net decrease in equity-based compensation expense is as a result of the absence of $7,735 in expense for 2012 related to the sale of common units by the majority member of the former limited liability company to another member and two executives of the former limited liability company. Offsetting the net decrease in equity-based compensation were increases in selling, general and administrative expenses in 2013 compared to 2012 associated with (i) merger and acquisition related activities (approximately $400) following our secondary public offering of common stock in September 2013, (ii) increased professional service fees (including legal, audit and other consulting expenses), (iii) increased personnel costs associated with an increased headcount (including salaries and related benefits) in making the transition from a private company to a publicly traded company and (iv) increased selling costs (principally selling commissions for machine sale transactions).

Table of Contents

Operating expenses for 2012 were $20,215 compared with operating expenses of $8,817 in 2011, an increase of $11,398, or 129.3%. Operating expenses as a percentage of revenue were 70.5% for 2012 compared with 57.7% in 2011, an increase of 12.8%.

Research and development expenses for 2012 were $1,930 compared with research and development expenses of $1,531 in 2011, an increase of $399, or 26.1%. This increase was mostly due to (i) continued investment in our 3D printing machine technology and (ii) increased costs associated with our materials qualification activities.

Selling, general and administrative expenses for 2012 were $18,285 compared with selling, general and administrative expenses of $7,286 in 2011, an increase of $10,999, or 150.1%. This increase was principally due to the aforementioned equity-based compensation expense of $7,735 associated with the sale of common units of the former limited liability company to another member and two executives of the former limited liability company during 2012. In addition, we incurred professional service fees (including legal, audit and other consulting expenses) of $2,328 in 2012 as compared to $469 in 2011. This increase is mostly attributable to costs incurred in preparation for our initial public offering, finalized in February 2013.

Interest Expense

Interest expense for 2013 was $372 compared with interest expense of $842 in 2012, a decrease of $470, or 55.8%. This decrease was due principally to a lower average outstanding debt balance for 2013, as compared to 2012, mostly due to (i) the retirement of the demand note payable to a member in February 2013 and (ii) the settlement of debt held by variable interest entities in connection with our acquisition of certain related assets of those entities in March 2013.

Interest expense for 2012 was $842 compared with interest expense of $1,570 in 2011, a decrease of $728, or 46.4%. This decrease was principally due to a lower average outstanding debt balance in 2012 as compared to 2011, mostly due to the conversion of amounts payable on our demand note payable to member to redeemable preferred units in December 2011.

Other Income Net

Other income net for 2013 was $98 compared with other income net of $221 for 2012 and other income net of $158 for 2011. Amounts for all periods consist principally of interest income on cash deposits and other financing activity benefits.

Provision for Income Taxes

The provision for income taxes for 2013, 2012 and 2011 was $370, $995 and $1,031, respectively, and in each of the respective years related entirely to the taxable income of ExOne GmbH. The effective tax rate for 2013, 2012 and 2011 was 106.2%, 111.5% and 115.7%, respectively. For 2013, the effective tax rate differed from the U.S. federal statutory rate of 34.0% primarily due to net changes in valuation allowances for the period. For 2012 and 2011, the effective tax rate differed from the U.S. federal statutory rate of 34.0% primarily due to the effects of (i) limited liability company losses not subject to tax and (ii) net changes in valuation allowances for the period.

We have provided a valuation allowance for our net deferred tax assets as a result of our inability to generate consistent net operating profits in jurisdictions in which we operate. As such, any benefit from deferred taxes in any of the periods presented in our consolidated financial statements has been fully offset by changes in the valuation allowance for net deferred tax assets. We continue to assess our future taxable income by jurisdiction based on (i) our recent historical operating results (ii) the expected timing of reversal of temporary differences (iii) various tax planning strategies that we may be able to enact in future periods (iv) the impact of potential operating changes on our business and (v) our forecast results from operations in future periods based

Table of Contents

on available information at the end of each reporting period. To the extent that we are able to reach the conclusion that deferred tax assets are realizable based on any combination of the above factors, a reversal of existing valuation allowances may occur.

Noncontrolling Interests

Net income attributable to noncontrolling interests for 2013 was $138 compared with net income attributable to noncontrolling interests of $480 in 2012, a decrease of $342, or 71.3%. There was no net income attributable to noncontrolling interests for 2013 following the acquisition of net assets in the related variable interest entities described immediately below, which was completed during the quarter ended March 31, 2013.

Net income attributable to noncontrolling interests for 2012 was $480 compared with net income attributable to noncontrolling interests of $420 in 2011, an increase of $60, or 14.3%. This increase was principally due to additional rental income (rental expense for ExOne) associated with 3D printing machines purchased by our variable interest entities, Lone Star and TMF.

Impact of Inflation

Our results of operations and financial condition are presented based on historical cost. While it is difficult to accurately measure the impact of inflation due to the imprecise nature of the estimates required, we believe the effects of inflation, if any, on our results of operations and financial condition are not significant.

Liquidity and Capital Resources

We incurred net losses of approximately $6,317, $9,688 and $7,617 for 2013, 2012 and 2011, respectively. Prior to our Reorganization, we operated as a limited liability company and were substantially supported by the continued financial support provided by our majority member. In connection with the completion of our initial public offering in February 2013 and our secondary public offering in September 2013, we received total unrestricted net proceeds from the sale of our common stock of approximately $157,311. We believe that the unrestricted net proceeds obtained through these transactions will be sufficient to support our operations through January 1, 2015.

The following table summarizes the significant components of cash flows for each of the years ending December 31:

	2013	2012	2011
Cash used for operating activities	$ (20,192)	$ (9,677)	$ (2,436)
Cash used for investing activities	(21,638)	(1,858)	(1,080)
Cash provided by financing activities	137,512	11,011	5,931
Effect of exchange rate changes on cash and cash equivalents	(39)	(170)	60
Net change in cash and cash equivalents	$ 95,643	$ (694)	$ 2,475
Cash and cash equivalents at end of year	$ 98,445	$ 2,802	$ 3,496

Operating Activities

Cash used for operating activities for 2013 was $20,192 compared with $9,677 for 2012. The increase of $10,525, or 108.8%, was mostly attributed to an increase in our net loss less depreciation and equity-based compensation of $2,964 mostly due to increased operating expenses following our public offering in February 2013 and net changes in assets and liabilities as a result of (i) an increase in outflows associated with inventories

Table of Contents

(as a result of increases in global machine manufacturing activities), (ii) an increase in outflows associated with prepaid expenses and other current assets (attributed mostly to an increase in value-added taxes paid (refundable) and an increase in supplier prepayments), (iii) a decrease in inflows associated with accounts payable and accrued expenses and other liabilities (based on increased purchasing activity and the timing of payment) and (iv) an increase in outflows associated with deferred revenue and customer prepayments (mostly due to the timing and amount of prepayments by customers). These amounts were offset by increased collections activity on accounts receivable.

Cash used for operating activities in 2012 was $9,677 compared with $2,436 in 2011. The increase of $7,241, or 297.2%, was attributed to increases in net working capital of $13,418 (mostly increases in accounts receivable and inventories as a result of increased selling and production activity) slightly offset by increases to accounts payable and accrued expenses, also linked to selling and production activity. The increase in net working capital was offset by an increase of cash earnings in 2012 of $6,177 (net income less non-cash items).

Investing Activities

Cash used for investing activities for 2013, was $21,638 compared with $1,858 for 2012. The increase of $19,780, or 1064.6%, was primarily attributed to increased capital expenditures in 2013, mostly due to spending associated with (i) the expansion of our facilities in Germany to increase our 3D printing machine manufacturing, PSCs and other administrative facilities located there and (ii) costs associated with expanding our global PSC network, including the purchase of land and a manufacturing facility in North Las Vegas, Nevada. In addition, the cash flow effect of deconsolidating certain variable interest entities previously under our control also increased outflows from investing activities.

Our 2014 capital expenditures plan includes (i) completion of our new multi-use facility in Germany (estimated total costs of approximately $11,000 for 2014), (ii) the anticipated purchase and expansion of our existing Japanese facilities (estimated total costs of $7,300 for 2014), (iii) an expansion and further investment in our facilities in the United States (including our planned facility expansion for our direct metal printing operations in North Huntingdon, Pennsylvania), including capital expenditures associated with our materials qualification activities (ExMAL) (total estimated costs of approximately $4,000 for 2014), (iv) an increase in our global installed base of 3D printing machines and related equipment (estimated total costs of approximately $8,000 for 2014), (v) deployment of a global ERP system to support our business activities (estimated total costs of approximately $2,000 for 2014), and (vi) additional sustaining capital expenditures (estimated total costs of less than $1,000 for 2014).

In addition, on March 3, 2014 and March 6, 2014, respectively, we acquired two businesses (MAM and MWT) as part of our strategy to enhance our pre-print and post-print capabilities for a combined cost of approximately $9,800.

Cash used for investing activities for the year ended December 31, 2012 was $1,858 compared with $1,080 for the year ended December 31, 2011. The use of cash for each of the three years was attributed to capital expenditures, principally to support the construction of 3D printing machines at our facilities in the United States and Germany.

Financing Activities

Cash provided by financing activities for 2013, 2012 and 2011 was $137,512, $11,011 and $5,931, respectively.

The principal sources of cash for 2013 were (i) net proceeds from our initial public offering of $91,083 and (ii) net proceeds from our secondary public offering of $64,948. Offsetting these sources of cash were outflows of (i) $528 associated with the repayment of amounts outstanding on our German line of credit, (ii) $9,885 associated with the repayment of amounts outstanding on the demand note payable to member (which was

Table of Contents

subsequently retired by us), (iii) $7,650 associated with the repayment of other outstanding debt and principal payments on financing leases, including repayment of all of the debt assumed from our VIEs in connection with the acquisition of net assets on March 27, 2013 and settlement of our financing lease obligation with a related party for a cash payment of approximately $1,372 during the quarter ended June 30, 2013, and (iv) $456 in preferred stock dividends paid prior to conversion of preferred stock to common stock upon closing of our initial public offering.

At December 31, 2013, we identified that we were not in compliance with the annual cash flow-to-debt service ratio covenant associated with our ExOne building note payable to a bank. We requested and were granted a waiver related to compliance with this covenant through December 31, 2014. Related to our 2013 noncompliance, there were no cross default provisions or related impacts on other lending agreements.

The principal sources of cash in 2012 were (i) net borrowings on our line of credit of $528 to support operations, (ii) net borrowings on the demand note payable to member of $8,629 to support operations, and (iii) proceeds from long-term debt and financing leases of $4,707 used to finance 3D printing machine production. Offsetting these sources of cash were long-term debt and financing lease repayments of $2,063.

The principal sources of cash in 2011 were (i) net borrowings on the demand note payable to member of $3,939 to support operations, (ii) proceeds from long-term debt of $2,398 used to finance 3D printing machine production and (iii) contributions from noncontrolling interests of $402. Offsetting these sources of cash were long-term debt repayments of $808.

Contractual Obligations

We are required to make future payments under various contracts, including operating lease and license agreements, construction services agreements, debt agreements and capital and financing lease agreements. At December 31, 2013, a summary of our outstanding contractual obligations is as follows:

	Total	2014	2015-2016	2017-2018	Thereafter
Operating activities:					
Operating leases	$ 1,377	$ 791	$ 349	$ 236	$ 1
License fee obligations	880	680	200		
Deferred revenue and customer prepayments	916	916			
Investing activities:					
Capital expenditures	6,650	6,650			
Financing activities:					
Long-term debt	2,209	127	270	282	1,530
Capital and financing leases	1,024	549	418	57	
Interest	812	129	174	161	348
Total	$ 13,868	$ 9,842	$ 1,411	$ 736	$ 1,879

Operating Leases

Operating leases consist of various lease agreements of manufacturing facilities, office and warehouse spaces, and equipment and vehicles, expiring in various years through 2019.

License Fee Obligations

License fee obligations include amounts contractually due to third parties for use of patented technology, expiring in various years through 2016.

Table of Contents

Deferred Revenue and Customer Prepayments

Deferred revenue and customer prepayments require us to deliver products or services to customers over a specified contract period. While these obligations are not expected to result in cash payments, they represent contractual obligations for which we would be obligated if the specified deliveries could not be made.

Capital Expenditures

Capital expenditures consist of firmly committed amounts under a construction services contract for the design and construction of a manufacturing facility in the Municipality of Gersthofen, Germany, with an expected completion date in the fourth quarter of 2014. Other amounts otherwise disclosed within this Annual Report on Form 10-K associated with the design, construction and building improvements related to this facility were not contractually committed at December 31, 2013.

Long-Term Debt

Long-term debt consists of the current and noncurrent portion of a note payable used to finance the acquisition of a building. Maturity of this debt instrument extends to 2027.

Capital and Financing Leases

Capital and financing leases consist of obligations associated with (i) leased assets or (ii) sale-leaseback transactions required to be accounted for as financings. Maturity of our capital and financing leases extends to 2017.

Interest

Interest related to long-term debt and capital and financing leases is based on interest rates in effect at December 31, 2013, and is calculated on instruments with maturities that extend to 2027.

Off Balance Sheet Arrangements

We are not a party to any off balance sheet arrangements.

Recently Adopted Accounting Guidance

None.

Recently Issued Accounting Guidance

Refer to the Recently Issued Accounting Guidance section of Note 1 to the consolidated financial statements included in Part II Item 8 of this Annual Report on Form 10-K.

Critical Accounting Policies and Estimates

The consolidated financial statements are prepared in conformity with GAAP. The preparation of these consolidated financial statements requires management to make certain judgments, estimates and assumptions regarding uncertainties that affect the reported amounts of assets, liabilities, revenue and expenses and related disclosure of contingent assets and liabilities. Areas that require significant judgments, estimates and assumptions include accounting for inventories (including the allowance for slow moving and obsolete inventory); product warranty reserves; income taxes (including the valuation allowance on certain deferred tax assets); equity-based compensation and future cash flow estimates associated with long-lived assets for purposes

Table of Contents

of impairment testing. We bases our estimates on historical experience and on various other assumptions that are believed to be reasonable, the results of which forms the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates.

Foreign Currency

The local currency is the functional currency for significant operations outside of the United States. The determination of the functional currency of an operation is made based upon the appropriate economic and management indicators.

Foreign currency assets and liabilities are translated into their U.S. dollar equivalents based upon year end exchange rates, and are included in stockholders / members equity as a component of other comprehensive (loss) income. Revenues and expenses are translated at average exchange rates. Transaction gains and losses that arise from exchange rate fluctuations are charged to operations as incurred, except for gains and losses associated with intercompany receivables and payables for which settlement is not planned or anticipated in the foreseeable future, which are included in other comprehensive (loss) income in the consolidated statement of operations and comprehensive loss.

We transact business globally and are subject to risks associated with fluctuating foreign exchange rates. Approximately 63.0%, 72.8% and 70.0% of our consolidated revenue was derived from transactions outside the United States for 2013, 2012 and 2011, respectively. This revenue is generated primarily from wholly-owned subsidiaries operating in their respective countries and surrounding geographic areas. This revenue is primarily denominated in each subsidiary s local functional currency, including the Euro and Japanese Yen.

Revenue Recognition

Revenue from the sale of 3D printing machines and micromachinery and 3D printed products and materials is recognized upon transfer of title, generally upon shipment. Revenue from the performance of production or other contract services is generally recognized when either the services are performed or the finished product is shipped. Revenue for all deliverables in a sales arrangement is recognized provided that persuasive evidence of a sales arrangement exists, both title and risk of loss have passed to the customer and collection is reasonably assured. Persuasive evidence of a sales arrangement exists upon execution of a written sales agreement or signed purchase order that constitutes a fixed and legally binding commitment between us and our customer. In instances where revenue recognition criteria are not met, amounts are recorded as deferred revenue and customer prepayments in the consolidated balance sheets.

We enter into sales arrangements that may provide for multiple deliverables to a customer. Sales of machines may include materials and/or production or other contract services (including maintenance, installation or training services). We identify all goods and services that are to be delivered separately under a sales arrangement and allocate revenue to each deliverable based on relative fair values. Fair values are generally established based on the prices charged when sold separately by us (vendor specific objective evidence). In general, revenues are separated between machines, materials and other services. The allocated revenue for each deliverable is then recognized ratably based on relative fair values of the components of the sale. In the absence of vendor specific objective evidence or third party evidence in leading to a relative fair value for a sale component, our best estimate of selling price is used. We also evaluate the impact of undelivered items on the functionality of delivered items for each sales transaction and, where appropriate, defer revenue on delivered items when that functionality has been affected. Functionality is determined to be met if the delivered products or services represent a separate earnings process. Revenue from services are recognized at the time of performance.

We provide customers with a standard warranty on all machines generally over a period of twelve months from the date of installation at the customer s site. The warranty is not treated as a separate service because the

Table of Contents

warranty is an integral part of the sale of the machine. After the initial twelve month warranty period, we offer our customers optional maintenance service contracts. Deferred maintenance service revenue is recognized when the maintenance services are performed since we have historical evidence that indicates that the costs of performing the services under the contract are not incurred on a straight-line basis.

We sell equipment with embedded software to our customers. The embedded software is not sold separately and it is not a significant focus of our marketing effort. We do not provide post-contract customer support specific to the software or incur significant costs that are within the scope of FASB guidance on accounting for software to be leased or sold. Additionally, the functionality that the software provides is marketed as part of the overall product. The software embedded in the equipment is incidental to the equipment as a whole such that the FASB guidance referenced above is not applicable. Sales of these products are recognized in accordance with FASB guidance on accounting for multiple-element arrangements.

Shipping and handling costs billed to customers for machine sales and sales of materials are included in revenue in the consolidated statement of operations and other comprehensive loss. Costs incurred by us associated with shipping and handling are included in cost of sales in the consolidated statement of operations and comprehensive loss.

Our terms of sale generally require payment within 30 to 60 days after shipment of a product, although we also recognize that longer payment periods are customary in some countries where we transact business. To reduce credit risk in connection with machine sales, we may, depending upon the circumstances, require certain amounts be prepaid prior to shipment. In some circumstances, we may require payment in full for our products prior to shipment and may require international customers to furnish letters of credit. These prepayments are reported as deferred revenue and customer prepayments in the consolidated balance sheets. Production and contract services are billed in accordance with specific contract terms, generally upon performance of the related services.

We have entered into certain contracts for the sale of our products and services with the federal government under fixed-fee, cost reimbursable and time and materials arrangements. With respect to cost reimbursable arrangements with the federal government, we generally bill for products and services in accordance with provisional rates as determined by us. To the extent that provisional rates billed under these contracts differ from actual experience, a billing adjustment (through revenue) is made in the period in which the difference is identified (generally upon completion of our annual Incurred Cost Submission filing as required by the federal government). For 2013, 2012 and 2011, revenues and any adjustments related to these contracts were not significant.

Cash and Cash Equivalents

We consider all highly liquid instruments with maturities when purchased of three months or less to be cash equivalents. Our policy is to invest cash in excess of short-term operating and debt-service requirements in such cash equivalents. These instruments are stated at cost, which approximates fair value because of the short maturity of the instruments. We maintain cash balances with financial institutions located in the United States, Germany and Japan. We place our cash with high quality financial institutions and believe our risk of loss is limited; however, at times, account balances may exceed international and federally insured limits. We have not experienced any losses associated with these cash balances.

Accounts Receivable

Accounts receivable are reported at their net realizable value. Our estimate of the allowance for doubtful accounts related to trade receivables is based on our evaluation of customer accounts with past-due outstanding balances or specific accounts for which we have information that the customer may be unable to meet its financial obligations. Based upon review of these accounts, and management s analysis and judgment, we record a specific allowance for that customer s accounts receivable balance to reduce the outstanding receivable balance to the amount expected to be collected. The allowance is re-evaluated and adjusted periodically as additional information is received that impacts the allowance amount reserved. At December 31, 2013 and 2012, the allowance for doubtful accounts was approximately $63 and $83, respectively.

Table of Contents

Inventories

We value all of our inventories at the lower of cost, as determined on the first-in, first-out method or market value. Overhead is allocated to work in progress and finished goods based upon normal capacity of our production facilities. Fixed overhead associated with production facilities that are being operated below normal capacity are recognized as a period expense rather than being capitalized as a product cost. An allowance for slow-moving and obsolete inventories is provided based on historical experience and current product demand. These provisions reduce the cost basis of the respective inventory and are recorded as a charge to cost of sales. At December 31, 2013 and 2012, the allowance for slow-moving and obsolete inventories was approximately $750 and $891, respectively.

Property and Equipment

Property and equipment are recorded at cost and depreciated on a straight-line basis over the estimated useful lives of the related assets, generally three to twenty-five years. Leasehold improvements are amortized on a straight-line basis over the shorter of (i) their estimated useful lives or (ii) the estimated or contractual lives of the related leases. Gains or losses from the sale of assets are recognized upon disposal or retirement of the related assets and are generally recorded in cost of sales in the statement of consolidated operations and comprehensive loss. Repairs and maintenance are charged to expense as incurred.

We evaluate long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying amount of such assets (asset group) may not be recoverable. Recoverability of assets is determined by comparing the estimated undiscounted net cash flows of the operations related to the assets (asset group) to their carrying amount. An impairment loss would be recognized when the carrying amount of the assets (asset group) exceeds the estimated undiscounted net cash flows. The amount of the impairment loss to be recorded is calculated as the excess of carrying value of assets (asset group) over their fair value, with fair value determined using the best information available, which generally is a discounted cash flow model. The determination of what constitutes an asset group, the associated undiscounted net cash flows, and the estimated useful lives of assets require significant judgments and estimates by management. No impairment loss was recorded by us during 2013, 2012 or 2011.

Product Warranty Reserves

Substantially all of our 3D printing machines and micromachinery are covered by a warranty, generally over a period of twelve months from the date of installation at the customer s site. A liability is recorded for future warranty costs in the same period in which the related revenue is recognized. The liability is based upon anticipated parts and labor costs using historical experience. We periodically assesses the adequacy of the product warranty reserves based on changes in these factors and record any necessary adjustments if actual experience indicates that adjustments are necessary. Future claims experience could be materially different from prior results because of the introduction of new, more complex products, a change in our warranty policy in response to industry trends, competition or other external forces, or manufacturing changes that could impact product quality. In the event that we determine that our current or future product repair and replacement costs exceed estimates, an adjustment to these reserves would be charged to cost of sales in the statement of consolidated operations and comprehensive loss in the period such a determination is made. At December 31, 2013 and 2012, product warranty reserves were approximately $943 and $556, respectively, and were included in accrued expenses and other current liabilities in the consolidated balance sheets.

Income Taxes

Prior to Reorganization, we were organized as a limited liability company. Under the provisions of the Internal Revenue Code and similar state provisions, we were taxed as a partnership and were not liable for income taxes. Instead, earnings and losses were included in the tax returns of our members. Therefore, for periods prior to Reorganization, the consolidated financial statements do not reflect a provision for U.S. federal or state income taxes.

Table of Contents

Our subsidiaries in Germany and Japan are taxed as corporations under the taxing regulations of Germany and Japan, respectively. As a result, the consolidated statement of operations and comprehensive loss includes a provision for income taxes related to these foreign jurisdictions. Any undistributed earnings are intended to be permanently reinvested in the respective subsidiaries.

We recognize the tax benefit from an uncertain tax position only if it is more likely than not that the tax position will be sustained on examination by the taxing authorities based upon the technical merits of the position. The tax benefits recognized in the consolidated financial statements from such positions are then measured based upon the largest amount that has a greater than 50% likelihood of being realized upon settlement. Tax benefits that do not meet the more likely than not criteria are recognized when effectively settled, which generally means that the statute of limitations has expired or that appropriate taxing authority has completed its examination even through the statute of limitations remains open. Interest and penalties related to uncertain tax positions are recognized as part of the provision for income taxes in the consolidated statement of operations and comprehensive loss and are accrued beginning in the period that such interest and penalties would be applicable under relevant tax law until such time that the related tax benefits are recognized.

We recognize deferred tax assets and liabilities for the differences between the financial statement carrying amounts and the tax basis of assets and liabilities in their respective jurisdictions using enacted tax rates in effect in the years in which the differences are expected to reverse. Valuation allowances are established when necessary to reduce deferred tax assets to the amount expected to be realized.

Derivative Financial Instruments

We are exposed to market risk from changes in interest rates and foreign currency exchange rates, which may adversely affect our results of operations and financial condition. We seek to minimize these risks through regular operating and financing activities and, when we consider it to be appropriate, through the use of derivative financial instruments.

We have entered into interest rate swaps for the purpose of managing risks related to the variability of future earnings and cash flows caused by changes in interest rates. We have elected not to prepare and maintain the documentation required to qualify for hedge accounting treatment and therefore, all gains and losses (realized or unrealized) related to derivative instruments are recognized as a component of interest expense in the statement of consolidated operations and comprehensive loss. Fair value of the interest rate swaps are reported as accrued expenses and other current liabilities in the consolidated balance sheets. We do not purchase, hold or sell derivative financial instruments for trading or speculative purposes.

We are exposed to credit risk if the counterparties to such transactions are unable to perform their obligations. However, we seek to minimize such risk by entering into transactions with counterparties that are believed to be creditworthy financial institutions.

There were no derivative financial instruments held by us at December 31, 2013. Derivative financial instruments held by us at December 31, 2012 were not significant.

Taxes on Revenue Producing Transactions

Taxes assessed by governmental authorities on revenue producing transactions, including sales, excise, value added and use taxes, are recorded on a net basis (excluded from revenue) in the consolidated statement of operations and comprehensive loss.

Research and Development

We are involved in research and development of new methods and technologies relating to our products. Research and development expenses are charged to operations as they are incurred. We capitalize the cost of materials, equipment and facilities that have alternative future uses in research and development projects or otherwise.

Table of Contents

Advertising

Advertising costs are charged to expense as incurred, and were not significant for 2013, 2012 or 2011.

Defined Contribution Plan

We sponsor a defined contribution savings plan under section 401(k) of the Internal Revenue Code. Under the plan, participating employees in the United States may elect to defer a portion of their pre-tax earnings, up to the Internal Revenue Service s annual contribution limit. We make matching contributions of 50% of the first 8% of employee contributions, subject to certain Internal Revenue Service limitations. Our matching contributions to the plan were approximately $92, $90 and $87 in 2013, 2012 and 2011, respectively.

Equity-Based Compensation

We recognize compensation expense for equity-based grants using the straight-line attribution method, in which the expense (net of estimated forfeitures) is recognized ratably over the requisite service period based on the grant date fair value. Fair value of equity-based awards is estimated on the date of grant using the Black-Scholes pricing model. We recognized total equity-based compensation expense of approximately $711 and $7,735 during 2013 and 2012, respectively. There was no equity-based compensation expense recognized during 2011.

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

We are exposed to market risk from fluctuations in foreign currency exchange rates which may adversely affect our results of operations and financial condition. We seek to minimize these risks through regular operating and financing activities and, when we consider it to be appropriate, through the use of derivative financial instruments. We do not purchase, hold or sell derivative financial instruments for trading or speculative purposes.

The local currency is the functional currency for significant operations outside of the United States. The determination of the functional currency of an operation is made based on the appropriate economic and management indicators.

Foreign currency assets and liabilities are translated into their U.S. dollar equivalents based on year end exchange rates, and are included in stockholders / members equity (deficit) as a component of other comprehensive income (loss). Revenues and expenses are translated at average exchange rates. Transaction gains and losses that arise from exchange rate fluctuations are charged to operations as incurred, except for gains and losses associated with intercompany receivables and payables for which settlement is not planned or anticipated in the foreseeable future, which are included in accumulated other comprehensive loss in the consolidated balance sheets.

We transact business globally and are subject to risks associated with fluctuating foreign exchange rates. Approximately 63.0%, 72.8% and 70.0% of our consolidated revenue was derived from transactions outside the United States for 2013, 2012 and 2011, respectively. This revenue is generated primarily from wholly-owned subsidiaries operating in their respective countries and surrounding geographic areas. This revenue is primarily denominated in each subsidiary s local functional currency, including the Euro and Japanese Yen. A hypothetical change in foreign exchange rates of +/- 10.0% for 2013 would result in an increase (decrease) in revenue of approximately $2,500. These subsidiaries incur most of their expenses (other than intercompany expenses) in their local functional currencies.

At December 31, 2013, we held approximately $98,445 in cash and cash equivalents, of which, approximately $94,175 was held by our United States parent in U.S. dollars.

Table of Contents

Item 8. Financial Statements and Supplementary Data.

	Page
Report of Independent Registered Public Accounting Firm	58
Statement of Consolidated Operations and Comprehensive Loss	59
Consolidated Balance Sheets	60
Statement of Consolidated Cash Flows	61
Statement of Changes in Consolidated Stockholders / Members Equity (Deficit)	62
Notes to the Consolidated Financial Statements	63
Supplementary Quarterly Financial Information (Unaudited)	86

Table of Contents

Report of Independent Registered Public Accounting Firm

Board of Directors and Stockholders

The ExOne Company (formerly The Ex One Company, LLC and Subsidiaries)

We have audited the accompanying consolidated balance sheets of The ExOne Company and Subsidiaries (the Company) as of December 31, 2013 and 2012, and the related consolidated statements of operations and comprehensive loss, stockholders / members equity (deficit), and cash flows for the each of the years in the three-year period ended December 31, 2013. These consolidated financial statements are the responsibility of the entity 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 audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the consolidated financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of The ExOne Company and Subsidiaries as of December 31, 2013 and 2012, and the results of their operations and their cash flows for each of the years in the three-year period ended December 31, 2013, in conformity with accounting principles generally accepted in the United States of America.

/s/ ParenteBeard LLC

Pittsburgh, Pennsylvania

March 20, 2014

Table of Contents

The ExOne Company and Subsidiaries (formerly The Ex One Company, LLC and Subsidiaries)

Statement of Consolidated Operations and Comprehensive Loss

(in thousands, except per-share amounts)

For the years ended December 31,	2013	2012	2011
Revenue	$ 39,480	$ 28,657	$ 15,290
Cost of sales	23,907	16,514	11,647
Gross profit	15,573	12,143	3,643
Operating expenses			
Research and development	5,127	1,930	1,531
Selling, general and administrative (Note 13)	16,119	18,285	7,286
	21,246	20,215	8,817
Loss from operations	(5,673)	(8,072)	(5,174)
Other expense (income)			
Interest expense	372	842	1,570
Other income net	(98)	(221)	(158)
	274	621	1,412
Loss before income taxes	(5,947)	(8,693)	(6,586)
Provision for income taxes* (Note 16)	370	995	1,031
Net loss	(6,317)	(9,688)	(7,617)
Less: Net income attributable to noncontrolling interests	138	480	420
Net loss attributable to ExOne	$ (6,455)	$ (10,168)	$ (8,037)
Net loss attributable to ExOne per common share (Note 2):			
Basic	$ (0.51)	N/A*	N/A*
Diluted	$ (0.51)	N/A*	N/A*
Comprehensive loss:			
Net loss attributable to ExOne	$ (6,455)	$ (10,168)	$ (8,037)
Other comprehensive (loss) income:			
Foreign currency translation adjustments	(178)	46	(107)
Comprehensive loss	(6,633)	(10,122)	(8,144)
Less: Comprehensive (loss) income attributable to noncontrolling interests			
Comprehensive loss attributable to ExOne	$ (6,633)	$ (10,122)	$ (8,144)

* Information not comparable for 2012 and 2011 as a result of the Reorganization of the Company as a corporation on January 1, 2013 (Note 1).

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

Table of Contents

The ExOne Company and Subsidiaries (formerly The Ex One Company, LLC and Subsidiaries)

Consolidated Balance Sheets

(in thousands, except share and unit amounts)

December 31,	2013	2012
Assets		
Current assets:		
Cash and cash equivalents	$ 98,445	$ 2,802
Accounts receivable net	9,042	8,413
Inventories net (Note 4)	12,764	7,485
Prepaid expenses and other current assets (Note 5)	3,237	1,543
Deferred income taxes (Note 16)	60	
Total current assets	123,548	20,243
Property and equipment net (Note 6)	32,772	12,467
(Including amounts attributable to consolidated variable interest entities of $5,567 at December 31, 2012)		
Deferred income taxes (Note 16)		178
Other noncurrent assets	2,115	187
Total assets	$ 158,435	$ 33,075
Liabilities		
Current liabilities:		
Line of credit (Note 7)	$	$ 528
Demand note payable to member (Note 8)		8,666
Current portion of long-term debt (Note 9)	127	2,028
(Including amounts attributable to consolidated variable interest entities of $1,913 at December 31, 2012)		
Current portion of capital and financing leases (Note 10)	549	920
Accounts payable	1,748	2,451
Accrued expenses and other current liabilities (Note 11)	5,394	4,436
Preferred unit dividends payable		1,437
Deferred income taxes (Note 16)		178
Deferred revenue and customer prepayments	916	4,281
Total current liabilities	8,734	24,925
Long-term debt net of current portion (Note 9)	2,082	5,669
(Including amounts attributable to consolidated variable interest entities of $3,150 at December 31, 2012)		
Capital and financing leases net of current portion (Note 10)	475	1,949
Deferred income taxes (Note 16)	60	
Other noncurrent liabilities	384	491
Total liabilities	11,735	33,034
Contingencies and commitments (Note 15)		
Stockholders / Members Equity		
ExOne stockholders / members equity (deficit):		
Common stock, $0.01 par value, 200,000,000 shares authorized, 14,387,608 shares issued and outstanding (Note 12)	144	
Additional paid-in capital	153,363	
Accumulated deficit	(6,455)	
Preferred units, $1.00 par value, 18,983,602 units issued and outstanding (Note 12)		18,984

Common units, $1.00 par value, 10,000,000 units issued and outstanding (Note 12)		10,000
Members deficit		(31,355)
Accumulated other comprehensive loss	(352)	(174)
Total ExOne stockholders / members equity (deficit)	146,700	(2,545)
Noncontrolling interests (Note 3)		2,586
Total stockholders / members equity	146,700	41
Total liabilities and stockholders / members equity	$ 158,435	$ 33,075

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

Table of Contents

The ExOne Company and Subsidiaries (formerly The Ex One Company, LLC and Subsidiaries)

Statement of Consolidated Cash Flows

(in thousands)

For the years ended December 31,	2013	2012	2011
Operating activities			
Net loss	$ (6,317)	$ (9,688)	$ (7,617)
Adjustments to reconcile net loss to cash used for operations:			
Depreciation (Note 6)	2,372	1,683	1,170
Equity-based compensation (Note 13)	711	7,735	
Changes in assets and liabilities, excluding effects of foreign currency translation adjustments:			
(Increase) decrease in accounts receivable	(671)	(7,077)	1,240
Increase in inventories	(8,083)	(4,691)	(1,368)
Increase in prepaid expenses and other assets	(4,334)	(338)	(438)
(Decrease) increase in accounts payable	(1,100)	1,575	(213)
Increase in accrued expenses and other liabilities	937	1,528	951
(Decrease) increase in deferred revenue and customer prepayments	(3,707)	(404)	3,839
Cash used for operating activities	(20,192)	(9,677)	(2,436)
Investing activities			
Capital expenditures (Note 6)	(19,311)	(1,858)	(1,080)
Cash effect of deconsolidation of noncontrolling interests in variable interest entities (Note 3)	(2,327)		
Cash used for investing activities	(21,638)	(1,858)	(1,080)
Financing activities			
Net proceeds from issuance of common stock - initial public offering (Note 1)	91,083		
Net proceeds from issuance of common stock - secondary public offering (Note 1)	64,948		
Net change in line of credit borrowings (Note 7)	(528)	528	
Net change in demand note payable to member (Note 8)	(9,885)	8,629	3,939
Proceeds from long-term debt (Note 9)		1,194	2,398
Proceeds from financing leases (Note 10)		3,513	
Payments on long-term debt (Note 9)	(5,488)	(1,626)	(808)
Payments on capital and financing leases (Note 10)	(2,162)	(437)	
Payment of preferred stock dividends	(456)		
Deferred offering costs (Note 1)		(712)	
Deferred financing costs		(78)	
Contribution from noncontrolling interests			402
Cash provided by financing activities	137,512	11,011	5,931
Effect of exchange rate changes on cash and cash equivalents	(39)	(170)	60
Net change in cash and cash equivalents	95,643	(694)	2,475
Cash and cash equivalents at beginning of year	2,802	3,496	1,021
Cash and cash equivalents at end of year	$ 98,445	$ 2,802	$ 3,496
Supplemental disclosure of cash flow information			
Cash paid for interest	$ 310	$ 407	$ 174
Cash paid for income taxes	$ 1,334	$ 1,354	$

Supplemental disclosure of noncash investing and financing activities			
Property and equipment acquired through financing arrangements	$ 282	$ 2,700	$
Transfer of inventories to property and equipment for internal use	$ 3,338	$ 2,001	$
Transfer of property and equipment to inventories for sale	$ (534)	$ (336)	$
Conversion of preferred stock dividends payable and accrued interest to principal amounts due under the demand note payable to member (Note 8)	$ 1,219	$ 37	$
Reorganization of The Ex One Company, LLC with and into The ExOne Company (Note 1)	$ (2,371)	$	$
Noncash effect of deconsolidation of noncontrolling interests in variable interest entities (Note 3)	$ (397)	$	$
Preferred unit dividends declared but unpaid	$	$ 1,437	$
Reclassification of redeemable preferred units to preferred units (Note 12)	$	$ 18,984	$
Conversion of demand note payable to member to redeemable preferred units (Note 12)	$	$	$ 18,984

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

Table of Contents

The ExOne Company and Subsidiaries (formerly The Ex One Company, LLC and Subsidiaries)

Statement of Changes in Consolidated Stockholders / Members Equity (Deficit)

(in thousands)

	ExOne unitholders / stockholders									
	Preferred units	Common units	Members deficit	Preferred stock	Common stock	Additional paid-in capital	Accumulated deficit	Accumulated other comprehensive loss	Noncontrolling interests	Total stockholders / members equity (deficit)
Balance at December 31, 2010	$	$ 10,000	$ (19,448)	$	$	$	$	$ (113)	$ 1,284	$ (8,277)
Net loss			(8,037)						420	(7,617)
Other comprehensive loss								(107)		(107)
Contribution from noncontrolling interests									402	402
Balance at December 31, 2011		10,000	(27,485)					(220)	2,106	(15,599)
Preferred unit reclassification (Note 12)	18,984									18,984
Preferred unit dividends			(1,437)							(1,437)
Equity-based compensation (Note 13)			7,735							7,735
Net loss			(10,168)						480	(9,688)
Other comprehensive income								46		46
Balance at December 31, 2012	18,984	10,000	(31,355)					(174)	2,586	41
Reorganization of The Ex One Company, LLC with and into The ExOne Company (Note 1)	(18,984)	(10,000)	31,355	190	58	(2,619)				
Preferred stock dividends						(152)				(152)
Conversion of preferred stock to common stock (Note 12)				(190)	20	170				
Initial public offering of common stock in The ExOne Company, net of issuance costs (Note 1)					55	90,316				90,371
Secondary public offering of common stock in The ExOne Company, net of issuance costs (Note 1)					11	64,937				64,948
Equity-based compensation (Note 13)						711				711

Net loss						(6,455)		138	(6,317)
Other comprehensive loss							(178)		(178)
Deconsolidation of noncontrolling interests in variable interest entities (Note 3)								(2,724)	(2,724)
Balance at December 31, 2013	$	$	$	$ 144	$ 153,363	$ (6,455)	$ (352)	$	$ 146,700

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

Table of Contents

The ExOne Company and Subsidiaries (formerly The Ex One Company, LLC and Subsidiaries)

Notes to the Consolidated Financial Statements

(dollars in thousands, except per-share, share and unit amounts)

Note 1. Summary of Significant Accounting Policies

Basis of Presentation and Principles of Consolidation

The ExOne Company (ExOne) is a corporation organized under the laws of the state of Delaware. ExOne was formed on January 1, 2013, when The Ex One Company, LLC, a Delaware limited liability company, merged with and into a Delaware corporation, which survived and changed its name to The ExOne Company (the Reorganization). As a result of the Reorganization, The Ex One Company, LLC became ExOne, the common and preferred interest holders of The Ex One Company, LLC became holders of common stock and preferred stock, respectively, of ExOne, and the subsidiaries of The Ex One Company, LLC became the subsidiaries of ExOne.

The Company has considered the proforma effects of its Reorganization on the provision for income taxes for 2012 and 2011 in its statement of consolidated operations and comprehensive loss and concluded that there would be no difference as compared to the amounts reported, principally due to valuation allowances established against net deferred tax assets. In addition, the Company has omitted basic and diluted earnings per share for each of the respective comparative years as a result of the Reorganization, as the basis for such calculation is no longer comparable to the current year presentation.

The consolidated financial statements include the accounts of ExOne, its wholly-owned subsidiaries, ExOne Americas LLC (United States), ExOne GmbH (Germany), effective in August 2013, ExOne Property GmbH (formerly ExOne Holding Deutschland GmbH) (Germany), ExOne KK (Japan) and through March 27, 2013 (see further description below) two variable interest entities (VIEs) in which ExOne was identified as the primary beneficiary, Lone Star Metal Fabrication, LLC (Lone Star) and Troy Metal Fabricating, LLC (TMF). Collectively, the consolidated group is referred to as the Company .

At December 31, 2012, and through March 27, 2013, ExOne leased property and equipment from Lone Star and TMF. ExOne did not have an ownership interest in Lone Star or TMF and the assets of Lone Star and TMF could only be used to settle obligations of Lone Star and TMF. ExOne was identified as the primary beneficiary of Lone Star and TMF in accordance with the guidance issued by the Financial Accounting Standards Board (FASB) on the consolidation of VIEs, as ExOne guaranteed certain long-term debt of both Lone Star and TMF and governed these entities through common ownership. This guidance requires certain VIEs to be consolidated when an enterprise has the power to direct the activities of the VIE that most significantly impact VIE economic performance and who has the obligation to absorb losses or the right to receive benefits of the VIE that could potentially be significant to the VIE. The consolidated financial statements therefore include the accounts of Lone Star and TMF through March 27, 2013.

On March 27, 2013, ExOne Americas LLC acquired certain assets, including property and equipment (principally land, buildings and machinery and equipment) held by the two VIEs, and assumed all outstanding debt of such VIEs. Following this transaction, neither of the entities continued to meet the definition of a VIE with respect to ExOne, and as a result, the remaining assets and liabilities of both entities were deconsolidated following the transaction.

On February 6, 2013, the Company commenced an initial public offering of 6,095,000 shares of its common stock at a price to the public of $18.00 per share, of which 5,483,333 shares were sold by the Company and 611,667 were sold by a selling stockholder (including consideration of the exercise of the underwriters over-allotment option). Following completion of the offering on February 12, 2013, the Company received net proceeds of approximately $91,996 (net of underwriting commissions). In addition, the Company incurred associated offering costs of approximately $1,625, including approximately $712 in offering costs previously paid and deferred by the Company at December 31, 2012.

Table of Contents

On September 9, 2013, the Company commenced a secondary public offering of 3,054,400 shares of its common stock at a price to the public of $62.00 per share, of which 1,106,000 shares were sold by the Company and 1,948,400 were sold by selling stockholders (including consideration of the exercise of the underwriters over-allotment option). Following completion of the offering on September 13, 2013, the Company received net proceeds of approximately $65,315 (net of underwriting commissions). In addition, associated offering costs of approximately $1,012 were incurred in connection with this offering. Associated offering costs incurred by the Company in connection with the secondary public offering ($367) were based on its pro-rata sale of shares as compared to selling stockholders, who were responsible for their pro-rata portion ($645).

The consolidated financial statements of the Company are prepared in conformity with accounting principles generally accepted in the United States of America (GAAP). All material intercompany transactions and balances have been eliminated in consolidation.

Liquidity

The Company has incurred net losses of approximately $6,317, $9,688 and $7,617 for 2013, 2012 and 2011, respectively. Prior to Reorganization the Company operated as a limited liability company and was substantially supported by the continued financial support provided by its majority member. As noted above, in connection with the completion of its initial public offering in February 2013 and secondary public offering in September 2013, the Company received total unrestricted net proceeds from the sale of its common stock of approximately $157,311. Management believes that the unrestricted net proceeds obtained through these transactions will be sufficient to support the Company s operations through January 1, 2015.

Use of Estimates

The preparation of these consolidated financial statements requires the Company to make certain judgments, estimates and assumptions regarding uncertainties that affect the reported amounts of assets, liabilities, revenue and expenses and related disclosure of contingent assets and liabilities. Areas that require significant judgments, estimates and assumptions include accounting for inventories (including the allowance for slow moving and obsolete inventory); product warranty reserves; income taxes (including the valuation allowance on certain deferred tax assets); equity-based compensation and future cash flow estimates associated with long-lived assets for purposes of impairment testing. The Company bases its estimates on historical experience and on various other assumptions that are believed to be reasonable, the results of which forms the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates.

Foreign Currency

The local currency is the functional currency for significant operations outside of the United States. The determination of the functional currency of an operation is made based upon the appropriate economic and management indicators.

Foreign currency assets and liabilities are translated into their U.S. dollar equivalents based upon year end exchange rates, and are included in stockholders / members equity as a component of other comprehensive (loss) income. Revenues and expenses are translated at average exchange rates. Transaction gains and losses that arise from exchange rate fluctuations are charged to operations as incurred, except for gains and losses associated with intercompany receivables and payables for which settlement is not planned or anticipated in the foreseeable future, which are included in other comprehensive (loss) income in the consolidated statement of operations and comprehensive loss.

Table of Contents

The Company transacts business globally and is subject to risks associated with fluctuating foreign exchange rates. Approximately 63.0%, 72.8% and 70.0% of the consolidated revenue of the Company was derived from transactions outside the United States for 2013, 2012 and 2011, respectively. This revenue is generated primarily from wholly-owned subsidiaries operating in their respective countries and surrounding geographic areas. This revenue is primarily denominated in each subsidiary s local functional currency, including the Euro and Japanese Yen.

Revenue Recognition

Revenue from the sale of 3D printing machines and micromachinery and 3D printed products and materials is recognized upon transfer of title, generally upon shipment. Revenue from the performance of production or other contract services is generally recognized when either the services are performed or the finished product is shipped. Revenue for all deliverables in a sales arrangement is recognized provided that persuasive evidence of a sales arrangement exists, both title and risk of loss have passed to the customer and collection is reasonably assured. Persuasive evidence of a sales arrangement exists upon execution of a written sales agreement or signed purchase order that constitutes a fixed and legally binding commitment between the Company and its customer. In instances where revenue recognition criteria are not met, amounts are recorded as deferred revenue and customer prepayments in the consolidated balance sheets.

The Company enters into sales arrangements that may provide for multiple deliverables to a customer. Sales of machines may include materials and/or production or other contract services (including maintenance, installation or training services. The Company identifies all goods and services that are to be delivered separately under a sales arrangement and allocates revenue to each deliverable based on relative fair values. Fair values are generally established based on the prices charged when sold separately by the Company (vendor specific objective evidence). In general, revenues are separated between machines, materials and other services. The allocated revenue for each deliverable is then recognized ratably based on relative fair values of the components of the sale. In the absence of vendor specific objective evidence or third party evidence in leading to a relative fair value for a sale component, the Company s best estimate of selling price is used. The Company also evaluates the impact of undelivered items on the functionality of delivered items for each sales transaction and, where appropriate, defers revenue on delivered items when that functionality has been affected. Functionality is determined to be met if the delivered products or services represent a separate earnings process. Revenue from services are recognized at the time of performance.

The Company provides customers with a standard warranty on all machines generally over a period of twelve months from the date of installation at the customer s site. The warranty is not treated as a separate service because the warranty is an integral part of the sale of the machine. After the initial twelve month warranty period, the Company offers its customers optional maintenance service contracts. Deferred maintenance service revenue is recognized when the maintenance services are performed since the Company has historical evidence that indicates that the costs of performing the services under the contract are not incurred on a straight-line basis.

The Company sells equipment with embedded software to its customers. The embedded software is not sold separately and it is not a significant focus of the Company s marketing effort. The Company does not provide post-contract customer support specific to the software or incur significant costs that are within the scope of FASB guidance on accounting for software to be leased or sold. Additionally, the functionality that the software provides is marketed as part of the overall product. The software embedded in the equipment is incidental to the equipment as a whole such that the FASB guidance referenced above is not applicable. Sales of these products are recognized in accordance with FASB guidance on accounting for multiple-element arrangements.

Shipping and handling costs billed to customers for machine sales and sales of materials are included in revenue in the consolidated statement of operations and other comprehensive loss. Costs incurred by the Company associated with shipping and handling are included in cost of sales in the consolidated statement of operations and comprehensive loss.

Table of Contents

The Company s terms of sale generally require payment within 30 to 60 days after shipment of a product, although the Company also recognizes that longer payment periods are customary in some countries where it transacts business. To reduce credit risk in connection with machine sales, the Company may, depending upon the circumstances, require certain amounts be prepaid prior to shipment. In some circumstances, the Company may require payment in full for its products prior to shipment and may require international customers to furnish letters of credit. These prepayments are reported as deferred revenue and customer prepayments in the consolidated balance sheets. Production and contract services are billed in accordance with specific contract terms, generally upon performance of the related services.

The Company has entered into certain contracts for the sale of its products and services with the federal government under fixed-fee, cost reimbursable and time and materials arrangements. With respect to cost reimbursable arrangements with the federal government, the Company generally bills for products and services in accordance with provisional rates as determined by the Company. To the extent that provisional rates billed under these contracts differ from actual experience, a billing adjustment (through revenue) is made in the period in which the difference is identified (generally upon completion of its annual Incurred Cost Submission filing as required by the federal government). For 2013, 2012 and 2011, revenues and any adjustments related to these contracts were not significant.

Cash and Cash Equivalents

The Company considers all highly liquid instruments with maturities when purchased of three months or less to be cash equivalents. The Company s policy is to invest cash in excess of short-term operating and debt-service requirements in such cash equivalents. These instruments are stated at cost, which approximates fair value because of the short maturity of the instruments. The Company maintains cash balances with financial institutions located in the United States, Germany and Japan. The Company places its cash with high quality financial institutions and believes its risk of loss is limited; however, at times, account balances may exceed international and federally insured limits. The Company has not experienced any losses associated with these cash balances.

Accounts Receivable

Accounts receivable are reported at their net realizable value. The Company s estimate of the allowance for doubtful accounts related to trade receivables is based on the Company s evaluation of customer accounts with past-due outstanding balances or specific accounts for which it has information that the customer may be unable to meet its financial obligations. Based upon review of these accounts, and management s analysis and judgment, the Company records a specific allowance for that customer s accounts receivable balance to reduce the outstanding receivable balance to the amount expected to be collected. The allowance is re-evaluated and adjusted periodically as additional information is received that impacts the allowance amount reserved. At December 31, 2013 and 2012, the allowance for doubtful accounts was approximately $63 and $83, respectively.

Inventories

The Company values all of its inventories at the lower of cost, as determined on the first-in, first-out method or market value. Overhead is allocated to work in progress and finished goods based upon normal capacity of the Company s production facilities. Fixed overhead associated with production facilities that are being operated below normal capacity are recognized as a period expense rather than being capitalized as a product cost. An allowance for slow-moving and obsolete inventories is provided based on historical experience and current product demand. These provisions reduce the cost basis of the respective inventory and are recorded as a charge to cost of sales. At December 31, 2013 and 2012, the allowance for slow-moving and obsolete inventories was approximately $750 and $891, respectively.

Table of Contents

Property and Equipment

Property and equipment are recorded at cost and depreciated on a straight-line basis over the estimated useful lives of the related assets, generally three to twenty-five years. Leasehold improvements are amortized on a straight-line basis over the shorter of (i) their estimated useful lives or (ii) the estimated or contractual lives of the related leases. Gains or losses from the sale of assets are recognized upon disposal or retirement of the related assets and are generally recorded in cost of sales in the statement of consolidated operations and comprehensive loss. Repairs and maintenance are charged to expense as incurred.

The Company evaluates long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying amount of such assets (asset group) may not be recoverable. Recoverability of assets is determined by comparing the estimated undiscounted net cash flows of the operations related to the assets (asset group) to their carrying amount. An impairment loss would be recognized when the carrying amount of the assets (asset group) exceeds the estimated undiscounted net cash flows. The amount of the impairment loss to be recorded is calculated as the excess of carrying value of assets (asset group) over their fair value, with fair value determined using the best information available, which generally is a discounted cash flow model. The determination of what constitutes an asset group, the associated undiscounted net cash flows, and the estimated useful lives of assets require significant judgments and estimates by management. No impairment loss was recorded by the Company during 2013, 2012 or 2011.

Product Warranty Reserves

Substantially all of the Company s 3D printing machines and micromachinery are covered by a warranty, generally over a period of twelve months from the date of installation at the customer s site. A liability is recorded for future warranty costs in the same period in which the related revenue is recognized. The liability is based upon anticipated parts and labor costs using historical experience. The Company periodically assesses the adequacy of the product warranty reserves based on changes in these factors and records any necessary adjustments if actual experience indicates that adjustments are necessary. Future claims experience could be materially different from prior results because of the introduction of new, more complex products, a change in the Company s warranty policy in response to industry trends, competition or other external forces, or manufacturing changes that could impact product quality. In the event that the Company determines that its current or future product repair and replacement costs exceed estimates, an adjustment to these reserves would be charged to cost of sales in the statement of consolidated operations and comprehensive loss in the period such a determination is made. At December 31, 2013 and 2012, product warranty reserves were approximately $943 and $556, respectively, and were included in accrued expenses and other current liabilities in the consolidated balance sheets.

Income Taxes

Prior to Reorganization, the Company was organized as a limited liability company. Under the provisions of the Internal Revenue Code and similar state provisions, the Company was taxed as a partnership and was not liable for income taxes. Instead, earnings and losses were included in the tax returns of its members. Therefore, for periods prior to Reorganization, the consolidated financial statements do not reflect a provision for U.S. federal or state income taxes.

The Company s subsidiaries in Germany and Japan are taxed as corporations under the taxing regulations of Germany and Japan, respectively. As a result, the consolidated statement of operations and comprehensive loss includes a provision for income taxes related to these foreign jurisdictions. Any undistributed earnings are intended to be permanently reinvested in the respective subsidiaries.

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 the taxing authorities based upon the technical merits of the position. The tax benefits recognized in the consolidated financial statements from such positions are then

Table of Contents

measured based upon the largest amount that has a greater than 50% likelihood of being realized upon settlement. Tax benefits that do not meet the more likely than not criteria are recognized when effectively settled, which generally means that the statute of limitations has expired or that appropriate taxing authority has completed its examination even through the statute of limitations remains open. Interest and penalties related to uncertain tax positions are recognized as part of the provision for income taxes in the consolidated statement of operations and comprehensive loss and are accrued beginning in the period that such interest and penalties would be applicable under relevant tax law until such time that the related tax benefits are recognized.

The Company recognizes deferred tax assets and liabilities for the differences between the financial statement carrying amounts and the tax basis of assets and liabilities in their respective jurisdictions using enacted tax rates in effect in the years in which the differences are expected to reverse. Valuation allowances are established when necessary to reduce deferred tax assets to the amount expected to be realized.

Derivative Financial Instruments

The Company is exposed to market risk from changes in interest rates and foreign currency exchange rates, which may adversely affect its results of operations and financial condition. The Company seeks to minimize these risks through regular operating and financing activities and, when the Company considers it to be appropriate, through the use of derivative financial instruments.

The Company has entered into interest rate swaps for the purpose of managing risks related to the variability of future earnings and cash flows caused by changes in interest rates. The Company has elected not to prepare and maintain the documentation required to qualify for hedge accounting treatment and therefore, all gains and losses (realized or unrealized) related to derivative instruments are recognized as a component of interest expense in the statement of consolidated operations and comprehensive loss. Fair value of the interest rate swaps are reported as accrued expenses and other current liabilities in the consolidated balance sheets. The Company does not purchase, hold or sell derivative financial instruments for trading or speculative purposes.

The Company is exposed to credit risk if the counterparties to such transactions are unable to perform their obligations. However, the Company seeks to minimize such risk by entering into transactions with counterparties that are believed to be creditworthy financial institutions.

There were no derivative financial instruments held by the Company at December 31, 2013. Derivative financial instruments held by the Company at December 31, 2012 were not significant.

Taxes on Revenue Producing Transactions

Taxes assessed by governmental authorities on revenue producing transactions, including sales, excise, value added and use taxes, are recorded on a net basis (excluded from revenue) in the consolidated statement of operations and comprehensive loss.

Research and Development

The Company is involved in research and development of new methods and technologies relating to its products. Research and development expenses are charged to operations as they are incurred. The Company capitalizes the cost of materials, equipment and facilities that have alternative future uses in research and development projects or otherwise.

Advertising

Advertising costs are charged to expense as incurred, and were not significant for 2013, 2012 or 2011.

Table of Contents

Defined Contribution Plan

The Company sponsors a defined contribution savings plan under section 401(k) of the Internal Revenue Code. Under the plan, participating employees in the United States may elect to defer a portion of their pre-tax earnings, up to the Internal Revenue Service s annual contribution limit. The Company makes matching contributions of 50% of the first 8% of employee contributions, subject to certain Internal Revenue Service limitations. The Company s matching contributions to the plan were approximately $92, $90 and $87 in 2013, 2012 and 2011, respectively.

Equity-Based Compensation

The Company recognizes compensation expense for equity-based grants using the straight-line attribution method, in which the expense (net of estimated forfeitures) is recognized ratably over the requisite service period based on the grant date fair value. Fair value of equity-based awards is estimated on the date of grant using the Black-Scholes pricing model. The Company recognized total equity-based compensation expense of approximately $711 and $7,735 during 2013 and 2012, respectively. There was no equity-based compensation expense recognized during 2011.

Recently Issued Accounting Guidance

In February 2013, the FASB issued guidance changing the requirements of companies reporting of amounts reclassified out of accumulated other comprehensive income (loss). These changes require an entity to report the effect of significant reclassifications out of accumulated other comprehensive income (loss) on the respective line items in net income (loss) if the amount being reclassified is required to be reclassified in its entirety to net income (loss). For other amounts that are not required to be reclassified in their entirety to net income (loss) in the same reporting period, an entity is required to cross-reference other disclosures that provide additional detail about those amounts. These requirements are to be applied to each component of accumulated other comprehensive income (loss). This change becomes effective for the Company on January 1, 2014. Other than the additional disclosure requirements, management has determined that the adoption of these changes will not have an impact on the consolidated financial statements of the Company.

In July 2013, the FASB issued guidance clarifying the presentation of unrecognized tax benefits when a net operating loss carryforward, a similar tax loss or a tax credit carryforward exists. The amendment requires that unrecognized tax benefits be presented in the consolidated financial statements as a reduction to a deferred tax asset for a net operating loss carryforward, a similar tax loss, or a tax credit carryforward, unless certain exceptions exist. This change becomes effective for the Company on January 1, 2015. The adoption of this guidance is not expected to have a material impact on the consolidated financial statements of the Company.

Note 2. Computation of Net Loss Attributable to ExOne Per Common Share

The Company presents basic and diluted loss per common share amounts. Basic loss per share is calculated by dividing net loss available to ExOne common shareholders by the weighted average number of common shares outstanding during the applicable period. Diluted loss per share is calculated by dividing net loss available to ExOne common shareholders by the weighted average number of common shares and common equivalent shares outstanding during the applicable period.

The weighted average shares outstanding for 2013 includes (i) the exchange of common units in the former limited liability company for common shares in the Company on a 0.58:1.00 basis in connection with the Reorganization of the Company on January 1, 2013, (ii) the issuance of 5,483,333 common shares in connection with the commencement of the initial public offering of the Company on February 6, 2013, (iii) the conversion of preferred shares to common shares in the Company on a 9.5:1.0 basis in connection with the closing of the initial public offering of the Company on February 12, 2013, and (iv) the issuance of 1,106,000 common shares in connection with the commencement of the secondary public offering of the Company on September 9, 2013.

Table of Contents

As ExOne incurred a net loss during 2013, basic average shares outstanding and diluted average shares outstanding were the same because the effect of potential shares of common stock consisting of incentive stock options and restricted stock issued was anti-dilutive.

The information used to compute basic and diluted net loss attributable to ExOne per common share for 2013 was as follows:

Net loss attributable to ExOne	$	(6,455)
Less: Preferred stock dividends declared		(152)
Net loss available to ExOne common shareholders	$	(6,607)
Weighted average shares outstanding (basic and diluted)		12,838,230
Net loss attributable to ExOne per common share:		
Basic	$	(0.51)
Diluted		(0.51)

The Company has omitted basic and diluted earnings per share for 2012 and 2011 as a result of the Reorganization of the Company (Note 1), as the basis for such calculation is no longer comparable to current period presentation.

Note 3. Acquisition of Net Assets of Variable Interest Entities

On March 27, 2013, ExOne Americas LLC acquired certain assets, including property and equipment (principally land, buildings and machinery and equipment) held by two VIEs of the Company, TMF and Lone Star, and assumed all outstanding debt of such VIEs.

Payments of approximately $1,900 and $200 were made to TMF and Lone Star, respectively, including a return of capital to the entities of approximately $1,400. These amounts, in addition to cash and cash equivalents balances ($227) held by the VIEs, represent the total cash outflows associated with the transaction. As the parties subject to this transaction were determined to be under common control, property and equipment acquired in the transaction were recorded at their net carrying value on the date of acquisition (approximately $5,400) similar to a pooling-of-interests. As the VIEs were consolidated by the Company in previous periods, no material differences exist due to the change in reporting entity, and as such, no restatement of prior period financial statements on a combined basis is considered necessary. There was no gain or loss or goodwill generated as a result of this transaction, as the total purchase price was equal to the net book value of assets at the VIE level (previously consolidated by the Company). Simultaneous with the completion of this transaction, the Company also repaid all of the outstanding debt assumed from the VIEs, resulting in a payment of approximately $4,700. Subsequent to this transaction, neither TMF or Lone Star continued to meet the definition of a VIE with respect to ExOne, and as a result, the remaining assets and liabilities of both entities were deconsolidated following the transaction, resulting in a reduction to equity (through noncontrolling interest) of approximately $2,700.

Note 4. Inventories

Inventories consist of the following at December 31:

	2013	2012
Raw materials and components	$ 6,253	$ 4,892
Work in process	5,957	2,098
Finished goods	554	495
	$ 12,764	$ 7,485

Table of Contents

At December 31, 2013 and 2012, the allowance for slow-moving and obsolete inventories was approximately $750 and $891, respectively, and has been reflected as a reduction to inventories (raw materials and components).

Note 5. Prepaid Expenses and Other Current Assets

Prepaid expenses and other current assets consist of the following at December 31:

	2013	2012
Value-added tax (VAT) receivable	$ 1,140	$
Prepayments to suppliers	850	559
Deferred offering costs		712
Other	1,247	272
	$ 3,237	$ 1,543

Note 6. Property and Equipment

Property and equipment consist of the following at December 31:

	2013	2012	Useful Life (in years)
Land	$ 5,216	$ 778	
Buildings and related improvements	6,377	4,941	25
Machinery and equipment	11,452	9,674	3-7
Other	2,129	1,450	3-7
	25,174	16,843	
Less: Accumulated depreciation	(5,096)	(5,118)	
	20,078	11,725	
Construction-in-progress	12,694	742	
Property and equipment net	$ 32,772	$ 12,467	

Machinery and equipment includes leased assets of approximately $1,282 and $1,160 at December 31, 2013 and 2012, respectively.

Depreciation expense was approximately $2,372, $1,683 and $1,170 for 2013, 2012 and 2011, respectively.

At December 31, 2012, property and equipment net, includes $5,567 in assets held by variable interest entities (Note 1). On March 27, 2013, in connection with the acquisition of certain net assets of the Lone Star and TMF variable interest entities, the Company acquired all of the property and equipment associated with the variable interest entities (Note 3).

On August 14, 2013, ExOne Property GmbH entered into a construction services contract with a turnkey provider of construction services for the design and construction of a new manufacturing facility to be located in the Municipality of Gersthofen, Germany. The total cost for construction of the facility (including design services and other building improvements) is estimated at approximately $21,500 (15,615). At December 31, 2013, construction-in-progress includes total capitalized costs of approximately $10,313 (7,491) associated with this project.

Table of Contents

Note 7. Line of Credit

The Company has a line of credit and security agreement with a German bank collateralized by certain assets of the Company for approximately $1,790 (1,300). In addition to the collateralization of assets against this facility, the line of credit and security agreement was also previously guaranteed by the Chairman and Chief Executive Officer (CEO) of the Company. On July 19, 2013, the bank removed this guarantee from the arrangement. There were no changes to available borrowing capacity or interest rates as a result of the removal of the guarantee.

Of the total amount available under this facility, approximately $688 (500) is available for short-term borrowings or cash advances (overdrafts). Both short-term borrowings and overdrafts are subject to variable interest rates as determined by the bank. At December 31, 2013, interest rates were 2.59% for short-term borrowings and 6.20% for overdrafts. There is no commitment fee associated with this agreement. At December 31, 2013, the Company had no outstanding short-term borrowings. At December 31, 2012, the Company had outstanding short-term borrowings of approximately $528 (400). At December 31, 2013 and 2012, there were no outstanding overdraft amounts.

Amounts in excess of the amounts available for short-term borrowings and overdrafts are available for additional bank transactions requiring security (i.e. bank guarantees, letters of credit, etc.). Amounts covered under the security agreement accrue interest at 1.75%. There is no charge for unused amounts under the security agreement. At December 31, 2013 and 2012, the Company had transactions guaranteed by the security agreement of approximately $982 (713) and $757 (573), respectively. Separate from the available capacity under its existing security agreement, the Company was granted additional capacity in August 2013 for a short-term bank guarantee of approximately $1,715 (1,268) which subsequently expired in October 2013.

Note 8. Demand Note Payable to Member

The Company has received cash advances to support its operations from an entity controlled by the majority member of the former limited liability company (also the Chairman and CEO of the Company). These cash advances accrued interest at 8.0% annually and were payable on demand. The Company formalized these cash advances in the form of a line of credit with the entity in 2012.

At December 31, 2012, the line of credit balance outstanding on these advances, including accrued interest, was approximately $8,666. In January and February 2013, approximately $1,219 in additional amounts (including accrued interest) were added to the outstanding line of credit, including the conversion of preferred stock dividends payable of approximately $1,133 by the principal preferred stockholder (also the majority member of the former limited liability company and Chairman and CEO of the Company) to amounts payable under the line of credit. On February 14, 2013, the Company repaid all outstanding amounts on the line of credit (approximately $9,885) and retired the arrangement.

Table of Contents

Note 9. Long-Term Debt

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

	2013	2012
ExOne		
Building note payable to a bank, with monthly payments of $18 including interest at 4.00% through May 2017 and subsequently, the monthly average yield on U.S. Treasury Securities plus 3.25% for the remainder of the term through May 2027.	$ 2,209	$ 2,334
Building note payable to an unrelated entity, with monthly payments including interest at 6.00% through June 2014.		300
Lone Star Metal Fabrication, LLC		
Building note payable to a bank, with monthly payments including interest at 7.00% through July 2014.		727
Troy Metal Fabricating, LLC		
Equipment note payable to a bank, with monthly payments including interest at one-month BBA LIBOR plus 3.00% (3.21% at December 31, 2012) through December 2017.		1,193
Equipment note payable to a bank, with monthly payments including interest at 4.83% through December 2016.		1,056
Equipment line of credit to a bank, converted to term debt in January 2012; monthly payments including interest at one-month BBA LIBOR plus 2.75% (2.96% at December 31, 2012) through December 2016.		886
Building note payable to a bank, with monthly payments including interest at one-month BBA LIBOR plus 2.45% (2.66% at December 31, 2012) through April 2013. Interest is fixed at 6.80% under a related interest rate swap agreement.		760
Equipment note payable to a bank, with monthly payments including interest at one-month BBA LIBOR plus 2.75% (2.96% at December 31, 2012) through January 2014. Interest is fixed at 6.68% under a related interest rate swap agreement.		228
Equipment note payable to a bank, with monthly payments including interest at one-month BBA LIBOR plus 2.75% (2.96% at December 31, 2012) through April 2013.		213
	2,209	7,697
Less: Current portion of long-term debt	127	2,028
	$ 2,082	$ 5,669

On February 14, 2013, the Company repaid $300 to retire its building note payable to an unrelated entity. There were no prepayment penalties or gains or losses associated with this early retirement of debt.

On March 27, 2013, in connection with the acquisition of certain net assets of the Lone Star and TMF VIEs (Note 3), the Company assumed and repaid all amounts outstanding on Lone Star and TMF debt (approximately $4,700). There were no prepayment penalties or gains or losses associated with this early retirement of debt.

At December 31, 2013, the Company identified that it was not in compliance with the annual cash flow-to-debt service ratio covenant associated with the ExOne building note payable to a bank. The Company requested and was granted a waiver related to compliance with this annual covenant as of December 31, 2013 and 2014. Related to the 2013 noncompliance, there were no cross default provisions or related impacts on other lending agreements.

Table of Contents

Future maturities of long-term debt at December 31, 2013, are approximately as follows:

2014	$ 127
2015	132
2016	138
2017	139
2018	143
Thereafter	1,530
	$ 2,209

Prior to deconsolidation, the Company, through its VIEs, entered into certain interest rate swap agreements with a bank. The Company utilized the interest rate swaps for the purpose of managing risks related to the variability of future earnings and cash flows caused by changes in interest rates. Under the terms of the agreements, the Company agreed to pay interest at fixed rates and receive variable interest from the counterparty.

At December 31, 2012, the fair value of the interest rate swaps was a liability of approximately $13. These obligations are included in accrued expenses and other current liabilities in the condensed consolidated balance sheets. Gains (losses) on interest rate swap contracts are recorded as a component of interest expense in the statement of consolidated operations and comprehensive loss.

Note 10. Capital and Financing Leases

In January 2013, the Company entered into an equipment leasing arrangement with a bank. Terms of the agreement include monthly payments of $5 over a five-year period beginning in January 2013 and a bargain purchase option at the end of the lease term. As a result, this agreement was determined to be a capital lease. The present value of future minimum lease payments, including an interest rate of 4.4%, was approximately $226 at December 31, 2013.

In November 2012, the Company entered into a sale-leaseback transaction with a bank for a 3D printing machine. Due to continuing involvement outside of the normal leaseback by the Company, this transaction has been accounted for as a financing lease. Under the terms of the agreement, the Company received proceeds of approximately $974 (737) with repayment of the lease occurring over a three-year period beginning in January 2013. The present value of the future minimum lease payments, including an interest rate of 6.0%, was approximately $468 (340) and $853 (646) at December 31, 2013 and 2012, respectively.

In July 2012, the Company entered into a sale-leaseback transaction with a related party for a 3D printing machine. Based on the economic substance of the transaction between the parties, this transaction was accounted for as a financing lease. Under the terms of the agreement, the Company received proceeds of approximately $1,553 with repayment of the lease occurring over a five-year period beginning in August 2012. On April 4, 2013, the Company settled this financing lease obligation for a cash payment of approximately $1,372 (including accrued interest). There were no prepayment penalties or gains or losses associated with this settlement.

In March 2012, the Company entered into a sale-leaseback transaction with a bank for a 3D printing machine. Due to continuing involvement outside of the normal leaseback by the Company, this transaction has been accounted for as a financing lease. Under the terms of the agreement, the Company received proceeds of approximately $985 (739) with repayment of the lease occurring over a three-year period beginning in April 2012. The present value of the future minimum lease payments, including an interest rate of 6.0%, was approximately $330 (239) and $553 (418) at December 31, 2013 and 2012, respectively.

Table of Contents

Future maturities of capital and financing leases at December 31, 2013, are approximately as follows:

2014	$ 549
2015	359
2016	59
2017	57
2018	
Thereafter	
	$ 1,024

Note 11. Accrued Expenses and Other Current Liabilities

Accrued expenses and other current liabilities consist of the following at December 31:

	2013	2012
Accrued payroll and related costs	$ 1,581	$ 1,367
Product warranty reserves	943	556
Accrued license fees	880	748
Liability for uncertain tax positions	768	416
Accrued income taxes		457
Other	1,222	892
	$ 5,394	$ 4,436

Note 12. Common Units, Preferred Units, Preferred Stock and Common Stock

Common Units

At December 31, 2012, the Company had 10,000,000 common units issued and outstanding.

Net income (loss) was allocated to each common unitholder in proportion to the units held by each common unitholder relative to the total units outstanding. The common unitholders shared the Company s positive cash flow, to the extent available, which was distributed annually and allocated among the common unitholders in proportion to the units held by each common unitholder relative to the total units outstanding. Common unitholders were entitled to one vote per unit on all matters.

On January 1, 2013, in connection with the Reorganization of the Company (Note 1), common units in the former limited liability company were exchanged for 5,800,000 shares of common stock.

Preferred Units and Preferred Stock

On December 30, 2011, the Company entered into a debt conversion agreement with the majority member of the former limited liability company to convert $18,984 of unpaid principal and interest on a demand note payable to member into redeemable preferred units of the Company in full satisfaction of the indebtedness. Accordingly, 18,983,602 in redeemable preferred units were issued at a conversion price of $1.00 per share.

The preferred units were non-voting limited liability company membership interests, and permitted the majority member (unitholder) to receive cumulative dividends at the annual rate of 8.0% per unit prior to, and in preference to, any declaration or payment of any dividend on the Company s common units. Dividends on the preferred units accumulated and were payable irrespective of whether the Company had earnings, whether there were funds legally available for the payment of such dividends, and whether dividends were declared.

75

Table of Contents

The Company had the option to redeem all or any number of the preferred units at any time upon written notice and payment to the unitholder of $1.00 plus all accrued but unpaid dividends for each unit being redeemed. The unitholder had the option to convert all or any number of preferred units to common units at the conversion rate of 9.5 preferred units for 1.0 common unit. Preferred units were designed to automatically convert to 1,998,275 common units upon the closing of any initial public offering in which the gross proceeds of the offering exceeded $50,000 provided that the unitholder elected to retain such units. The Company analyzed the conversion feature under the applicable FASB guidance for accounting for derivatives and concluded that the conversion feature did not require separate accounting under such FASB guidance.

Because the unitholder was also the majority member of the Company at December 31, 2011, he had the ability to redeem the preferred units at his option, thus giving the units characteristics of a liability rather than equity. Accordingly, the Company s preferred units were classified as a liability in the Company s consolidated balance sheet at December 31, 2011. At December 31, 2011, the unitholder had committed to not exercise his redemption rights through January 1, 2013.

In February 2012, the redemption feature on the preferred units was removed by an amendment to the preferred unit agreement. As a result, the preferred units were reclassified at fair value ($18,984) from a liability to equity in the consolidated balance sheets.

In May 2012, the unitholder sold 6,000,000 preferred units to two separate unrelated parties for $1.00 per unit.

On January 1, 2013, in connection with the Reorganization of the Company (Note 1), all of the preferred units in the former limited liability company were exchanged for 18,983,602 shares of preferred stock.

On February 12, 2013, immediately prior to the closing of the initial public offering of the Company (Note 1), shares of preferred stock were converted into shares of common stock at a 9.5 to 1.0 basis (1,998,275 shares). Following the conversion, there are no issued or outstanding shares of preferred stock in the Company. Following the closing of the initial public offering of the Company on February 12, 2013, there are 50,000,000 shares of preferred stock authorized at a par value of $0.01 per share and no shares issued and outstanding at December 31, 2013.

Common Stock

Following the closing of the secondary public offering of the Company on September 13, 2013, there are 200,000,000 shares of common stock authorized at a par value of $0.01 per share and 14,387,608 shares issued and outstanding.

The following table summarizes common stock activity:

	Common Stock (number of shares)
Balance at December 31, 2012	
Conversion of common units of The Ex One Company, LLC to common stock of The ExOne Company	5,800,000
Conversion of preferred stock to common stock immediately prior to closing of the initial public offering of The ExOne Company	1,998,275
Initial public offering of common stock in The ExOne Company	5,483,333
Secondary public offering of common stock in The ExOne Company	1,106,000
Balance at December 31, 2013	14,387,608

Table of Contents

Note 13. Equity-Based Compensation

2013 Equity Incentive Plan

On January 24, 2013, the Board of Directors of the Company adopted the 2013 Equity Incentive Plan (the Plan). In connection with the adoption of the Plan, 500,000 shares of common stock were reserved for issuance pursuant to the Plan, with automatic increases in such reserve available each year annually on January 1 from 2014 through 2023 equal to the lesser of (i) 3.0% of the total outstanding shares of common stock as of December 31 of the immediately preceding year or (ii) a number of shares of common stock determined by the Board of Directors, provided that the maximum number of shares authorized under the Plan will not exceed 1,992,242 shares, subject to certain adjustments.

On January 24, 2013, the Board of Directors authorized awards of 180,000 incentive stock options (ISOs) under the Plan to certain employees, which grants were effective contemporaneously with the initial public offering of the Company at an exercise price determined by the initial offering price ($18.00 per share). These awards vest in one-third increments on the first, second and third anniversaries of the grant date, respectively, and expire on February 6, 2023.

On January 24, 2013, the Board of Directors authorized awards of 10,000 shares of restricted stock ($18.00 per share based on the initial public offering price) under the Plan to certain members of the Board of Directors, which grants were effective contemporaneously with the initial public offering of the Company. These awards vest in one-third increments on the first, second and third anniversaries of the grant date, respectively.

On March 11, 2013, the Board of Directors authorized an award of 10,000 shares of restricted stock ($28.51 per share based on the closing price of shares on the date of grant) under the Plan to an executive of the Company. This award vests in one-third increments on the first, second and third anniversaries of the grant date, respectively.

The following table summarizes the total equity-based compensation expense recognized for all ISOs and restricted stock awards for 2013:

Equity-based compensation expense recognized:	
ISOs	$ 580
Restricted stock	131
Total equity-based compensation expense before income taxes	$ 711
Benefit for income taxes*	
Total equity-based compensation expense net of income taxes	$ 711

* The benefit for income taxes from equity-based compensation has been determined to be $0 based on a full valuation allowance against net deferred tax assets for 2013. In the absence of a full valuation allowance, the tax benefit derived from equity-based compensation would be approximately $119 for 2013.

At December 31, 2013, total future compensation expense related to unvested awards yet to be recognized by the Company was approximately $1,332 for ISOs and $334 for restricted stock awards. Total future compensation expense related to unvested awards yet to be recognized by the Company is expected to be recognized over a weighted-average remaining vesting period of approximately 2.1 years.

Table of Contents

The fair value of ISOs was estimated on the date of grant using the Black-Scholes option pricing model with the following assumptions:

Weighted average fair value per ISO	$ 11.03
Volatility	68.70%
Average risk-free interest rate	1.07%
Dividend yield	0.00%
Expected term (years)	6.0

Expected volatility has been estimated based on historical volatilities of certain peer group companies over the expected term of the awards, due to the fact that prior to issuance, the Company was a nonpublic entity. The average risk-free rate is based on a weighted average yield curve of risk-free interest rates consistent with the expected term of the awards. Expected dividend yield is based on historical dividend data as well as future expectations. Expected term has been calculated using the simplified method as the Company does not have sufficient historical exercise experience upon which to base an estimate.

The activity for ISOs for the year ended December 31, 2013, was as follows:

	Number of ISOs	Weighted Average Exercise Price	Weighted Average Grant Date Fair Value
Outstanding at January 1, 2013		$	$
ISOs granted	180,000	$ 18.00	$ 11.03
ISOs forfeited	(6,667)	$ 18.00	$ 11.03
Outstanding at December 31, 2013	173,333	$ 18.00	$ 11.03
ISOs exercisable		$	$
ISOs expected to vest	164,852	$ 18.00	$ 11.03

At December 31, 2013, the aggregate intrinsic value of ISOs expected to vest was approximately $7,000. The weighted average remaining contractual term of ISOs expected to vest at December 31, 2013, was approximately 9.1 years.

The activity for restricted stock awards for the year ended December 31, 2013, was as follows:

	Shares of Restricted Stock	Weighted Average Grant Date Fair Value
Outstanding at January 1, 2013		$
Restricted shares granted	20,000	$ 23.26
Restricted shares forfeited		$
Outstanding at December 31, 2013	20,000	$ 23.26
Restricted shares vested		$
Restricted shares expected to vest	20,000	$ 23.26

Other

In May 2012, the Company s majority member completed the sale of 300,000 common units of the former limited liability company to another existing member of the former limited liability company for $1.25 per unit. In July and August 2012, the Company s majority member completed the sale of an additional 1,000,000 common units of the former limited liability company to two executives of the former limited liability company

78

Table of Contents

for $1.25 per unit. The fair value of these common units on each of the respective measurement dates was $7.20 per common unit. The Company recognized compensation expense of approximately $7,735 for the year ended December 31, 2012, in connection with the sale of these common units which has been recorded in selling, general and administrative expenses in the statement of consolidated operations and comprehensive loss.

Determining the fair value of the common units required complex and subjective judgments. The Company used the sale of a similar security in an arms-length transaction with unrelated parties to estimate the value of the enterprise at each of the respective measurement dates, which included assigning a value to the similar security s rights, preferences and privileges, relative to the common units. The enterprise value was then allocated to the Company s outstanding equity securities using a Black-Scholes option pricing model. The option pricing required certain estimates to be made, including: (i) the anticipated timing of a potential liquidity event (less than one year), (ii) volatility (65.0%) estimated based on historical volatilities of peer group companies, and (iii) a risk-free interest rate (0.2%).

Note 14. License Agreements

The Company has license agreements with certain organizations which require license fee payments to be made on a periodic basis, including royalties on net sales of licensed products, processes and consumables. License fee expenses amounted to approximately $218, $57 and $682 for 2013, 2012 and 2011 respectively. License fee expenses are included in cost of sales in the consolidated statement of operations and comprehensive loss. At December 31, 2013, accrued license fees were approximately $880 and are recorded in accrued expenses and other current liabilities ($680) and other noncurrent liabilities ($200) in the consolidated balance sheets. At December 31, 2012, accrued license fees were approximately $1,015 and are recorded in accrued expenses and other current liabilities ($748) and other noncurrent liabilities ($267) in the consolidated balance sheets.

Included in the license agreements is an exclusive patent license agreement with the Massachusetts Institute of Technology (the MIT Agreement). Patents covered under the MIT Agreement have expiration dates ranging from 2015 to 2021.

On January 22, 2013, the Company and MIT agreed to an amendment of their exclusive patent license agreement (the Amended MIT Agreement). The Amended MIT Agreement provides for, among other things, (1) a reduction in the term of the agreement between the Company and MIT from the date of expiration or abandonment of all issued patent rights to December 31, 2016, (2) an increase in the annual license maintenance fees due for the years ended December 31, 2013 through December 31, 2016 from $50 annually to $100 annually, with amounts related to 2013 through 2016 guaranteed by the Company, (3) a settlement of all past and future royalties on net sales of licensed products, processes and consumables for a one-time payment of $200 (paid in March 2013), and (4) a provision for optional extension of the term of the arrangement between the parties for an annual license maintenance fee of $100 for each subsequent year beyond 2016. As a result of the Amended MIT Agreement, the Company recorded a reduction to its accrued license fees at December 31, 2012, of approximately $1,500, with a corresponding reduction to cost of sales.

There were no license fee expenses associated with the Amended MIT Agreement for 2013. License fee expenses, including minimum license maintenance fees and royalties, associated with the MIT Agreement for 2012 and 2011 were ($159), a reduction to cost of sales and $595, respectively. Reimbursement of qualifying patent expenses incurred by MIT were approximately $16, $50 and $11 for 2013, 2012 and 2011, respectively. Reimbursement of qualifying patent expenses incurred by MIT are recorded in selling, general and administrative expenses in the statement of consolidated operations and comprehensive loss.

Note 15. Contingencies and Commitments

The Company and its subsidiaries are subject to various litigation, claims, and proceedings which have been or may be instituted or asserted from time to time in the ordinary course of business. Management does not

Table of Contents

believe that the outcome of any pending or threatened matters will have a material adverse effect, individually or in the aggregate, on the financial position, results of operations or cash flows of the Company.

The Company leases various manufacturing facilities, office and warehouse spaces, equipment and vehicles under operating lease arrangements, expiring in various years through 2019.

Future minimum lease payments of operating lease arrangements at December 31, 2013, are approximately as follows:

2014	$ 791
2015	199
2016	150
2017	125
2018	111
Thereafter	1
	$ 1,377

Rent expense under operating lease arrangements was approximately $1,072, $984 and $1,057 for 2013, 2012 and 2011, respectively.

Note 16. Income Taxes

Prior to Reorganization (Note 1) the Company was a limited liability company whereby its members were taxed on a proportionate share of the Company s taxable income. Following the merger of The Ex One Company, LLC with and into The ExOne Company, The ExOne Company became a corporation, taxable for federal, state, local and foreign income tax purposes. On January 1, 2013, the Company recorded a net deferred tax asset of approximately $410 based on the difference between the book and tax basis of assets and liabilities as of that date. Due to a history of operating losses by the limited liability company, a valuation allowance of 100% of the initial net deferred tax asset was established.

The provision for income taxes was $370, $995 and $1,031 for 2013, 2012 and 2011, respectively. The provision for income taxes for 2013 relates entirely to the taxable income of ExOne GmbH (Germany). The benefit from deferred taxes for 2013, 2012 and 2011 was fully offset by changes in the valuation allowance for deferred taxes.

A reconciliation of the provision for income taxes at the U.S. statutory rate of 34.0% to the effective rate of the Company for the years ended December 31 is as follows:

	2013	2012	2011
U.S. statutory rate (34.0%)	$ (2,022)	$ (2,956)	$ (2,239)
Unbenefitted limited liability company losses		3,931	1,752
Taxes on foreign operations	(95)	(164)	(71)
Increase in uncertain tax positions	323	146	249
Net change in valuation allowances	2,029	8	1,290
Permanent differences and other	135	30	50
Provision for income taxes	$ 370	$ 995	$ 1,031
Effective tax rate	106.2%	111.5%	115.7%

Table of Contents

The components of net deferred income tax assets and net deferred income tax liabilities were as follows:

	December 31, 2013	January 1, 2013 (Reorganization)	December 31, 2012
Current deferred tax assets (liabilities):			
Accounts receivable	$ 23	$ 31	$
Inventories	452	(40)	(434)
Accrued expenses and other current liabilities	591	562	143
Deferred revenue and customer prepayments	25	1,851	1,912
Other	(1)	10	250
Valuation allowance	(1,030)	(2,429)	(2,049)
Current deferred tax assets (liabilities)	60	(15)	(178)
Noncurrent deferred tax assets (liabilities):			
Net operating loss carryforwards	2,694	431	431
Tax credit carryforwards	874		
Property and equipment	820	691	599
Other	(306)	342	567
Valuation allowance	(4,142)	(1,449)	(1,419)
Noncurrent deferred tax assets (liabilities)	(60)	15	178
Net deferred tax assets (liabilties)	$	$	$

The Company has provided a valuation allowance for its net deferred tax assets as a result of the Company not generating consistent net operating profits. As such, any benefit from deferred taxes in any of the periods presented has been fully offset by changes in the valuation allowance for net deferred tax assets. The Company continues to assess its future taxable income by jurisdiction based on (i) recent historical operating results (ii) the expected timing of reversal of temporary differences (iii) various tax planning strategies that the Company may be able to enact in future periods (iv) the impact of potential operating changes on the business and (v) forecast results from operations in future periods based on available information at the end of each reporting period. To the extent that the Company is able to reach the conclusion that deferred tax assets are realizable based on any combination of the above factors, a reversal of existing valuation allowances may occur.

The following table summarizes changes to the Company s valuation allowances for the years ended December 31:

	2013	2012
Beginning balance	$ 3,468	$ 3,636
Increase to allowances*	2,029	8
Foreign currency	(325)	(176)
Ending balance	$ 5,172	$ 3,468

* The increase to allowances for 2013 includes approximately $410 associated with the allowance recorded against the initial net deferred tax asset resulting from the formation of the The ExOne Company as a corporation, taxable for federal, state, local and foreign income tax purposes on January 1, 2013.

At December 31, 2013, the Company had approximately $4,897 in net operating loss carryforwards which expire in 2033 and $874 in tax credit carryforwards which expire in 2023, to offset the future taxable income of its United States subsidiary. At December 31, 2013, the Company had approximately $2,142 in net operating loss carryforwards which expire from 2014 through 2020, to offset the future taxable income of its

Japanese subsidiary. At December 31, 2013, the Company had approximately $135 in net operating loss carryforwards which do not expire, to offset the future taxable income of its German property subsidiary.

Table of Contents

The Company has a liability for uncertain tax positions related to certain capitalized expenses and intercompany transactions. At December 31, 2013 and 2012, the liability for uncertain tax positions was approximately $768 and $416, respectively, and is included in accrued expenses and other current liabilities in the consolidated balance sheets. In addition, at December 31, 2013 and 2012, the liability for uncertain tax positions related to the Company s Japanese subsidiary was $93 and $94, respectively, and was fully offset against net operating loss carryforwards of this subsidiary.

A reconciliation of the beginning and ending amount of unrecognized tax benefits at December 31 was as follows:

	2013	2012	2011
Beginning balance	$ 416	$ 264	$ 15
Increases related to current year tax positions	323	146	249
Foreign currency	29	6	
Ending balance	$ 768	$ 416	$ 264

The Company files income tax returns in the United States (effective January 1, 2013), Germany and Japan. In Germany, the Company s 2010 through 2013 tax years remain subject to examination. In Japan, the Company s 2005 through 2013 tax years remain subject to examination.

Note 17. Fair Value Measurements

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. When determining the fair value measurements for assets and liabilities which are required to be recorded at fair value, the Company considers the principal or most advantageous market in which the Company would transact and the market-based risk measurements or assumptions that market participants would use in pricing the asset or liability, such as inherent risk, transfer restrictions and credit risk.

The Company applies the following fair value hierarchy, which prioritizes the inputs used to measure fair value into three levels and bases the categorization within the hierarchy upon the lowest level of input that is available and significant to the fair value measurement:

Level 1 Observable inputs such as quoted prices in active markets for identical investments that the Company has the ability to access.

Level 2 Inputs include:

Quoted prices for similar assets or liabilities in active markets;

Quoted prices for identical or similar assets or liabilities in inactive markets;

Inputs, other than quoted prices in active markets, that are observable either directly or indirectly;

Inputs that are derived principally from, or corroborated by, observable market data by correlation or other means.

Level 3 Inputs that are generally unobservable and typically reflect management s estimates of assumptions that market participants would use in pricing the asset or liability.

The Company is required to disclose its estimate of the fair value of material financial instruments, including those recorded as assets or liabilities in its consolidated financial statements, in accordance with GAAP.

Table of Contents

The following table sets forth the fair value of the Company s liabilities measured on a recurring basis by level at December 31:

	Level	2013	2012
Accrued expenses and other current liabilities:			
Interest rate swap liability	2	$	$ 13

The fair value of the interest rate swap liability is determined by using a discounted cash flow model using observable inputs from the related forward interest rate yield curves with the differential between the forward rate and the stated interest rate of the instrument discounted back from the settlement date of the contracts to the respective balance sheet date. As this model utilizes observable inputs and does not require significant management judgment it has been determined to be a Level 2 financial instrument in the fair value hierarchy.

Prior to redemption during the quarter ended March 31, 2012, the fair value of the Company s redeemable preferred units was estimated based on unobservable inputs, including the present value of the Company s demand note payable to member immediately prior to conversion. As this estimate utilized unobservable inputs and required significant management judgment it was determined to be a Level 3 financial instrument in the fair value hierarchy.

The following table sets forth a summary of changes in the fair value of the Company s Level 3 financial instruments:

	2013	2012
Beginning balance	$	$ 18,984
Realized gains (losses)		
Unrealized gains (losses)		
Purchases		
Sales		
Issuances		
Settlements		(18,984)
Transfers into Level 3		
Transfers out of Level 3		
Ending balance	$	$

The carrying values and fair values of other financial instruments (assets and liabilities) not required to be recorded at fair value at December 31 were as follows:

	2013		2012	
	Carrying Value	Fair Value	Carrying Value	Fair Value
Cash and cash equivalents	$ 98,445	$ 98,445	$ 2,802	$ 2,802
Line of credit	$	$	$ 528	$ 528
Demand note payable to member	$	$	$ 8,666	$ 8,666
Current portion of long-term debt	$ 127	$ 127	$ 2,028	$ 2,028
Current portion of capital and financing leases	$ 549	$ 549	$ 920	$ 920
Long-term debt net of current portion	$ 2,082	$ 1,666	$ 5,669	$ 7,880
Capital and financing leases net of current portion	$ 475	$ 475	$ 1,949	$ 1,949

The carrying amounts of cash and cash equivalents, line of credit, demand note payable to member, current portion of long-term debt and current portion of financing leases approximate fair value due to their short-term maturities. Cash and cash equivalents are classified in Level 1; Line of credit, demand note payable to member,

83

Table of Contents

current portion of long-term debt, current portion of capital and financing leases, long-term debt net of current portion and capital and financing leases net of current portion are classified in Level 2.

Note 18. Segment, Product and Geographic Information

The Company manages its business globally in a singular operating segment in which it develops, manufactures and markets 3D printing machines and micromachinery, printed products, materials and other services. Geographically, the Company conducts its business through wholly-owned subsidiaries in the United States, Germany and Japan.

Revenue by product for the year ended December 31 was as follows:

	2013	2012	2011
3D printing machines and micromachinery	$ 24,851	$ 15,668	$ 5,406
3D printed products, materials and other services	14,629	12,989	9,884
	$ 39,480	$ 28,657	$ 15,290

During 2013, 2012 and 2011, the Company conducted a significant portion of its business with a limited number of customers. For 2013, 2012 and 2011, the Company s five most significant customers represented approximately 25.5%, 31.7% and 40.9% of total revenue, respectively. At December 31, 2013 and 2012, accounts receivable from the Company s five most significant customers were approximately $5,912 and $1,671, respectively.

Geographic information for revenue for the year ended December 31 was as follows (based on the country where the sale originated):

	2013	2012	2011
United States	$ 14,596	$ 7,802	$ 4,587
Germany	14,744	13,956	5,678
Japan	10,140	6,899	5,025
	$ 39,480	$ 28,657	$ 15,290

Geographic information for long-lived assets at December 31 was as follows (based on the physical location of assets):

	2013	2012
United States	$ 13,257	$ 9,592
Germany	18,219	2,550
Japan	1,296	325
	$ 32,772	$ 12,467

Note 19. Related Party Transactions

The Company has provided various services to several related entities under common control by the Chairman and CEO of the Company, primarily in the form of accounting, finance, information technology and human resource outsourcing, which are reimbursed by the related entities. The cost of these services was approximately $133, $281 and $210 for 2013, 2012 and 2011, respectively. In addition, the Company has purchased certain items on behalf of related parties under common control by the Chairman and CEO of the Company. This practice was discontinued by the Company in early 2013. Amounts due from these related entities at December 31, 2013 and 2012, were not significant.

84

Table of Contents

The Company has received design services and the corporate use of an airplane from related entities under common control by the Chairman and CEO of the Company. The cost of these services was approximately $185, $149 and $23 for 2013, 2012 and 2011, respectively. Amounts due to these related entities at December 31, 2013 and 2012, were not significant.

In addition to the transactions identified above, in connection with the secondary public offering of shares of common stock (Note 1) of the Company completed on September 13, 2013, total associated offering costs of approximately $1,012 were incurred, a portion of which ($645) were reimbursable to the Company from other selling stockholders (each selling stockholder separately qualifying as a related party and consisting principally of entities controlled by the Chairman and CEO of the Company and other executives of the Company) based on their pro-rata participation in the offering. Amounts reimbursable from selling stockholders were subsequently settled with the Company.

Note 20. Subsequent Events

The Company has evaluated all of its activities and concluded that no subsequent events have occurred that would require recognition in the consolidated financial statements or disclosure in the notes to the consolidated financial statements, except as described below.

On January 2, 2014, the Board of Directors authorized awards of 7,500 shares of restricted stock under the 2013 Equity Incentive Plan to three executives of the Company. These awards vest in one-third increments on the first, second and third anniversaries of the grant date, respectively. Separately, on March 20, 2014, the Board of Directors authorized awards under the Plan of 5,000 shares of restricted stock to an executive of the Company and an aggregate of 5,000 shares of stock bonus awards to members of the Board of Directors. The restricted stock award to the executive of the Company vests in one-third increments on the first, second and third anniversaries of the grant date, respectively. The stock bonus awards granted to the Board of Directors vest immediately upon issuance.

On March 3, 2014, ExOne Americas LLC purchased (i) substantially all the assets of Machin-A-Mation Corporation (Machin-A-Mation), a specialty machine shop located in Chesterfield, Michigan, and (ii) the real property on which Machin-A-Mation s business is located for an aggregate purchase price of approximately $5,000.

On March 6, 2014, ExOne GmbH acquired all of the shares of MWT-Gesellschaft für Industrielle Mikrowellentechnik mbH (MWT), a pioneer in industrial grade microwaves with design and manufacturing experience based in Elz, Germany, for approximately $4,800.

Table of Contents

The ExOne Company and Subsidiaries (formerly The Ex One Company, LLC and Subsidiaries)

Supplemental Quarterly Financial Information (unaudited)

(in thousands, except per-share amounts)

	For the Quarter Ended			
	December 31, 2013	September 30, 2013	June 30, 2013	March 31, 2013
Revenue	$ 10,695	$ 11,621	$ 9,230	$ 7,934
Gross profit	3,303	5,251	4,181	2,838
Net loss attributable to ExOne	(3,197)	(224)	(1,120)	(1,914)
Net loss attributable to ExOne per common share*:				
Basic	$ (0.22)	$ (0.02)	$ (0.08)	$ (0.20)
Diluted	(0.22)	(0.02)	(0.08)	(0.20)

	For the Quarter Ended			
	December 31, 2012	September 30, 2012	June 30, 2012	March 31, 2012
Revenue	$ 12,744	$ 8,515	$ 4,676	$ 2,722
Gross profit	6,248	3,556	1,523	816
Net income (loss) attributable to ExOne	902	(5,932)	(3,609)	(1,529)
Net loss attributable to ExOne per common share*:				
Basic	N/A**	N/A**	N/A**	N/A**
Diluted	N/A**	N/A**	N/A**	N/A**

* Per-share amounts are calculated independently for each quarter presented; therefore the sum of the quarterly per-share amounts may not equal the per-share amounts for the year.

** Information not comparable as a result of the Reorganization of the Company as a corporation on January 1, 2013 (Note 1).

Table of Contents

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

None.

Item 9A. Controls and Procedures.

Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our Chief Executive Officer and our Chief Financial Officer, evaluated the effectiveness of our disclosure controls and procedures as of December 31, 2013. The term disclosure controls and procedures, as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act, means controls and other procedures of a company that are designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the SEC s rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the company s management, including its principal executive and principal financial officers, as appropriate to allow timely decisions regarding required disclosure. Management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives and management necessarily applies its judgment in evaluating the cost benefit relationship of possible controls and procedures. Based on this evaluation, management concluded as of December 31, 2013 that our disclosure controls and procedures were not effective at the reasonable assurance level due to material weaknesses in our internal control over financial reporting, which are described below.

In connection with the preparation of our consolidated financial statements for the year ended December 31, 2013, we concluded that there are material weaknesses in the design and operating effectiveness of our internal control over financial reporting as defined in SEC Regulation S-X. A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting such that there is a reasonable possibility that a material misstatement of the annual or interim financial statements will not be prevented or detected on a timely basis. A description of the identified material weaknesses in internal control over financial reporting are as follows:

The design and operating effectiveness of internal controls related to our financial reporting process were not sufficient to allow for accurate and timely reporting of our consolidated financial results. We did not maintain adequate control with respect to the application of GAAP. This was principally due to a lack of personnel with adequate knowledge and experience in GAAP. As a result, we recorded certain manual, post-close adjustments in order to prepare the consolidated financial statements included in this Annual Report on Form 10-K.

The design and operating effectiveness of internal controls related to our information technology systems was not sufficient to allow for accurate and timely reporting of our consolidated financial results. Each of our primary locations (United States, Germany and Japan) utilizes separate and distinct information technology platforms to record, process and summarize transactions. As a result, our process to consolidate and report financial information is substantially a manual process and inherently subject to error.

The design and operating effectiveness of internal controls related to our consolidation process and management s review of our consolidated financial results did not operate at a level of precision sufficient to allow for accurate and timely reporting of our consolidated financial results. Our consolidation process is substantially a manual process and inherently subject to error. Further, because of internal control weaknesses identified with respect to our financial reporting process and information technology systems, management was unable to complete an adequate review of either subsidiary or consolidated financial results at a sufficient level of precision to prevent or detect misstatements. As a result, we recorded certain manual, post-close adjustments in order to prepare the consolidated financial statements included in this Annual Report on Form 10-K.

Table of Contents

Management s Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting. Our internal control system is designed to provide reasonable assurance to our management and Board of Directors regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with GAAP. All internal control systems, no matter how well designed, have inherent limitations. Accordingly, even effective controls can provide only reasonable assurance with respect to financial statement preparation and presentation.

Our management assessed the effectiveness of the Company s internal control over financial reporting as of December 31, 2013. In making this assessment, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in *Internal Control-Integrated Framework*. Based on this assessment, management concluded that the Company did not maintain effective internal control over financial reporting as of December 31, 2013 due to the existence of identified material weaknesses (as further described above).

As a result of material weaknesses, we performed additional analysis and other post-closing procedures to ensure our consolidated financial statements were prepared in accordance with GAAP. Accordingly, management believes that the consolidated financial statements and related notes thereto included in this Annual Report on Form 10-K fairly present, in all material respects, our financial condition, results of operations and cash flows for the periods presented.

As an emerging growth company, we are exempt from the requirement to obtain an attestation report from our independent registered public accounting firm on the assessment of our internal controls pursuant to the Sarbanes-Oxley Act of 2002 until 2018, or such time that we no longer qualify as an emerging growth company in accordance with the Jumpstart Our Business Startups Act of 2012.

Changes in Internal Control over Financial Reporting

With the oversight of senior management and our audit committee, we continue to take steps and additional measures to remediate the underlying causes of the identified material weaknesses, including (i) enhancing our global accounting and reporting process by designing and strengthening the operating effectiveness of internal controls over financial reporting, (ii) evaluating our information technology systems to further integrate existing systems or invest in improvements to our technology sufficient to generate accurate and timely financial information and (iii) adding financial personnel with adequate knowledge and experience in GAAP.

Item 9B. Other Information.

None.

Table of Contents

PART III

Item 10. Directors, Executive Officers and Corporate Governance.

The information required by Item 10 is incorporated by reference from the information under the captions Executive Officers and Directors of ExOne, Section 16(a) Beneficial Ownership Reporting Compliance, Corporate Governance and Audit Committee Report in our definitive proxy statement for the Annual Meeting of Stockholders to be held on May 5, 2014, which will be filed with the SEC within 120 days of the end of the fiscal year ended December 31, 2013.

Item 11. Executive Compensation.

The information required by Item 11 is incorporated by reference from the information under the caption Compensation of Named Executive Officers in our definitive proxy statement for the Annual Meeting of Stockholders to be held on May 5, 2014, which will be filed with the SEC within 120 days of the end of the fiscal year ended December 31, 2013.

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

The information required by Item 12 is incorporated by reference from the information (i) under the caption Securities Authorized for Issuance Under Equity Compensation Plans on page 35 of this Annual Report on Form 10-K and (ii) under the caption Security Ownership of Certain Beneficial Owners and Management in our definitive proxy statement for the Annual Meeting of Stockholders to be held on May 5, 2014, which will be filed with the SEC within 120 days of the end of the fiscal year ended December 31, 2013.

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

The information required by Item 13 is incorporated by reference from the information under the captions Independence of the Board of Directors and Transactions with Related Persons in our definitive proxy statement for the Annual Meeting of Stockholders to be held on May 5, 2014, which will be filed with the SEC within 120 days of the end of the fiscal year ended December 31, 2013.

Item 14. Principal Accountant Fees and Services.

The information required by Item 14 is incorporated by reference from the information under the caption Independent Registered Public Accounting Firm s Fees in our definitive proxy statement for the Annual Meeting of Stockholders to be held on May 5, 2014, which will be filed with the SEC within 120 days of the end of the fiscal year ended December 31, 2013.

Table of Contents

PART IV

Item 15. Exhibits and Financial Statement Schedules.

(a)(1) Financial Statements

See Item 8 of Part II of this Annual Report on Form 10-K.

(a)(2) Financial Statement Schedules

Financial statement schedules have been omitted because they are not applicable, not required, or the required information is included in the consolidated financial statements or notes thereto.

All other schedules for which provision is made in the applicable accounting regulations of the Securities and Exchange Commission are not required under the related instructions or are inapplicable and therefore have been omitted.

(a)(3) Exhibits

The Exhibits listed on the accompanying Index to Exhibits are filed as part of this Annual Report on Form 10-K.

Table of Contents

Signatures

Pursuant to the requirements of 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.

The ExOne Company

By: /s/ S. Kent Rockwell
S. Kent Rockwell
Chief Executive Officer

Date: March 20, 2014

Pursuant to the requirements of 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.

Signature	Date	Title
/s/ S. Kent Rockwell	March 20, 2014	Chief Executive Officer; Director (Principal Executive Officer)
/s/ Brian W. Smith	March 20, 2014	Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)
/s/ David J. Burns	March 20, 2014	President and Chief Operating Officer And Director
/s/ John Irvin	March 20, 2014	Director
/s/ Raymond J. Kilmer	March 20, 2014	Director
/s/ Victor Sellier	March 20, 2014	Director
/s/ Lloyd A. Semple	March 20, 2014	Director
/s/ Bonnie K. Wachtel	March 20, 2014	Director

Table of Contents

EXHIBIT INDEX

The agreements and other documents filed as exhibits to this report are not intended to provide factual information or other disclosure other than with respect to the terms of the agreements or other documents themselves, and you should not rely on them for that purpose. In particular, any representations and warranties made by us in these agreements or other documents were made solely within the specific context of the relevant agreement or document and may not describe the actual state of affairs as of the date they were made or at any other time.

Exhibits and Financial Statement Schedules

(A) Exhibits:

Exhibit Number	Description	Method of Filing
2.1	Asset Purchase Agreement dated March 27, 2013 between the Company and Troy Metal Fabricating, LLC.	Incorporated by reference to Exhibit 2.1 to Form 8-K filed on March 29, 2013.
2.2	Asset Purchase Agreement dated March 27, 2013 between the Company and Lone Star Metal Fabrication, LLC.	Incorporated by reference to Exhibit 2.2 to Form 8-K filed on March 29, 2013.
2.3	Asset Purchase Agreement dated March 3, 2014 by and between ExOne Americas LLC, Machin-A-Mation Corporation, Metal Links, LLC and William Dega.	Incorporated by reference to Exhibit 2.1 to Form 8-K filed on March 7, 2014.
2.4	Purchase and Assignment Contract, dated March 6, 2014, between Reinhard Schulze and ExOne GmbH.	Incorporated by reference to Exhibit 2.2 to Form 8-K filed on March 7, 2014.
3.1	Certificate of Incorporation.	Incorporated by reference to Exhibit 3.1 to Form S-1 Registration Statement (#333-185933) filed on January 8, 2013.
3.2	Amended and Restated Bylaws.	Incorporated by reference to Exhibit 3.1 to Form 8-K (#001-35806) filed on March 29, 2013.
3.3	Amendment to Amended and Restated Bylaws.	Incorporated by reference to Exhibit 3.1 to Form 8-K (#001-35806) filed on August 20, 2013.
4.1	Form of Stock Certificate.	Incorporated by reference to Exhibit 4.1 to Amendment No. 2 to Form S-1 Registration Statement (#333-185933) filed on January 28, 2013.
10.01.01	Amended and Restated Exclusive Patent License Agreement dated January 1, 2011, by and between Massachusetts Institute of Technology and The Ex One Company, LLC.	Incorporated by reference to Exhibit 10.01.01 to Amendment No. 1 to Form S-1 Registration Statement (#333-185933) filed on January 24, 2013.
10.01.02	First Amendment to the Amended and Restated Exclusive Patent License Agreement, dated as of January 1, 2013, by and between Massachusetts Institute of Technology and The Ex One Company, LLC.	Incorporated by reference to Exhibit 10.01.02 to Amendment No. 1 to Form S-1 Registration Statement (#333-185933) filed on January 24, 2013.

Table of Contents

Exhibit Number	Description	Method of Filing
10.2	Employment Agreement, dated June 1, 2012, by and between the Company and S. Kent Rockwell.	Incorporated by reference to Exhibit 10.2 to Form S-1 Registration Statement (#333-185933) filed on January 8, 2013.
10.3	Employment Agreement, dated June 1, 2012, by and between the Company and David Burns.	Incorporated by reference to Exhibit 10.3 to Form S-1 Registration Statement (#333-185933) filed on January 8, 2013.
10.4	Employment Agreement, dated August 1, 2012, by and between the Company and John Irvin.	Incorporated by reference to Exhibit 10.4 to Form S-1 Registration Statement (#333-185933) filed on January 8, 2013.
10.5	Employment Agreement, dated August 21, 2003, by and between Prometal RCT and Rainer Hoechsmann (translated from German).	Incorporated by reference to Exhibit 10.5 to Form S-1 Registration Statement (#333-185933) filed on January 8, 2013.
10.6	Letter amending Employment Agreement, dated March 9, 2012, from the Company to Rainer Hoechsmann (translated from German).	Incorporated by reference to Exhibit 10.6 to Form S-1 Registration Statement (#333-185933) filed on January 8, 2013.
10.07.01	2013 Equity Incentive Plan.	Incorporated by reference to Exhibit 10.07.01 to Amendment No. 1 to Form S-1 Registration Statement (#333-185933) filed on January 24, 2013.
10.07.02	Form of Award Agreements under 2013 Equity Incentive Plan.	Incorporated by reference to Exhibit 10.07.02 to Amendment No. 1 to Form S-1 Registration Statement (#333-185933) filed on January 24, 2013.
10.8	Lone Star Metal Fabrication, LLC Equipment Lease.	Incorporated by reference to Exhibit 10.8 to Form S-1 Registration Statement (#333-185933) filed on January 8, 2013.
10.9	Lone Star Metal Fabrication, LLC Building Lease.	Incorporated by reference to Exhibit 10.9 to Form S-1 Registration Statement (#333-185933) filed on January 8, 2013.
10.10.01	Troy Metal Fabricating, LLC Equipment Lease October 1, 2011.	Incorporated by reference to Exhibit 10.10.01 to Form S-1 Registration Statement (#333-185933) filed on January 8, 2013.
10.10.02	Troy Metal Fabricating, LLC Equipment Lease December 31, 2012.	Incorporated by reference to Exhibit 10.10.02 to Form S-1 Registration Statement (#333-185933) filed on January 8, 2013.
10.10.03	Troy Metal Fabricating, LLC Equipment Lease May 31, 2008.	Incorporated by reference to Exhibit 10.10.03 to Form S-1 Registration Statement (#333-185933) filed on January 8, 2013.
10.10.04	Troy Metal Fabricating, LLC Equipment Lease February 1, 2009.	Incorporated by reference to Exhibit 10.10.04 to Form S-1 Registration Statement (#333-185933) filed on January 8, 2013.
10.10.05	Troy Metal Fabrication, LLC Equipment Lease May 31, 2008.	Incorporated by reference to Exhibit 10.10.05 to Form S-1 Registration Statement (#333-185933) filed on January 8, 2013.

Table of Contents

Exhibit Number	Description	Method of Filing
10.10.06	Troy Metal Fabricating, LLC Building Lease March 31, 2008.	Incorporated by reference to Exhibit 10.10.06 to Form S-1 Registration Statement (#333-185933) filed on January 8, 2013.
10.12	Kontokorrentkredit Overdraft Agreement, dated July 29, 2011, Between ExOne GmbH and Stadtsparkasse Augsburg. (translated from German).	Incorporated by reference to Exhibit 10.12 to Form S-1 Registration Statement (#333-185933) filed on January 8, 2013.
10.13	Aval Kredit-Rahmanvertrag, Linton Bank Guarantees, dated July 29, 2011, Between ExOne GmbH and Stadtsparkasse Augsburg. (translated from German).	Incorporated by reference to Exhibit 10.13 to Form S-1 Registration Statement (#333-185933) filed on January 8, 2013.
10.14	Abtretung von Außenständer, Assignment of Receivables, dated July 29, 2011, Between ExOne GmbH and Stadtsparkasse Augsburg. (translated from German).	Incorporated by reference to Exhibit 10.14 to Form S-1 Registration Statement (#333-185933) filed on January 8, 2013.
10.15	Revolving Demand Note, dated January 1, 2012 by and between the Company and Rockwell Forest Products, Inc.	Incorporated by reference to Exhibit 10.15 to Form S-1 Registration Statement (#333-185933) filed on January 8, 2013.
10.16	Leasing Contract, Agreement Concerning Use of Machine, Sale and Leaseback Agreement, dated November 21, 2012, between ExOne GmbH and Deutsche für Sparkassen und Mittelstand GmbH (translated from German).	Incorporated by reference to Exhibit 10.16 to Amendment No. 1 to Form S-1 Registration Statement (#333-185933) filed on January 24, 2013.
10.17	Employment Agreement, dated March 7, 2013, by and between the Company and JoEllen Lyons Dillon.	Incorporated by reference to Exhibit 10.17 to Form 10-K (#001-35806) filed on March 29, 2013.
10.18	Employment Agreement dated December 23, 2013 between the ExOne Company and Rainer Hoechsmann.*	Incorporated by reference to Exhibit 10.1 to Form 8-K filed on December 23, 2013.
10.19	Managing Director Contract dated December 23, 2013 between the ExOne Company and Rainer Hoeschmann.*	Incorporated by reference to Exhibit 10.2 to Form 8-K filed on December 23, 2013.
10.20	Form of Indemnification Agreement for Officers and Directors.	Incorporated by reference to Exhibit 3.1 to Form 8-K filed on March 29, 2013.
10.21	Form of Restricted Stock Award Agreement.	Incorporated by reference to Exhibit 99.2 to the Registration Statement on Form S-8 (No. 333-187053) filed on March 5, 2013.
10.22	Offer to Conclude a Sales Contract.	Incorporated by reference to Exhibit 10.20 to Amendment No. 1 to Form S-1 Registration Statement (#333-190768) filed on September 3, 2013.
10.23	Sales Contract.	Incorporated by reference to Exhibit 10.21 to Amendment No. 1 to Form S-1 Registration Statement (#333-190768) filed on September 3, 2013.

Table of Contents

Exhibit Number	Description	Method of Filing
10.24	General Contractor Agreement.	Incorporated by reference to Exhibit 10.22 to Amendment No. 1 to Form S-1 Registration Statement (#333-190768) filed on September 3, 2013.
10.25	Statement of Work, dated as of March 6, 2014, by and among The ExOne Company, ExOne GmbH and proALPHA Consulting GmbH.	Incorporated by reference to Exhibit 1.1 to Form 8-K filed on March 11, 2014.
10.26	Form of Stock Bonus Agreement.	Filed herewith.
21.1	Subsidiaries of the Registrant.	Filed herewith as Exhibit 21.1.
23.1	Consent of ParenteBeard LLC.	Filed herewith as Exhibit 23.1.
31.1	Rule 13(a)-14(a) Certification of Principal Executive Officer.	Filed herewith as Exhibit 31.1.
31.2	Rule 13(a)-14(a) Certification of Principal Financial Officer.	Filed herewith as Exhibit 31.2.
32	Section 1350 Certification of Principal Executive Officer and Principal Financial Officer.	Filed herewith as Exhibit 32.
101	Interactive Data File.	Filed herewith as Exhibit 101.

Each management contract and compensatory arrangement in which any director or any named executive officer participates has been marked with an asterisk (*).

You can obtain copies of these exhibits electronically at the SEC s website at www.sec.gov or by mail from the Public Reference Section of the SEC at 100 F Street, N.E., Washington, D.C. 20549 at prescribed rates. The exhibits are also available as part of this Annual Report on Form 10-K on ExOne s corporate website at www.exone.com. Stockholders may also obtain copies of exhibits without charge by contacting the Chief Legal Officer and Corporate Secretary at (724) 863-9663. The Interactive Data File (XBRL) exhibit is only available electronically.

Pursuant to the rules and regulations of the SEC, The ExOne Company has filed certain agreements as exhibits to this Annual Report on Form 10-K. These agreements may contain representations and warranties by the parties. These representations and warranties have been made solely for the benefit of the other party or parties to such agreements and (i) may have been qualified by disclosures made to such other party or parties, (ii) were made only as of the date of such agreements or such other date(s) as may be specified in such agreements and are subject to more recent developments, which may not be fully reflected in The ExOne Company s public disclosure, (iii) may reflect the allocation of risk among the parties to such agreements and (iv) may apply materiality standards that are different from what may be viewed as material to investors. Accordingly, these representations and warranties may not describe The ExOne Company s actual state of affairs at the date hereof and should not be relied upon.